

Sat. Jul 18, 2026

Gender/Career Development

9:30 AM - 10:30 AM JST | 12:30 AM - 1:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

9:30 AM - 9:35 AM JST | 12:30 AM - 12:35 AM UTC

[2_Csfom2-01] Greeting

Robbert Dijkgraaf (International Science Council, President elect)

9:35 AM - 9:40 AM JST | 12:35 AM - 12:40 AM UTC

[2_Csfom2-02] Greeting

Kiriko Sakata (Hiroshima University, Vice President (Student Support and Diversity))

9:40 AM - 9:55 AM JST | 12:40 AM - 12:55 AM UTC

[2_Csfom2-03] Science diplomacy: way to global context starting from lab

*Amal Amin¹ (1. The National Research Center, Egypt (Egypt))

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[2_Csfom2-04] Connecting Maternal Care Across Borders: Women Scientists in Action through Science Diplomacy

*Yoko Shimpuku¹ (1. Hiroshima University (Japan))

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[2_Csfom2-06] Building Bridges Across Boundaries: The Role of Young Academies in Science Diplomacy

*Haruka Ono¹ (1. Toyohashi University of Technology, Japan (Japan))

10:15 AM - 10:25 AM JST | 1:15 AM - 1:25 AM UTC

[2_Csfom2-05] Women in science diplomacy and science diplomacy for women

*Angela Liberatore¹ (1. European University Institute (Italy))

Science Diplomacy

10:40 AM - 12:10 PM JST | 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

10:40 AM - 10:50 AM JST | 1:40 AM - 1:50 AM UTC

[7SRQ.F-l-01] **Women empowerment in leadership: Seeing through the lens of young scientists.**

Sam Chan Siok Yee (Immediate Past Co-chairs of Global Young Academy

School of Pharmaceutical Sciences, Universiti Sains Malaysia)

10:50 AM - 11:00 AM JST | 1:50 AM - 2:00 AM UTC

[7SRQ.F-l-02] **Science Diplomacy at UNESCO: Building Peace in the Minds of Men and Women**

Galindo Moreno, Manuel Ricardo (UNESCO)

11:00 AM - 11:10 AM JST | 2:00 AM - 2:10 AM UTC

[7SRQ.F-l-03] “Science and Technology Policy” and “Distributive Justice”

*Ryuma Shineha¹ (1. Keio University, Japan (Japan))

11:10 AM - 11:20 AM JST | 2:10 AM - 2:20 AM UTC

[7SRQ.F-l-04] The role of the European Union in fostering an inclusive and equitable global science diplomacy discourse

*Jan Marco MÜLLER¹ (1. European Commission, DG Research and Innovation, Belgium (Belgium))

11:20 AM - 11:30 AM JST | 2:20 AM - 2:30 AM UTC

[7SRQ.F-l-05] Transforming Science, Science System, Science Diplomacy and the Role of Scientists

*Tateo Arimoto^{1,2,3} (1. ISC Fellow (Japan), 2. Visiting Professor of National Graduate Institute for Policy Studies, (GRIPS) (Japan), 3. Senior Advisor to the President of JST (Japan))

11:30 AM - 11:40 AM JST | 2:30 AM - 2:40 AM UTC

[7SRQ.F-l-06] Science Diplomacy: Building Common Interests with Global Inclusion

*Paul Arthur Berkman¹ (1. Science Diplomacy Center, Inc (SDCI), USA (USA))

Innovation for Education and Health

12:20 PM - 1:20 PM JST | 3:20 AM - 4:20 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Special Lecture

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:20 PM - 1:20 PM JST | 3:20 AM - 4:20 AM UTC

[vrYgdEYq-01] African Mothers Inc.

Kimiyoshi Yokogawa (African Mothers Inc.)

Science Diplomacy

1:30 PM - 3:00 PM JST | 4:30 AM - 6:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ejb9XLcK-01] SCIENTIFIC LEADERSHIP AND DIPLOMACY: THE POWER OF COLLECTIVE WISDOM IN SOLVING GLOBAL PROBLEMS

Yusuf Baran (İzmir Institute of Technology)

1:45 PM - 2:00 PM JST | 4:45 AM - 5:00 AM UTC

[ejb9XLcK-02] **Building a Collaborative Research Platform on Early Adolescents and Gender Norms: Key Findings from A Cross-Sectional Study, Cape Town, South Africa**

Rinko Kinoshita (University of the Western Cape, Cape Town, South Africa)

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ejb9XLcK-03] **Science Diplomacy as a Space of Reflection: Knowledge, Meaning and Shared Futures**

Nerina Finetto

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ejb9XLcK-04] **Cultivating Cooperation through Sustained Dialogue: The Hiroshima AI Process and Japan's Science Diplomacy**

Ayako Takemi (Associate Professor, Research Center for Advanced Science and Technology (RCAST), The University of Tokyo, Japan)

2:30 PM - 3:00 PM JST | 5:30 AM - 6:00 AM UTC

[ejb9XLcK-5add] Discussion

Innovation for Education and Health

3:10 PM - 4:40 PM JST | 6:10 AM - 7:40 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:10 PM - 3:20 PM JST | 6:10 AM - 6:20 AM UTC

[7MN.fwfq-01] **Smart 2D Nanomaterial Biosensors: Advancing Mobile Health and Digital Healthcare Systems**

*Ashima Bagaria¹ (1. Dept of Physics, School of Physical and Biological Sciences, Manipal University, Jaipur, Rajasthan, India-303007)

3:20 PM - 3:30 PM JST | 6:20 AM - 6:30 AM UTC

[7MN.fwfq-02] The need for workforce development to advance digital health innovation: 20 years of insights from telemedicine in Asia

*Kuriko Kudo¹ (1. Kyushu University Hospital, Department of International Medicine, Telemedicine Development Center of Asia (Japan))

3:30 PM - 3:40 PM JST | 6:30 AM - 6:40 AM UTC

[7MN.fwfq-03] Address the Triple Burden of Malnutrition in Tanzania: Opportunities for Scalable Digital Health in Maternal Nutrition Education

*Sanmei Chen Chen¹ (1. Hiroshima University (Japan))

3:40 PM - 3:50 PM JST | 6:40 AM - 6:50 AM UTC

[7MN.fwfq-04] Healthcare in the Digital Age: Empowering Patient Self-Management through mHealth Innovations

*Bilkis Banu¹ (1. Independent University, Bangladesh (IUB) (Bangladesh))

3:50 PM - 4:00 PM JST | 6:50 AM - 7:00 AM UTC

[7MN.fwfq-05] **Digital Technologies for Sustainable Clinical Skills Development Among Healthcare Providers in Remote Areas**

Sayaka Horiuchi (Department of Epidemiology and Global Public Health, Gifu University, Japan)

4:00 PM - 4:10 PM JST | 7:00 AM - 7:10 AM UTC

[7MN.fwfq-06] **Strengthening Digital Health Innovation and Healthcare Systems in Tanzania: Lessons from a Tanzania-Japan Midwifery Research Collaboration**

Dr. Beatrice Mwilike (Lecturer, School of Nursing, Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania

President, Tanzania Midwives Association (TAMA), Tanzania

Visiting Faculty, Senior Lecturer, Organization for International Education and Research, Mie University, Japan)

Global Partnership

4:50 PM - 6:20 PM JST | 7:50 AM - 9:20 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Exile

Chair: Encieh Erfani(International Science Council, Fellow)

4:50 PM - 5:00 PM JST | 7:50 AM - 8:00 AM UTC

[ScwNXsLf-01] **Science in Exile: Protecting At Risk Scholars**

Dr. Encieh Erfani (Perimeter Institute for Theoretical Physics, Canada)

5:00 PM - 5:20 PM JST | 8:00 AM - 8:20 AM UTC

[ScwNXsLf-02] TBA

Laura Oleson (IIE-SR)

5:20 PM - 5:40 PM JST | 8:20 AM - 8:40 AM UTC

[ScwNXsLf-03] TBA

Tomoko Ako (Graduate School of Arts and Sciences)

5:40 PM - 6:00 PM JST | 8:40 AM - 9:00 AM UTC

[ScwNXsLf-04] Scientific Exile as a Phenomenon of Academic Unfreedom

Sayaka Oki (The University of Tokyo)

Poster Session 1

[50IXCzC1-01] "Mental Stress and Quality of Life among Mothers of Children with Special Needs"

*SADIA AFRIN BITHI¹ (1. Research Fellow, Department of Health Education, NIPSOM, Dhaka, Bangladesh (Bangladesh))

[50IXCzC1-02] Blue Hope in Post-Disaster Reconstruction: Redefining Ocean Literacy through Transformative Practices along the Sanriku Coastline of North-East Japan

*Yuri Oki¹, Hiroshi Kitazato², Toyonobu Fujii³, Hiroki Murata⁴, Megumi Kuraishi⁵, Kokichi Ito⁶ (1. St. Luke's International University (Japan), 2. Tokyo University of Marine Science and Technology (Japan), 3. Tohoku University (Japan), 4. Kitasato University (Japan), 5. Ocean Eyes Co., Ltd. (Japan), 6. Riken Food Co., Ltd. (Japan))

[50IXCzC1-04] Sex differences in the urban-rural disparity in suicide mortality in Japan: a Bayesian spatial epidemiological study of all municipalities nationwide

*Masahide Koda¹, Nahoko Harada² (1. Co-learning Community Healthcare Re-innovation Office, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University (Japan), 2. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

[50IXCzC1-05] Building Brotherhood: Enhancing Social Engagement Among Male Seniors Through Targeted Community-Building Activities in Active Ageing Centres what

*Anne Neo, Aqilah Nintendo Mohammad Yunus Noor, Sarah Swee, Eileen Yeo, Emily Ong, Olivia Leong

[50IXCzC1-06] *Alli Kawsay (Buen vivir)* in the indigenous movements of Colombia - Ecuador, political-economic practices as a global model, in defense of the rights of Mother Nature in the global south

*Vanessa-Eduardo Arteaga Bernal-Eraza Acosta¹ (1. Indigenous Independent Researcher in Ecuador-Colombia (Colombia))

[50IXCzC1-07] Young people in a warming world: an urgent call for action based on synthesis of the impacts of climate on child health across 22 countries

*Aparna Lal¹, Erin I Walsh¹, Zoe A Becvarik¹ (1. Australian National University (Australia))

[50IXCzC1-08] A three lever CMIP aligned roadmap to decarbonize and climate proof Japan's healthcare sector

*kazumi Kubota¹, Kubota Anna² (1. Shimonoseki City University (Japan), 2. Keio University (Japan))

[50IXCzC1-09] Investigation of Fully Depleted Silicon On Insulator Devices.

*Samiul Haque Touhid¹, Mubashara Maisha¹, Maisha Tasnim Adri¹, Zannatun Nahar¹, Dr. Towhid Adnan Chowdhury¹ (1. Ahsanullah University of Science and Technology (Bangladesh))

[50IXCzC1-10] Perspective on Governance Barriers to Effective Health Infrastructure Financing at the National and Subnational Levels in Indonesia

*Cynthia Febrina Febrina¹, Stanley Saputra² (1. Hiroshima University (Japan), 2. Ministry of Health (Indonesia))

[50IXCzC1-11] Insights of Dietary Habits Among Female Workers in Micro Industries of Bangladesh: A Cross-Sectional Study.

*Isfat Jahan Bristi¹, Bilkis Banu¹ (1. Independent University, Bangladesh (Bangladesh))

[50IXCzC1-12] GROWTH ANALYSIS OF SEVEN SWEETPOTATO GENOTYPES ON DEGRADED ULTISOLS IN SOUTHEASTERN NIGERIA

*OGECHI UCHE¹, EMMANUEL Ukaobasi MBAH² (1. NATIONAL ROOT CROPS RESEARCH INSTITUTE UMUDIKE (Nigeria), 2. MICHEAL OKPARA UNIVERISTY OF AGRICULTURE UMUDIKE (Nigeria))

[50IXCzC1-13] Proportion of Attention-Deficit/Hyperactivity Disorder and its associated factors among female University students of Bangladesh

*Marzana Hossain¹, Bilkis Banu¹ (1. Department of Public Health, Independent University, Bangladesh (IUB) (Bangladesh))

[50IXCzC1-14] International collaboration opportunity experience with Sakura Science program: focusing on building systems to minimize health hazards from disasters

*Mayumi Kako¹, Chie Teramoto¹, Sanmei Chen¹, Rahman MD Jiaur¹, Cai Juan¹, Yoko Shimpuku¹ (1. Hiroshima University School of Biomedical and Health Sciences (Japan))

[50IXCzC1-15] **Rising car dependence at Hiroshima University: A three-year empirical analysis of commuting behaviour, transit-service changes, and CO2 emissions (2023-2025)**

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

[50IXCzC1-16] **Toward carbon-neutral commuting at Hiroshima University: A joint residence-mode policy simulation**

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

Science Technology Diplomacy/Distributive Justice

3:10 PM - 4:25 PM JST | 6:10 AM - 7:25 AM UTC | Oral Presentation 1(Classroom 301)

Science Technology Diplomacy/Distributive Justice

Chair:Yasmine Mahmoud Moussa Osman (Zagazig University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[31q821XY-01] Science Diplomacy, Neuroscience, Technology, and Society: Contributions from a Women-Led Latin American and Caribbean Network to Wellness and Sustainable Development in the Global South

Miriam Argueta⁸, Victoria Cano Colazo⁹, María Castelló², Jorge Gómez¹⁰, *Itala Laurente¹, Lizbeth Murillo^{4,7}, Sabrina Pighin⁵, Romina Porreca⁶, Perla Berenice Sánchez Reyna³ (1. Universidade Estadual de Campinas (Brazil), 2. Instituto de Investigaciones Biológicas Clemente Estable (Uruguay), 3. Instituto Tecnológico y de Estudios Superiores de Monterrey (Mexico), 4. Universidad Nacional Abierta y a Distancia - UNAD (Colombia), 5. Universidad Nacional del Litoral (Argentina), 6. Municipalidad de San Fernando (Argentina), 7. Universidad Maimónides (Argentina), 8. Universidad de San Carlos de Guatemala (Guatemala), 9. Escuela Interdisciplinaria de Altos Estudios Sociales (Escuela IDAES-UNSAM) (Argentina), 10. Servicio Nacional de Aprendizaje - SENA (Colombia))

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[31q821XY-02] High Motivation, Low Capacity: Why Perinatal Mental-Health Screening Remains Rare in Frontline Midwifery Care

*Siti Khuzaiyah¹, Rufidah Maulina², Elsa Tursina³, Agustina Catur Setyaningrum⁵, Fadhila Tsania Richa⁴ (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universitas Negeri Sebelas Maret (Indonesia), 3. Politeknik Negeri Jember (Indonesia), 4. Universitas Brawijaya (Indonesia), 5. Badan Pelatihan Tenaga Kesehatan, Semarang (Indonesia))

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

[31q821XY-03] Patients' satisfaction and perceived inequality in Non-Communicable Diseases (NCD) care across different financing groups: *A case study at Khmer Soviet Friendship Hospital in Cambodia*

*Sokchamroeun Sim¹ (1. Hiroshima University (Japan))

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[31q821XY-04] Distributive Justice in Global Science: Policy Pathways for Empowering Women Scientists

*Noushin Arfatahery¹ (1. Freie University Berlin (Germany))

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[31q821XY-05] Predicted Fe_{1-x}Y_xAl Ternary Systems Doped with Pt and Ru Metal: High-temperature Materials for Component Coating in Steel

*Christine Mkhonto¹, Ndanduleni Lesley Lethole², Phuti Esrom Ngoepe³ (1. University of Limpopo (South Africa), 2. Sefako Makgato Institution (South Africa), 3. University of Limpopo (South Africa))

Innovation for Education and Health

4:50 PM - 6:20 PM JST | 7:50 AM - 9:20 AM UTC | Oral Presentation 1(Classroom 301)

Education/Health 1

Chair:Sanmei Chen(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[kNAyHR2S-01] Development of an AI-Enhanced Decision Support System for Female Patients with Stress Urinary Incontinence

*Haoran Zhu¹, Liwei Jing¹ (1. Capital Medical University (China))

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[kNAyHR2S-02] Unveiling men's knowledge on women's menopause: Insights and predictors focused on urban Bangladesh

*Bilkis Banu¹, Nasrin Akter², Md Jiaur Rahman³ (1. Independent University, Bangladesh (IUB) (Bangladesh), 2. University of Sydney (Australia), 3. Hiroshima University (Japan))

5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[kNAyHR2S-03] Mathematical Modelling of Family-Based Approach as a Control Strategy for Gastric Ulcers and Gastric Cancer

*Glory Kawira Mutua¹, Musyoka Kinyili¹, Dominic Makaa Kitavi¹ (1. University of Embu (Kenya))

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[kNAyHR2S-04] "From Shock to Learning to Live with Uncertainty":A Qualitative Exploration of Caregivers' Emotional and Cognitive Adaptation to a Child's Leukemia Diagnosis

*Xiaowan Li^{1,2,3}, Sanmei Chen¹, Yishuang Yang^{2,3}, Hua Wei^{2,3}, Qiurong Chen^{2,3}, Jingjing Ma^{2,3}, Feng Lu^{2,3}, Yoko Shimpuku¹ (1. Hiroshima university (Japan), 2. West China Second University Hospital (China), 3. Key Laboratory of Birth Defects and Related Diseases of Women and Children (Sichuan University) (China))

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[kNAyHR2S-05] The association between Woman-Centred Care and antenatal depressive symptoms in Tanzania: A cross-sectional study

*XUENI XIE¹, Dorkasi L Mwakawanga², Sanmei Chen¹, Ni Ning¹, Beatrice Mwilike², Agnes F Massae², Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. Muhimbili University of Health and Allied Sciences (Tanzania))

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[kNAyHR2S-06] Revealing the crosstalk between gut and breast microbiota and the role of their metabolites with breast cancer in obese females: A case control study

*wala saad hanafy mahmoud¹, Mahmoud M. Kamel², Mohammed Abu-Elghait³, Osama Azmy⁴ (1. Assistant professor, faculty of medicine, Galala university (Egypt), 2. Clinical Pathology, National Cancer Institute, Cairo University, Cairo, Egypt (Egypt), 3. Department of Botany and Microbiology, Faculty of Science, Al-Azhar University, Cairo, Egypt (Egypt), 4. Department of Reproductive Health Research, Cairo, Egypt (Egypt))

Food Security

3:10 PM - 4:40 PM JST | 6:10 AM - 7:40 AM UTC | Oral Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[PveJL7OM-01] COMPARATIVE NUTRITIONAL AND MICROBIAL OF BOILED AND FRESH *Clarias gariepinus* STORED UNDER FREEZED CONDITION

*Kafayat Aina Iyapo¹, Adewole Muniru Adeyemo², Khairat Olamide Abdullahi³ (1. Kwara State University, Malete (Nigeria), 2. Adekunle Ajasin University, Akungba Akoko (Nigeria), 3. Ojaja University, Eyekorin, Ilorin Kwara State (Nigeria))

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[PveJL7OM-02] Upcycled coconut dietary fiber from virgin coconut oil processing waste: a potential sustainable functional food ingredient

*Casiana Blanca Villarino¹, Jin Mark Pagulayan¹, Mary Michelle Velasquez¹ (1. Food Application and Sensory Laboratory, Department of Food Science and Nutrition, College of Home Economics, University of the Philippines-Diliman (Philippines))

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

[PveJL7OM-03] Valorization of Indigenous Purple Yam into Functional Flour: Nutritional Characterization and Implications for Food Security

*Airisae Rae Basinang¹, Edward Peter De Guzman¹, Casiana Blanca Villarino¹ (1. University of the Philippines Diliman (Philippines))

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[PveJL7OM-04] Social-Demographic Inequalities Shaping Food Insecurity among Indonesian Women: Insights from a National Survey

*Lini Anisfatus Sholihah¹ (1. Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan))

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[PveJL7OM-05] Antioxidant and gene expression of Juvenile catfish *Clarias gariepinus* (Burchell, 1822) fed maggot meal diets

*Tunmise Odunola Folorunso¹ (1. Adekunle Ajasin University Akungba-Akoko, Ondo State, Nigeria (Nigeria))

4:25 PM - 4:40 PM JST | 7:25 AM - 7:40 AM UTC

[PveJL7OM-06] Hurdles on Plant-based alternatives: Labeling, Safety, and Nutritional Standardization—A Policy Recommendation

*GERIEKA ANAPI ANAPI¹, Airisae Rae P. Basinang¹, Jin Mark DG. Pagulayan¹, Casiana Blanca J. Villarino¹ (1. University of the Philippines Diliman (Philippines))

Disaster/SDGs

4:50 PM - 6:20 PM JST | 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[w5gNzYeC-01] GENDERED POWER IN TYPHOON-INDUCED DISPLACEMENT: A QUALITATIVE CASE STUDY OF WOMEN IN LAGUNA, PHILIPPINES

*Lea Espadilla Licong¹, Ryan Vincent Rites¹, Jason Rodriguez¹, Thi Thi Soe^{2,1}, Jessica Villanueva-Peyraube¹ (1. University of the Philippines Los Baños (Philippines), 2. Yezin Agricultural University (Myanmar))

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[w5gNzYeC-02] The 10-Minute Promise and Its Limits: Safety, Care, and Gendered Access in Nusantara

*Krismiyati Krismiyati¹ (1. The University of Queensland (Australia))

5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[w5gNzYeC-03] Disaster Preparedness Among University Students Who Participated in a Collaborative Online International Learning (COIL) Program on "Disaster Resilience and Community Health"

*Chie Teramoto¹, Mayumi Kako¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan))

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[w5gNzYeC-04] Responding to Trauma in Non-Formal Education: A Quantitative Needs Assessment of Trauma-Informed Informal Educators within the COPE Project

*Tomislav Mestrovic^{1,2,3}, Ena Bandov⁴, Goran Bandov⁵ (1. Department of Nursing, University North, University centre Varazdin, Varazdin (Croatia), 2. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 3. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA), 4. Clinical Hospital Centre Osijek, Osijek (Croatia), 5. International Relations and Sustainable Development Department University of Zagreb, Zagreb (Croatia))

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[w5gNzYeC-05] A Mixed-Methods Approach to Advancing Trauma-Informed Practice in Informal Education through the COPE Project

*Goran Bandov¹, Ena Bandov², Tomislav Mestrovic^{3,4,5} (1. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 2. Clinical Hospital Centre Osijek, Osijek (Croatia), 3. Department of Nursing, University centre Varazdin, University North, Varazdin (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[w5gNzYeC-06] Innovative use of algae in bioplastic production

*Shymaa Sabry Zaher¹, Sayed Makawy Ibrahim¹ (1. National Institute of Oceanography and Fisheries (Egypt))

Sun. Jul 19, 2026

Global Partnership

9:00 AM - 9:30 AM JST | 12:00 AM - 12:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Coffee session

Chair:Jiaur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

9:00 AM - 9:30 AM JST | 12:00 AM - 12:30 AM UTC

[5bJ3fGmU-01] Free talk time with participants

Leadership in Science beyond Gender

9:45 AM - 11:15 AM JST | 12:45 AM - 2:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment-and Advancing Research Careers

Chair:Saki Sugano(Aoyama Gakuin University), Daisuke Matsumoto(Young Academy of Japan)

9:45 AM - 9:55 AM JST | 12:45 AM - 12:55 AM UTC

[HbDz7mzy-01] Care Is Not a Career Penalty:

Reclaiming Care as Fulfillment, Infrastructure, and Scientific Strength

Dr. Antonia Morita Iswari Saktiawati (Universitas Gadjah Mada, Indonesia)

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[HbDz7mzy-02] Reframing Women's Health: From Individual Burden to Societal Value

*Keiko Matsubara¹ (1. Chief, Discovery and Innovation Gateway, Integrated Center for Women's Health, National Center for Child Health and Development, Japan (Japan))

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[HbDz7mzy-03] Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment—and Advancing Research Careers

Hazuki Maehara (President, Life Portfolio Co., Ltd.)

10:15 AM - 10:25 AM JST | 1:15 AM - 1:25 AM UTC

[HbDz7mzy-04] TBA

Dr. Zille Anam (UK Research and Innovation India Office, Senior Programme Manager)

10:25 AM - 10:35 AM JST | 1:25 AM - 1:35 AM UTC

[HbDz7mzy-05] **The UK's Athena Swan gender equality charter: Reflections on a Gold Award**

Professor Rob Jenkins (Department of Psychology, University of York, UK)

Climate Change / Planetary Health

12:15 PM - 1:45 PM JST | 3:15 AM - 4:45 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Planetary Health Justice: The Right to Health for Humanity and the Planet

Chair:Saori Kashima(IDEA Institute, Hiroshima University), Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[i4CY8toL-01] Maternal obesity, social factors, environmental hormone and offspring adolescent development

*Aomi Katagiri¹ (1. Specially Appointed Assistant Professor, Department of Public Health, Institute of Science Tokyo (Japan))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[i4CY8toL-02] Reconsidering the Significance of Planetary Health from a Human Rights Perspective

*Kenta MINAMITANI¹ (1. Attorney at Mori Hamada & Matsumoto / Visiting Lecturer, Department of Public Health, Yokohama City University School of Medicine (Japan))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[i4CY8toL-03] Business-Led Women's Empowerment and Mental Health in Post-Conflict Societies

*Mari Katayanagi¹ (1. Professor, International Peace and Coexistence Program, Graduate School of Humanities and Social Sciences, Hiroshima University (Japan))

Innovation for Education and Health

2:00 PM - 3:30 PM JST | 5:00 AM - 6:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

Chair:Megumi Ikemoto

2:00 PM - 2:45 PM JST | 5:00 AM - 5:45 AM UTC

[D2.juBx_-01] The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

*Allison Cummins¹ (1. School of Nursing and Midwifery, University of Newcastle, Australia (Australia))

2:45 PM - 3:30 PM JST | 5:45 AM - 6:30 AM UTC

[D2.juBx_-2add] ディスカッション

Gender/Career Development

3:45 PM - 5:15 PM JST | 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[aQrq5kgV-01] Midwives' Perspectives and Practices in Adolescent Pregnancy Care: A Qualitative Study in Northern Malawi

*Miyuki Toda¹, Crystal Patil², Balwani Chingatchifwe Mbakaya³, Dorkasi Mwakawanga⁴, Jing Zhou¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. University of Michigan (USA), 3. University of Livingstonia (Malawi), 4. Muhimbili University (Tanzania))

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[aQrq5kgV-02] Effects of mHealth Intervention on Stress, Anxiety, and Depression Among Patients with Polycystic Ovary Syndrome: A Randomized Controlled Trial in Rural Bangladesh

*Sadia Akter¹, Farkhanda Mahjebin², Mohammad Delwer Hossain Hawlader^{3,4}, Md Moshir Rahman⁵, Sanmei Chen⁵, Saori Kashima^{6,7}, Sheuly Akter², Shamit Dasgupta⁸, Yoko Shimpuku^{1,5} (1. Graduate School of Innovation and practice for smart society, Hiroshima University (Japan), 2. Khwaja Yunus Ali Medical College and Hospital (Bangladesh), 3. Department of Public Health, North South University (Bangladesh), 4. NSU Global Health Institute, NGHI, North South University (Bangladesh), 5. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 6. Center for Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 7. Environmental Health Sciences Laboratory, Graduate School of Advanced Science and Engineering, Hiroshima University (Japan), 8. Ministry of Health, Government of British Columbia (Canada))

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[aQrq5kgV-03] Factors Influencing Breastfeeding Continuation After Returning to Work: A Cross-Sectional Study of Women Residing in Japan

*Saori Fujimoto¹, Hiromi Kawasaki¹, Nanami Funaki¹, Mari Murakami¹, Kaori Fujita¹ (1. Hiroshima University (Japan))

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[aQrq5kgV-04] Nursing practice environment, work-family conflict, and turnover intention among female nurses with children under 18 years of age in Japan: A nationwide cross-sectional study

*Liyuan Zheng¹, Hiromi Kawasaki¹, Wenjie Guo¹, Miyuki Toda¹, Yoko Shimpuku¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[aQrq5kgV-05] Fathers' experiences of supporting human milk feeding for preterm infants in Neonatal Intensive Care Units with parent–infant separation in China: a qualitative descriptive study

*Wenjie Guo¹, Li Wang², Haiyan Zhang³, Sanmei Chen¹, Maggie Zgambo⁴, Yan Wu⁵, Yanmei Bu⁶, Man Qi⁵, Ling Yang⁵, Yoko Shimpuku¹ (1. Global Health Nursing, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Department of Nursing, Maternal and Child Health Hospital of Jiaozuo (China), 3. Department of Medical Records Management, The Second People's Hospital of Jiaozuo (China), 4. School of Nursing and Midwifery, Edith Cowan University (Australia), 5. Neonatal Intensive Care Unit, Maternal and Child Health Hospital of Jiaozuo (China), 6. Neonatal Intensive Care Unit, The Second People's Hospital of Jiaozuo (China))

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[aQrq5kgV-06] Maternity Healthcare Professionals' Experience of Pregnant Adolescent Healthcare-Seeking Behaviour in Brunei Darussalam: A Phenomenological Study

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

Program

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

Leadership in Science beyond Gender

5:30 PM - 6:00 PM JST | 8:30 AM - 9:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Closing Ceremony

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

5:40 PM - 5:50 PM JST | 8:40 AM - 8:50 AM UTC

[l77UvBAF-01] Greeting, Announcement of Award Receipient

Yoko Shimpuku (Chair, World Forum for Women in Science - Japan)

5:50 PM - 6:00 PM JST | 8:50 AM - 9:00 AM UTC

[l77UvBAF-02] Greeting

Poster Session 2

[FPoIQWB5-01] Dietary Knowledge for Non-Communicable Disease Prevention among Female University Students: A Descriptive Study in the Bangladesh Context

*Ami Das¹, Dr. Bilkis Banu¹ (1. Independent University, Bangladesh (Bangladesh))

[FPoIQWB5-02] Prevalence and contributing factors of Postnatal depressive symptom in rural Tanzania: Evidence from health-center

*Zarin Tasnim¹, Md Jiaur Rahman¹, Dorkasi Mwakawanga², yoko Shimpuku¹ (1. Hiroshima University (Graduate School of Biomedical and Health Sciences) (Japan), 2. Muhimbili University of Health and Allied Science (Tanzania))

[FPoIQWB5-03] A Research Protocol on Mobile Phone-Based Health Education for Improving Preconception Health among Adolescent Girls in Bangladesh

*Jesmin Ara Bubly¹, Md Jiaur Rahman², Md Moshir Rahman², Miyuki Toda², Zheng Liyuan¹, Masataka Tatsumi¹, Bilkis Banu³, Yoko Shimpuku¹ (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Department of Public Health, Independent University Bangladesh (Japan))

[FPoIQWB5-04] Digital Strategies for Preventing Adolescent Pregnancy through Sexual and Reproductive Education in Brunei Darussalam: Insight from Maternity Healthcare Professionals

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

[FPoIQWB5-05] “Pausing the Moment, Beginning the Healing”: Exploring the Impact of Mindfulness Activities on Nursing Students’ Mental Health

*Khadizah H. Abdul-Mumin^{1,2,3}, Nursyuhaidah Aida Johari³, Mohd Eryad Sudirman³, Maria Massuni³, Siti-Sarah Shalehah Muhd-Zin³, Aqil Danish Hirman³, Hamiz-Ihtisyam Md Zul-Majdi³, Piyanee Klainin-Yobas⁴ (1. Universiti Brunei Darussalam, Midwifery Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 2. School of Nursing and Midwifery, La Trobe University, Melbourne VIC3086, Australia (Australia), 3. Universiti Brunei Darussalam, Nursing Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 4. Alice Lee Centre for Nursing Studies, National University of Singapore 119077, Singapore (Singapore))

[FPoIQWB5-06] Quality of Life and Mental Health Status Among Patients with Chronic Kidney Disease in Public Tertiary Hospitals in Bangladesh

*Shuvo Md Jobael¹, Dr. ABM Alauddin Chowdhury², Md. Biplob Hossain³ (1. The Kyoto College of Graduate Studies for Informatics (Japan), 2. Daffodil International University (Bangladesh), 3. German University Bangladesh (Bangladesh))

[FPoIQWB5-07] Implementation of Sphere Handbook training in Hiroshima Prefecture: building a common language for humanitarian response through multidisciplinary collaboration

*Kazushi Keito¹, Nahoko Harada², Kayako Chishima³, Masahide Koda⁴ (1. Hiroshima Prefectural Hospital, Hiroshima, Japan (Japan), 2. Department of Nursing Science, Graduate School of Interdisciplinary Science and Engineering in Health Systems, Okayama University, Okayama, Japan (Japan), 3. Division of Disaster and Crisis Management, Japan Institute for Health Security (JIHS), Tokyo, Japan (Japan), 4. Office for Promotion of Regional Healthcare (Japan))

[FPoIQWB5-09] Experience, challenges, and motivations in the provision of antenatal care among healthcare providers in Tanzania: a qualitative study

*Jing Zhou¹ (1. Hiroshima University (Japan))

[FPoIQWB5-10] 将来の女性リーダー育成に向けた東京大学 #WeChangeの実践報告

*Madoka Nakano¹, Kyoko Kubo¹, Mariko Ogawa¹ (1. IncluDE, University of Tokyo (Japan))

[FPoIQWB5-11] Factors influencing the utilization of sexual and reproductive health services among im/migrant women

*Kozue Yamauchi¹ (1. Otemae University (Japan))

[FPoIQwB5-12] Digital Health Intervention to Improve Maternal Mental Health in Rural Bangladesh: A Randomized Controlled Trial Protocol

*Asma Begum¹, Md Jiaur Rahman², Md Moshir Rahman², Yoko Shimpuku^{2,1} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

[FPoIQwB5-13] Effectiveness of an mHealth-Based Educational Intervention to Reduce Anemia in Pregnancy in Rural Bangladesh: Protocol for a Randomized Controlled Trial

*Taiyaba Tabassum Ananta¹, Md Moshir Rahman², Md Jiaur Rahman², Sanmei Chen², Saori Kashima³, Miyuki Toda², Mohammad Habibur Rahman Sarker⁴, Taslima Khatun⁵, Yoko Shimpuku² (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing, Graduate School of Biomedical and Health Science, Hiroshima University (Japan), 3. Center for the Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 4. Technical Training Unit, International Centre for Diarrhoeal Disease Research (Bangladesh), 5. Department of Community Nutrition, Faculty of Public Health, Bangladesh University of Health Sciences, Dhaka (Bangladesh))

[FPoIQwB5-14] Mental Health Status and Associated Factors among Chinese Female Workers Living in Japan

*Weng Li¹ (1. Graduate School of Nursing, Hiroshima Bunka Gakuen University (Japan))

[FPoIQwB5-15] **TBA**

[FPoIQwB5-16] TBA

Innovation for Education and Health

12:15 PM - 1:45 PM JST | 3:15 AM - 4:45 AM UTC | Oral Presentation 1(Classroom 301)

Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[xYqn.QJi-01] Mathematics Anxiety as a Barrier to Medication Safety Its Impact on Nursing Students' Drug Calculation Competence

*Zainab Zahr¹, Tamer AL-GHRAIYBAH¹, San Mei Chen², Jane Maguire¹, Chiara Torrelli¹, Leila Gholizadeh¹ (1. University of Technology, Sydney (Australia), 2. Hiroshima University (Japan))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[xYqn.QJi-02] Emotional Challenges Among Older Adults Living in Resident Care Facilities in Bangladesh: A Qualitative Study

*Fazilatun Nasa¹, Rahman Md Moshir², Rahman Md Jiaur², Salma Parvin³, Mosammet Khaleda Akter⁴, Yoko Shimpuku^{1,2} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing lab, Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Nurse specialist, Al-Quwarah General Hospital, Al Qassim (Saudi Arabia), 4. National Institute of Advanced Nursing Education and Research, Department of Mental Health and Psychiatric Nursing (Bangladesh))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[xYqn.QJi-03] CONJUGATION OF BIOACTIVE COMPOUNDS WITH BACTERIAL SURFACTIN FOR ENHANCED WOUND HEALING

*Mayesha Marzia Dipti Moni¹ (1. Student (Bangladesh))

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[xYqn.QJi-04] *From genes to communities: enhancing infection prevention through science and education**Silvia Castellanos Castro^{1,2}, Elisa Irene Azuara Liceaga² (1. Tokyo University, visitant researcher (Japan), 2. Universidad Autónoma de la Ciudad de México (Mexico))

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[xYqn.QJi-05] Differences in Discharge Destinations between Non-Emergency and Emergency Hospital Visits among Nursing Home Residents in Japan: A 12-Year Analysis (2011–2023)

*Haruka Imura^{1,2}, Chie Teramoto¹, Kazuaki Tanabe¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Nijinohana Nijinohana Home-Visit Nursing Center (Japan))

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[xYqn.QJi-06] **The burden of antimicrobial resistance (AMR) in men and women in different regions of the world: advancing equity from the lens of sustainable development goals and EURESTOP Action**Tomislav Meštrović^{1,2}, Goran Bandov^{3,4}, Ena Bandov⁵, Marko Jelovac⁶, Ana Čikoš⁷, Mattia Mori⁸ ((1) Health Metrics Centre, University North, Croatia

(2) Institute for Health Metrics and Evaluation and the Department of Health Metrics Sciences, University of Washington, US

(3) Department of International Relations and Sustainable Development, University of Zagreb, Croatia

(4) The World Academy of Art and Science (WAAS) Fellow

(5) University Hospital Centre Osijek, Croatia

(6) Università luav di Venezia, Italy

(7) Ruđer Bošković Institute, Croatia

(8) Università degli Studi di Siena, Italy)

Career Development

2:00 PM - 3:30 PM JST | 5:00 AM - 6:30 AM UTC | Oral Presentation 1(Classroom 301)

Rethinking Career Paths for Early-Career Researchers: Insights from the "10 Critical Issues" of the Young Academy of Japan

Chair:Saki Sugano(Aoyama Gakuin University)

Science Technology Diplomacy/SDGs

3:45 PM - 5:15 PM JST | 6:45 AM - 8:15 AM UTC | Oral Presentation 1(Classroom 301)

Food security/SDGs

Chair:Sonoko Watanabe(Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[J.6E72iz-01] Beyond blame: migration's limited role in Madagascar's deforestation

*Mirindra Sitraka Rakotoarisoa¹, Sarobidy Rakotonarivo¹, Valerie Mueller^{2,3}, Henintsoa Rakoto^{1,4}, Andrew Bell^{5,6} (1. École Supérieure des Sciences Agronomiques, University of Antananarivo, Antananarivo, Madagascar (Madagascar), 2. School of Politics and Global Studies, Arizona State University, Tempe, AZ, USA (USA), 3. Development Strategy and Governance Division, International Food Policy Research Institute, Washington, DC, USA (USA), 4. School for the Future of Innovation in Society, Arizona State University, Tempe, AZ, USA (USA), 5. Department of Global Development, Cornell University, USA (USA), 6. Boston University, Boston, USA (USA))

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[J.6E72iz-02] Strengthening Food Security through Sustainable Aquaculture and Microbial Ecology

*Noushin Arfatahery¹, Maryam Asefnejad² (1. Freie University Berlin (Germany), 2. Tehran Medical University (Iran))

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[J.6E72iz-03] 日本に障壁のない世界を創る ―欧州諸国から学ぶ日本のインクルージョンの未来―

*Yuko Kataoka¹ (1. Hearing Health Center, Okayama University Hospital (Japan))

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[J.6E72iz-04] (Withdrawn) Menstrual Pain, Dietary Practices, and Academic Performance During Menstruation among Young Adult Women at Selected Universities in Dhaka City, Bangladesh

*Sk Shareyar¹, Farhana Islam², Nusrat Hossain Sheba³, Bilkis Banu⁴ (1. Student, Department of Public Health, Independent University, Bangladesh (IUB)), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh; (Bangladesh), 2. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences; 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh (Bangladesh), 3. PhD Student, Department of Family and Preventive Medicine, University of Utah, Salt Lake City, Utah 84108, USA (Bangladesh), 4. Associate Professor, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh (Bangladesh))

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[J.6E72iz-05] (Withdrawal) Integrating UN SDGs into Chemistry Education: Insights from Project-Based Learning in the UK and USA

*Yalinu Poya¹ (1. Wentworth Institute of Technology (USA))

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[J.6E72iz-06] Socio-cultural drivers and strategies for the control of excessive gestational weight gain and maternal obesity in the Pwani region, Tanzania

*Dorkasi Lushindiho Mwakawanga¹, Manase Kilonzi², Agnes Fredrick Massae¹, Notikela Nyamle³, Furahini Joram³, Ipyana M Kajembula¹, Emmanuel Mlay⁴, Pius M Temba¹, Nathanael Sirili³ (1. School of Nursing, Muhimbili University of Health and Allied Sciences (Tanzania), 2. School of Pharmacy, Muhimbili University of Health and Allied Sciences (Tanzania), 3. School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences (Tanzania), 4. School of Nursing and Midwifery, Aga Khan University (Tanzania))

Gender/Career Development

12:15 PM - 1:45 PM JST | 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[ZE_VRU11-01] Gender-neutral Scientific Leadership in Bolivia: Evidence-Based Insights on Women's Participation Across the STEM Education and Research Pipeline

*Natalia Montellano Duran^{1,2}, Jose Alberto Limpas Hurtado¹, Brenda Mariola Cruz Benavent¹, Narel Paniagua-Zambrana² (1. Universidad Católica Boliviana San Pablo (Bolivia), 2. Organization for Women in Science in Developing Countries (Italy))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[ZE_VRU11-02] Beyond building Empires: Scientific Leadership as Collective Capability

*Tomoko Sugiura¹, Aparna Lal¹ (1. Australian National University (Australia))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[ZE_VRU11-03] Interactive Session at the World Forum for Women in Science 2026: The Female Science Talents Programme – Adaptive Support Systems for Women's Leadership in Science and Beyond

*Julia Milbredt¹ (1. Falling Walls Foundation (Germany))

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[ZE_VRU11-04] Building a Novel Humanitarian Support System Through Women's Leadership: A Decade of Practice with PCAT Across Multiple Disasters in Japan

*Nahoko Harada¹ (1. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[ZE_VRU11-05] Gender Bias, Professional Identity and Public Perception of Nursing Profession in the Republic of Croatia

*Tomislav Mestrovic^{1,4,5}, Danijela Sopic^{1,2}, Matjea Krizaj Grabant¹, Tina Kosanski¹, Rosana Ribic¹, Marijana Neuberg¹, Goran Bandov³ (1. University North, University centre Varazdin, Varazdin (Croatia), 2. Alma Mater Europaea University, Maribor (Slovenia), 3. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ZE_VRU11-06] Career Development of Women in Science and Higher Education: Changing Dynamics of the International and Japanese Science Communities

*Aysun Uyar Makibayashi¹ (1. Doshisha University (Japan))

Planetary Health/SDGs

2:00 PM - 3:30 PM JST | 5:00 AM - 6:30 AM UTC | Oral Presentation 2(Classroom 302)

Planetary Health/SDGs

Chair:Cynthia Maharani(Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ctkh3Px5-01] From Climate Crisis to Silent Harm: Synthesizing Evidence on Climate-related Stress and Violence Among Reproductive-Aged Women

*Yasmine Mahmoud Moussa Osman¹, Marwa Mamdouh Shaban², Mostafa Shaban³ (1. Department of Obstetrics and Gynaecology Nursing, Faculty of Nursing, Zagazig University, Zagazig, Egypt (Egypt), 2. Department of Community Health Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt), 3. Department of Geriatric Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt))

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ctkh3Px5-02] The Power of ancestral philosophy *Alli kawsay (Buen Vivir)* in indigenous movements of Colombia - Ecuador vs. the exclusion by big mining development, rights of Mother Nature from the global south

*Vanessa-Eduardo Arteaga Bernal-Erazo Acosta¹ (1. Indigenous Independents Researchers in Ecuador-Colombia indigenous womens (Colombia))

2:30 PM - 2:45 PM JST | 5:30 AM - 5:45 AM UTC

[ctkh3Px5-03] Gender difference in Greenness effect on preventable mortality among middle-aged people: evidence from 47 cities in Japan, 2001-2018

*Meng Xiaolu¹, Saori Kashima¹ (1. Hiroshima University (Japan))

2:45 PM - 3:00 PM JST | 5:45 AM - 6:00 AM UTC

[ctkh3Px5-04] Spatiotemporal analysis for Evaluating the Impact of Climate Change on Malaria among Under-5 Children in Nigeria

*Kelechi Genevieve Ukeoma¹, Saori KASHIMA¹ (1. Environmental Health Science Laboratory, Graduate School of Advanced Sciences and Engineering, Hiroshima University. (Japan))

3:00 PM - 3:15 PM JST | 6:00 AM - 6:15 AM UTC

[ctkh3Px5-05] Practical Project-Based Learning Education toward Co-Creative Branding across Coffee-Producing and Coffee-Consuming Countries

*Maiku Abe¹, Hyunjung Lim¹ (1. Department of Intercultural Studies, Yamaguchi Prefectural University (Japan))

3:15 PM - 3:30 PM JST | 6:15 AM - 6:30 AM UTC

[ctkh3Px5-06] (Withdrawn) Navigating Silence and Barriers: Experience of Sexual and Reproductive Health Among Married Adolescent Girls Living in an Urban Informal Settlement in Dhaka, Bangladesh

*Farhana Islam¹, Sk Shareyar², Asaduzzaman Hridoy³, Md. Rabbi Tarikujjaman⁴, Nadira Islam Nitu⁵, Dr. Md. Shahriar Mahbub⁶, Dr. Nasreen Nahar⁷ (1. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences(BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh. (Bangladesh), 2. Student, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh. (Bangladesh), 3. Student, Department of Anthropology, Comilla University; Road, Kotbari-3506, Cumilla, Bangladesh. (Bangladesh), 4. Student, BRAC James P Grant School of Public Health, BRAC University, 65, BRAC Tower, Floor 10-13, Bir Uttam AK Khandakar Rd, Dhaka 1212, Bangladesh, (Bangladesh), 5. Student, Department of Public Health & Informatics, Bangladesh University of Professionals (BUP), Mirpur Cantonment, Dhaka-1216, Bangladesh. (Bangladesh), 6. Lecturer, Department of Reproductive and Child Health, Bangladesh University of Health Sciences(BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh (Bangladesh), 7. Associate Professor & Head, Department of Reproductive and Child Health, Bangladesh University of Health Sciences(BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh. (Bangladesh))

Mon. Jul 20, 2026

Science Technology Diplomacy/SDGs

9:00 AM - 11:30 AM JST | 12:00 AM - 2:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Communicating science for policy

Chair:Shaheen Motala Timol(Head Academic and Quality Enhancement, Middlesex University Mauritius/Chair, INGSA-Africa, Mauritius)

Gender/Career Development

🗓 Sat. Jul 18, 2026 9:30 AM - 10:30 AM JST | Sat. Jul 18, 2026 12:30 AM - 1:30 AM UTC | 🏛 Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

9:30 AM - 9:35 AM JST | 12:30 AM - 12:35 AM UTC

[2_Csfom2-01] Greeting

Robbert Dijkgraaf (International Science Council, President elect)

9:35 AM - 9:40 AM JST | 12:35 AM - 12:40 AM UTC

[2_Csfom2-02] Greeting

Kiriko Sakata (Hiroshima University, Vice President (Student Support and Diversity))

9:40 AM - 9:55 AM JST | 12:40 AM - 12:55 AM UTC

[2_Csfom2-03] Science diplomacy: way to global context starting from lab

*Amal Amin¹ (1. The National Research Center, Egypt (Egypt))

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[2_Csfom2-04] Connecting Maternal Care Across Borders: Women Scientists in Action through Science Diplomacy

*Yoko Shimpuku¹ (1. Hiroshima University (Japan))

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[2_Csfom2-06] Building Bridges Across Boundaries: The Role of Young Academies in Science Diplomacy

*Haruka Ono¹ (1. Toyohashi University of Technology, Japan (Japan))

10:15 AM - 10:25 AM JST | 1:15 AM - 1:25 AM UTC

[2_Csfom2-05] Women in science diplomacy and science diplomacy for women

*Angela Liberatore¹ (1. European University Institute (Italy))

10:25 AM - 10:30 AM JST | 1:25 AM - 1:30 AM UTC

Summary

Gender/Career Development

Sat. Jul 18, 2026 9:30 AM - 10:30 AM JST | Sat. Jul 18, 2026 12:30 AM - 1:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

9:40 AM - 9:55 AM JST | 12:40 AM - 12:55 AM UTC

[2_Csfom2-03] Science diplomacy: way to global context starting from lab

*Amal Amin¹ (1. The National Research Center, Egypt (Egypt))

Keywords : Science Diplomacy

Nowadays, the scientists should have extra commitments towards their societies to build up trust in the role of science in fixing society and development. In this context, science diplomacy can start and benefit from accumulative experience building multi-and trans-disciplinary networks on the national level then to the globe. Accordingly, women in science without borders was chosen by NASAC as example of effective science diplomacy initiatives especially at crises where it was founded by scientist and began from Egypt, Africa as gender inclusive scientific initiative working within frame of science for sustainable development and it now distributes over 92 countries connecting scientists, policy makers, industry, private sector and the public for the sake of humanity. On that way, several other initiatives were founded as science diplomacy for the future, World forum for science innovation and entrepreneurship, science for humanity foundation and global society and many more initiatives proving that change may come from south as North as long as the idea aims for the sake of humanity.

Gender/Career Development

Sat. Jul 18, 2026 9:30 AM - 10:30 AM JST | Sat. Jul 18, 2026 12:30 AM - 1:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[2_Csfom2-04] Connecting Maternal Care Across Borders: Women Scientists in Action through Science Diplomacy

*Yoko Shimpuku¹ (1. Hiroshima University (Japan))

Keywords : Women in Science、 Science Diplomacy

As the world faces increasingly complex challenges, including climate change, infectious diseases, conflicts, and disasters, the importance of science diplomacy in connecting science, policy, and international cooperation continues to grow. In this presentation, I reflect on the role of women scientists in advancing global science diplomacy through my experiences as a researcher in midwifery and maternal and child health.

Over the past two decades, I have collaborated with partners in low- and middle-income countries, particularly in Asia and Africa, to improve maternal and newborn health outcomes and strengthen the quality of midwifery care. Through research, capacity building, digital health interventions, and midwifery education initiatives in countries such as Tanzania, I have sought to generate evidence that can inform both local practice and health policy.

Importantly, these experiences have also provided opportunities to contribute to international discussions and policy development through organizations such as the World Health Organization (WHO) and the International Confederation of Midwives (ICM). This illustrates how evidence generated at the community and country levels can influence global agendas and, in turn, be translated back into policy and practice.

Drawing on these experiences, I will discuss how women scientists can serve as bridges across countries, disciplines, and sectors, fostering collaboration, mutual learning, and more equitable global partnerships. Using maternal and newborn health as a case study, I will explore how science can contribute to diplomacy, strengthen international cooperation, and promote a more just and sustainable world.

Gender/Career Development

Sat. Jul 18, 2026 9:30 AM - 10:30 AM JST | Sat. Jul 18, 2026 12:30 AM - 1:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[2_Csfom2-06] Building Bridges Across Boundaries: The Role of Young Academies in Science Diplomacy

*Haruka Ono¹ (1. Toyohashi University of Technology, Japan (Japan))

Keywords : Young Academy、 Science-policy interface

Background / Context

As societies face increasingly complex challenges, stronger connections between science and society are essential. While science diplomacy is often associated with international cooperation, many contemporary challenges require dialogue, trust-building, and collaboration across a wider range of boundaries—between science and policy, science and society, science and media, as well as across disciplines, generations, and cultures. Young academies have emerged as important platforms where early- and mid-career researchers engage across these boundaries and contribute to societal challenges.

Key Issues or Challenges

Despite the growing importance of scientific knowledge, gaps remain between researchers, policymakers, communities, media, and the public. Young researchers often have limited opportunities to engage in these interfaces. In addition, women researchers and scholars from diverse backgrounds continue to face barriers to visibility, leadership, and participation. More inclusive spaces for dialogue and collaboration are therefore needed.

Approach / Perspective

This presentation introduces the activities of the Young Academy of Japan as examples of how young academies foster dialogue, trust-building, and collaboration across boundaries. It highlights initiatives connecting researchers with policymakers, local communities, media professionals, and international networks. Through these activities, young researchers develop leadership and communication skills while contributing to society beyond their disciplinary expertise.

Key Messages

Young academies are more than networks for researcher exchange. They connect science with policy, society, media, and international communities, creating opportunities for dialogue and co-creation. By building trust across boundaries, they provide practical spaces where the next generation of scientific leaders can learn, collaborate, and address societal challenges.

Implications for Science and Society

The experience of the Young Academy of Japan suggests that science diplomacy should be understood not only as cooperation across nations but also as the broader practice of connecting people, institutions, and communities through science. Strengthening young academies can foster inclusive leadership, amplify diverse voices, and support more collaborative and resilient knowledge communities.

Gender/Career Development

Sat. Jul 18, 2026 9:30 AM - 10:30 AM JST | Sat. Jul 18, 2026 12:30 AM - 1:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Bridging Borders: Women in Science Leading Global Science Diplomacy

Chair:Saori Kashima(IDEA Institute, Hiroshima University)

10:15 AM - 10:25 AM JST | 1:15 AM - 1:25 AM UTC

[2_Csfom2-05] Women in science diplomacy and science diplomacy for women

*Angela Liberatore¹ (1. European University Institute (Italy))

Keywords : Women in Science、 Science Diplomacy

Background / Context

Science diplomacy starts with the acknowledgment that science matters for international relations and, at the same time, is influenced by them. It fosters scientific collaboration also when this is made difficult by conflicts, while tackling competition and concerns over research security. It is more necessary than ever in an increasingly turbulent world. Science diplomacy matters for women scientists, whether to support their international outreach or help them when among the researchers at risk due to violent conflicts or political persecution. And women have been taking a leading role in its development and helped shaping its practices.

Key Issues or Challenges

The presentation will address some key challenges for science diplomacy – e.g. concerning diversity, access to data and ways to protect researchers at risk- and will discuss what this entails for women and how women contributions can be further enhanced.

Approach / Perspective

The experience of the author in the policy and scientific debate on science diplomacy in Europe (e.g. the European Framework on Science Diplomacy) will be the basis for the presentation. This with the aim to contribute to a broader international effort to foster women leadership in this field as proposed by initiatives such as Women in Science Without Borders.

Key Messages

Key messages: 1) science diplomacy is not a naïve effort to be dropped in the name of geopolitical realism but a necessity for the advancement of science and for science to contribute protecting global public goods; 2) diversity in science diplomacy is as important as diversity in science itself to ensure its quality and context sensitivity; 3) women may disproportionately be affected by attacks on researchers during conflicts and -on the positive side- are active agents of science diplomacy.

Implications for Science and Society

Science diplomacy is a key aspect of the relations between science and society at the international level.

Science Diplomacy

📅 Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | 🏢 Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

Abstract:

Science plays a crucial role not only in generating knowledge but also in fostering trust and collaboration across nations. Amid global challenges such as pandemics, climate change, vaccine inequities, and AI governance, science diplomacy has gained renewed attention as a means of addressing transnational issues.

Yet, the benefits and influence of science diplomacy are not evenly distributed. This symposium introduces a *distributive justice* framework to critically examine the structural imbalances in access to scientific knowledge, decision-making processes, and international cooperation. Key issues include the marginalization of Global South perspectives, systemic barriers for early-career and female researchers, and the opacity of science-policy interfaces.

By reframing science as a global public good, this session explores how we might construct more inclusive, dialogical, and equitable platforms for scientific collaboration. Ultimately, the symposium aims to reimagine science diplomacy as a tool not only for international relations but also for advancing social justice and epistemic equity.

10:40 AM - 10:50 AM JST | 1:40 AM - 1:50 AM UTC

[7SRQ.F-l-01] Women empowerment in leadership: Seeing through the lens of young scientists.

Sam Chan Siok Yee (Immediate Past Co-chairs of Global Young Academy)

School of Pharmaceutical Sciences, Universiti Sains Malaysia)

10:50 AM - 11:00 AM JST | 1:50 AM - 2:00 AM UTC

[7SRQ.F-l-02] Science Diplomacy at UNESCO: Building Peace in the Minds of Men and Women

Galindo Moreno, Manuel Ricardo (UNESCO)

11:00 AM - 11:10 AM JST | 2:00 AM - 2:10 AM UTC

[7SRQ.F-l-03] “Science and Technology Policy” and “Distributive Justice”

*Ryuma Shineha¹ (1. Keio University, Japan (Japan))

11:10 AM - 11:20 AM JST | 2:10 AM - 2:20 AM UTC

[7SRQ.F-l-04] The role of the European Union in fostering an inclusive and equitable global science diplomacy discourse

*Jan Marco MÜLLER¹ (1. European Commission, DG Research and Innovation, Belgium (Belgium))

11:20 AM - 11:30 AM JST | 2:20 AM - 2:30 AM UTC

[7SRQ.F-l-05] Transforming Science, Science System, Science Diplomacy and the Role of Scientists

*Tateo Arimoto^{1,2,3} (1. ISC Fellow (Japan), 2. Visiting Professor of National Graduate Institute for Policy Studies, (GRIPS) (Japan), 3. Senior Advisor to the President of JST (Japan))

11:30 AM - 11:40 AM JST | 2:30 AM - 2:40 AM UTC

[7SRQ.F-l-06] Science Diplomacy: Building Common Interests with Global Inclusion

*Paul Arthur Berkman¹ (1. Science Diplomacy Center, Inc (SDCI), USA (USA))

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

11:40 AM - 12:10 PM JST | 2:40 AM - 3:10 AM UTC

Discussion

Science Diplomacy

Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

10:40 AM - 10:50 AM JST | 1:40 AM - 1:50 AM UTC

[7SRQ.F-I-01] Women empowerment in leadership: Seeing through the lens of young scientists.

Sam Chan Siok Yee (Immediate Past Co-chairs of Global Young Academy

School of Pharmaceutical Sciences, Universiti Sains Malaysia)

Background / Context

Globally, women comprise just 28% of researchers (UNESCO), with the gap widening at senior levels. COVID-19 intensified this, as women scientists absorbed disproportionate caregiving duties which up to ten times more unpaid care work than men. This gap between educational parity and leadership raises urgent questions about how scientific opportunity is distributed.

Key Issues or Challenges

Barriers to women's leadership in science are deep-seated: institutional mindsets and unconscious bias about women's roles remain the most significant obstacles, compounded by internalised self-doubt. Career structures rarely accommodate the competing demands of teaching, research, administration, and family. Grassroots efforts such as OWSD, AKEPT Malaysia, KANITA USM, and WIN Malaysia are commendable but largely bottom-up, disconnected from top-down structural reform, leaving a persistent gap between policy intent and lived outcomes.

Approach / Perspective

Drawing on discussions from the YSN-ASM "Inspiring Women Leadership" forum and Malaysia's science advisory ecosystem, this presentation applies a distributive justice lens to science diplomacy, examining how opportunity and authority are — and should be — allocated across gender lines in research systems. It highlights research's collaborative future, spanning academia, industry, government, and community, and argues women's equitable participation is essential to it. Strategies discussed include mentorship pathways, STEM talent policy incentives, and stronger institutions acting as innovation intermediaries.

Key Messages

Educational access alone does not guarantee equitable leadership; distributive justice requires deliberate redistribution of authority, not just opportunity. Closing the gap demands coordinated action, connecting grassroots advocacy to structural, top-down policy rather than isolated initiatives. Individual courage and mentorship matter but must be matched by institutional accountability and the dismantling of unconscious bias.

Implications for Science and Society

Embedding distributive justice into science diplomacy offers a pathway to more resilient, representative global knowledge cooperation. By linking Malaysia's advocacy networks to national policy and platforms such as OWSD, this scenario shows how equitable participation of women strengthens scientific quality and diplomatic credibility; positioning gender equity as a structural condition for effective global cooperation.

Science Diplomacy

Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

10:50 AM - 11:00 AM JST | 1:50 AM - 2:00 AM UTC

[7SRQ.F-I-02] Science Diplomacy at UNESCO: Building Peace in the Minds of Men and Women

Galindo Moreno, Manuel Ricardo (UNESCO)

This presentation examines how science can help build peace and support international cooperation. It sets out UNESCO's approach under four pillars: improving international relations, supporting STI cooperation, informing policy, and building capacity. It then turns to four recently renewed priorities: open science, emerging technologies, science in times of crisis, and shared resources. Each is illustrated with real-world cases, including the Recommendation on Open Science, the Human Cell Atlas, transboundary water cooperation, and SESAME. In 2025, the Global Ministerial Dialogue on Science Diplomacy brought together more than 1,000 participants, who agreed on a common set of principles and ten recommendations, as well as strategies, skills, and foresight.

Science Diplomacy

Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

11:00 AM - 11:10 AM JST | 2:00 AM - 2:10 AM UTC

[7SRQ.F-I-03] “Science and Technology Policy” and “Distributive Justice”

*Ryuma Shineha¹ (1. Keio University, Japan (Japan))

Keywords : Distributive Justice

Background / Context

In recent years, distributive justice has become an important concept in discussions of science and technology policies. Scientific knowledge and technological innovations generate significant social benefits; however, these benefits are not always distributed equally. Simultaneously, the risks associated with science and technology are often disproportionately borne by vulnerable populations. In a knowledge-based society, questions regarding who produces knowledge, who benefits from it, and who bears the risks have become central policy concerns. International organizations and policy frameworks increasingly emphasize fairness, inclusion, and access to knowledge as public assets. Therefore, examining science and technology policy from the perspective of distributive justice is essential to understand the structural inequalities embedded in the global knowledge system.

Key Issues or Challenges

One of the key challenges is the existence of multilevel inequalities in science and technology systems. These include disparities between the Global North and Global South, gaps in research funding and infrastructure, inequalities between institutions and regions, and disparities within laboratories and research communities. The “Matthew Effect,” identified by Robert K. Merton, illustrates how accumulated advantage reproduces inequality in scientific communities. These inequalities are rooted in historical, economic, and political contexts and influence both knowledge production and the distribution of its benefits. The challenge for science policy is to design systems that reduce these structural inequalities rather than reinforce them..

Approach / Perspective

This presentation examines distributive justice through the lenses of science policy, science diplomacy, and research ecosystems. Drawing on discussions within academic communities, policy dialogues, and international collaborations, this presentation explores how concepts such as open science, capacity building, and international cooperation can help address inequalities in knowledge production and access. This perspective emphasizes multilevel policy design, from global governance to institutional and laboratory-level practices.

Key Messages

The main message is that distributive justice should be considered not only in the distribution of scientific outcomes but also in the processes of knowledge production and the structure of research systems. Science policy must address the structural inequalities embedded in the global knowledge system and promote more inclusive research ecosystems. The main message is that distributive justice should be considered not only in the distribution of scientific outcomes, but also in the processes of knowledge production and the structure of research systems. Science policy must address structural inequalities embedded in the global knowledge system and promote more inclusive research ecosystems.

Implications for Science and Society

By integrating distributive justice into science and technology policies, we can promote more equitable access to knowledge, strengthen international collaboration, and support more inclusive scientific communities. This perspective contributes to building a research and innovation system that advances both scientific excellence and social justice in academia.

Science Diplomacy

Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

11:10 AM - 11:20 AM JST | 2:10 AM - 2:20 AM UTC

[7SRQ.F-I-04] The role of the European Union in fostering an inclusive and equitable global science diplomacy discourse

*Jan Marco MÜLLER¹ (1. European Commission, DG Research and Innovation, Belgium (Belgium))

Keywords : Science diplomacy

Background / Context

In an age of geostrategic rivalries and growing global competition in science and technology, in particular with respect to disruptive technologies, research and innovation (R&I) has become a critical asset, translating into power, competitiveness and geopolitical influence. At the same time, geopolitical disruptions are increasingly impacting on the international science system. As a consequence, science diplomacy has emerged as a key tool to foster the dialogue between research and foreign policy.

Key Issues or Challenges

The global science diplomacy discourse has been largely dominated by countries in the North. However, countries in the South have been quickly catching up, aiming at leveraging their geopolitical influence through science diplomacy. The question is how to foster an inclusive global dialogue in science diplomacy that benefits countries individually and humankind as a whole.

Approach / Perspective

The presentation will present the recently adopted Council recommendation on a European Union framework for science diplomacy, which has among its explicit goals the use of science for the pursuit of peace and a rules-based international order and for managing global goods and commons sustainably. Based on values such as academic freedom, gender equality, diversity and inclusion, the Council recommendation aims at building equitable science diplomacy partnerships and fostering the global science diplomacy discourse.

Key Messages

Science diplomacy has evolved very dynamically in recent years, leading to the development of a vibrant global community of science diplomacy scholars and practitioners, including a strong engagement by women and the young generation. This offers a unique opportunity to foster the dialogue between nations through science diplomacy.

Implications for Science and Society

Research and innovation impact on people's lives more than ever before and have triggered a tech race between nations bearing the risk of deepening asymmetries between North and South. Science diplomacy offers a tool to discuss these issues and come to solutions that benefit all sides. This benefits also the impact of science on society and the role of women in science.

Science Diplomacy

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Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

11:20 AM - 11:30 AM JST | 2:20 AM - 2:30 AM UTC

[7SRQ.F-I-05] Transforming Science, Science System, Science Diplomacy and the Role of Scientists

*Tateo Arimoto^{1,2,3} (1. ISC Fellow (Japan), 2. Visiting Professor of National Graduate Institute for Policy Studies, (GRIPS) (Japan), 3. Senior Advisor to the President of JST (Japan))

Keywords : Science Diplomacy

Humanity stands at a critical juncture. The climate crisis, intensifying geopolitical tensions, and the erosion of the postwar international order are converging, fundamentally reshaping the environment in which science operates. At the same time, rapid advances in frontier technologies—particularly artificial intelligence—are unfolding with insufficient governance, amplifying inequalities, undermining sustainability, and posing systemic risks to the Earth system.

These transformations also reveal a profound shift in the operating environment of science diplomacy. We are moving toward a hybrid order—where values and interests, cooperation and competition, and interdependence and autonomy coexist. In such a world, science diplomacy can no longer remain primarily normative or symbolic; it must become strategic, embedded in STI policy, and oriented toward action.

At the same time, the international system of science—long shaped predominantly by the Global North, including its institutions, norms, and practices of science diplomacy—must be rethought. A central task ahead is to redesign this system through genuine co-design and co-creation with the Global South, fostering more inclusive and equitable governance frameworks that reflect diverse perspectives, capacities, and priorities.

This presentation argues that both science and the science system are undergoing structural transformation. It proposes an expanded understanding of scientists' roles across four interrelated functions: knowledge production, integration, policy brokerage, and trust-building communication. As stakeholders diversify—across governments, industry, security communities, and civil society—new forms of collaboration and transdisciplinary approach are required, linking Track 1 and Track 2 processes.

The central challenge is not simply to promote cooperation, but to design adaptive, multi-layered frameworks that reconcile openness with security, and national interests with global responsibility. Science must move beyond analysis toward the design and implementation of actionable policies, supported by new policy instruments, institutional innovation and capacity development.

Ultimately, this transformation raises a fundamental question: what is science for, and who are scientists? Rebuilding trust in science demands a long-term perspective grounded in history and a deeper understanding of humanity's place within an increasingly complex and fragile global system

Science Diplomacy

Sat. Jul 18, 2026 10:40 AM - 12:10 PM JST | Sat. Jul 18, 2026 1:40 AM - 3:10 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Diplomacy from the Perspective of Distributive Justice: Redefining Global Knowledge Cooperation

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University), Sayaka Horiuchi (Gifu University)

11:30 AM - 11:40 AM JST | 2:30 AM - 2:40 AM UTC

[7SRQ.F-I-06] Science Diplomacy: Building Common Interests with Global Inclusion

*Paul Arthur Berkman¹ (1. Science Diplomacy Center, Inc (SDCI), USA (USA))

Keywords : Science Diplomacy

Inclusion equates with knowledge discovery (who, what, when, where, why and how), providing insights about patterns, trends and processes to make informed decisions that operate across a ‘continuum of urgencies’. Inclusion also is a fundamental difficulty for humanity to overcome at personal to planetary levels, considering the immediate and enduring challenge of our globally-interconnected civilization to navigate the 21st century. Science diplomacy emerged at the height of the Cold War – in the aftermath of War World War II last century – revealing a powerful path for dialogue even among superpower adversaries based on “*matters of common interest*”, which were elegantly elaborated in the 1959 Antarctic Treaty that became the first nuclear arms agreement. “*With the interests of science and the progress of all mankind*”, the 1959 Antarctic Treaty emerged directly from the International Geophysical Year (IGY) 1957-1958, “*forever*” highlighting the global roles and inclusive responsibilities with science as a tool of diplomacy. This presentation will illustrate how science diplomacy works as a ‘language of hope’, applying the Global Indigenous Youth Summit on Climate Change (GIYSCC) as an inclusive as well as inspiring exemplar with the theory, methods and skills of informed decisionmaking. GIYSCC is a “*virtual dialogue by, for and among Indigenous youth with global inclusion*” on August 9th – circling the Earth with the Sun across three 8-hour time zones in 24 hours (00:00-24:00 GMT) on the International Day of the World’s Indigenous Peoples. Considering inclusion and leadership in the context of this World Forum for Women in Science, the four GIYSCC Global Leads from 2023-2026 have all been amazing women leaders from Africa (Nigeria, Mauritius, Madagascar and Ghana, respectively). Since its origin with GIYSCC-2023, this annual virtual dialogue has engaged registrants representing 355 languages from 140 nations. Importantly, the GIYSCC Indigenous Youth Leaders have produced legacy contributions, notably their 2023 *Nature Commentary* that “*Indigenous Youth Must Be at the Forefront of Climate Diplomacy*”, initiating development of a Global Partnership of Indigenous Youth in the spirit of SDG 17 among the United Nations Sustainable Development Goals. The ongoing passion, imagination and capacities with the GIYSCC Indigenous Youth Leaders are further reflected by two upcoming Springer volumes in the *Informed Decisionmaking for Sustainability* book series – including nearly fifty chapters crafted by Indigenous youth from around the world. Global inclusion with GIYSCC is hopeful for humanity with insights for the benefit of all on Earth across generations.

Innovation for Education and Health

📅 Sat. Jul 18, 2026 12:20 PM - 1:20 PM JST | Sat. Jul 18, 2026 3:20 AM - 4:20 AM UTC | 🏛️ Main Hall(Main Conference Hall in Kojin Kaikan)

Special Lecture

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:20 PM - 1:20 PM JST | 3:20 AM - 4:20 AM UTC

[vrYgdEYq-01] African Mothers Inc.

Kimiyoshi Yokogawa (African Mothers Inc.)

Science Diplomacy

📅 Sat. Jul 18, 2026 1:30 PM - 3:00 PM JST | Sat. Jul 18, 2026 4:30 AM - 6:00 AM UTC | 🏛️ Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ejb9XLcK-01] **SCIENTIFIC LEADERSHIP AND DIPLOMACY: THE POWER OF COLLECTIVE WISDOM IN SOLVING GLOBAL PROBLEMS**

Yusuf Baran (İzmir Institute of Technology)

1:45 PM - 2:00 PM JST | 4:45 AM - 5:00 AM UTC

[ejb9XLcK-02] **Building a Collaborative Research Platform on Early Adolescents and Gender Norms: Key Findings from A Cross-Sectional Study, Cape Town, South Africa**

Rinko Kinoshita (University of the Western Cape, Cape Town, South Africa)

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ejb9XLcK-03] **Science Diplomacy as a Space of Reflection: Knowledge, Meaning and Shared Futures**

Nerina Finetto

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ejb9XLcK-04] **Cultivating Cooperation through Sustained Dialogue: The Hiroshima AI Process and Japan's Science Diplomacy**

Ayako Takemi (Associate Professor, Research Center for Advanced Science and Technology (RCAST), The University of Tokyo, Japan)

2:30 PM - 3:00 PM JST | 5:30 AM - 6:00 AM UTC

[ejb9XLcK-5add] Discussion

Science Diplomacy

Sat. Jul 18, 2026 1:30 PM - 3:00 PM JST | Sat. Jul 18, 2026 4:30 AM - 6:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ejb9XLcK-01] **SCIENTIFIC LEADERSHIP AND DIPLOMACY: THE POWER OF COLLECTIVE WISDOM IN SOLVING GLOBAL PROBLEMS**

Yusuf Baran (İzmir Institute of Technology)

Humanity has faced numerous global challenges throughout history. However, issues such as climate change, pandemics, the energy transition, food and water security, biological threats, and the new dynamics arising from artificial intelligence and advanced technologies are no longer problems that countries are able to manage on their own. The common feature of these problems is that they transcend national borders and necessitate international knowledge sharing, joint research capacity and multidisciplinary collaboration for their resolution.

Global problems that humanity faces have no boundaries and directly affect all societies. Therefore, it is inevitable that solutions to global problems must be based on the production of universal knowledge and international collaboration.

At this point, science provides the strongest common ground for humanity. Through its empirical approach, universal methodology, transparency and verifiability, science is able to bring together researchers from different cultures and political systems towards common goals. Scientific knowledge forms the basis not only for new discoveries, but also for trust, mutual understanding and sustainable partnerships between societies.

The reflection of this approach in international relations is science diplomacy. Science diplomacy is a multidimensional concept that encompasses the strengthening of international relations through scientific collaboration, the support of scientific research by diplomatic mechanisms, and the effective use of scientific data in the policy-making process. Key components of this approach include the global support for scientific research, the sharing of research infrastructure, the development of international funding mechanisms, and bringing scientists together within shared networks.

Science diplomacy is not only a tool for increasing academic productivity. It is also a strategic element of soft power that supports the achievement of global development goals, particularly the United Nations Sustainable Development Goals, enhances research and innovation capacity, builds trust between societies, and strengthens the international visibility of countries. The fact that many countries today have made science diplomacy an important component of their national strategies is a clear indication of the new role that science plays in international relations.

This transformation also brings a new perspective to the concept of scientific leadership. Scientific leadership is no longer limited to conducting high-quality research or producing scientific publications. It also encompasses the capacity to bring together different disciplines, institutions and countries around shared research objectives, to encourage the sharing of knowledge, and to transform scientific outputs for the common good of humanity. Strong partnerships established among universities, research centres, public institutions, the private sector and international organisations are one of the key factors determining the success of science diplomacy. Promoting open science practices, supporting researcher mobility, developing shared research infrastructure and strengthening a culture of interdisciplinary collaboration are strategically important for the sustainability of the global science ecosystem.

Scientific knowledge is a universal value that evolves through sharing, strengthens through

collaboration, and contributes to the common prosperity of humanity. Scientific leadership and science diplomacy, as natural extensions of this understanding, are among the fundamental approaches that strengthen collective wisdom in addressing global challenges, deepen international cooperation, and enable the generation of knowledge-based solutions for a more sustainable future.

Science Diplomacy

Sat. Jul 18, 2026 1:30 PM - 3:00 PM JST | Sat. Jul 18, 2026 4:30 AM - 6:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

1:45 PM - 2:00 PM JST | 4:45 AM - 5:00 AM UTC

[ejb9XLcK-02] **Building a Collaborative Research Platform on Early Adolescents and Gender Norms: Key Findings from A Cross-Sectional Study, Cape Town, South Africa**

Rinko Kinoshita (University of the Western Cape, Cape Town, South Africa)

Background

Early adolescents (EAs) aged between 10 and 14, account for half of 1.2 billion adolescent population worldwide. During early adolescence (EA), they go through puberty and experience social and cognitive shifts. This is a period when gender norms are shaped, manifesting in their perceptions, attitudes and behaviors. Unequal gender norms may negatively affect adolescents' sexual and reproductive health (ASRH), including unintentional pregnancy, violence, and mental health issues. The EA continues to be the most poorly understood period of life due to paucity of evidence.

Methodology

A quantitative, cross-sectional study was conducted in low socio-economic suburbs in Cape Town, South Africa, as part of the Global Early Adolescent Study (GEAS) led by Johns Hopkins University. Through a two-stage sampling method, 569 learners aged 11–14 were recruited from 11 schools. Data collection took place from July 2019 to March 2020, using GEAS's close-ended, semi-structured questionnaires. EAs self-administered questionnaires through a Computer Assisted Self-interviewing (CASI) method. The study aimed at identifying key factors influencing EAs' constructing gender norms and explored how unequal gender norms may affect EAs' SRH knowledge and behaviors.

Key Findings

The EAs construct gender norms through a collective influence across the different levels of the Socio-ecological model. The participants reported a high prevalence of ACEs (92% of EAs reported at least one); peer violence perpetration (28%) or victimization (60%); and anxiety or depression symptoms (94% reported at least one). When adjusted for other covariates, stereotypical gender norms were associated with early initiation of romantic relationships and sexual activity; knowledge level of pregnancy and HIV prevention; IPV victimization; and depression symptoms, interplayed by ACEs.

Implications

The study calls for an urgent need to create a multi-country research collaboration platform focused on Gender norms and EAs. The GEAS is a good model as it pioneered the development of gender-norm indices and questionnaires, published various articles from multi-country analysis, and mobilized additional research funding for longitudinal or intervention studies. These studies provided crucial evidence to inform policies and practices, specifically targeting EAs.

Science Diplomacy

Sat. Jul 18, 2026 1:30 PM - 3:00 PM JST | Sat. Jul 18, 2026 4:30 AM - 6:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ejb9XLcK-03] Science Diplomacy as a Space of Reflection: Knowledge, Meaning and Shared Futures

Nerina Finetto

Science diplomacy is traditionally celebrated as a neutral “bridge” across borders. Yet it is never merely an objective exchange of technical knowledge; it is an encounter between complex systems of meaning, values, interests, and competing imagined futures. At a time of geopolitical tension, rapid technological change, ecological uncertainty, and declining public trust, recognizing these hidden dimensions is essential for responsible scientific leadership and international cooperation.

This presentation moves beyond the field’s dominant, purely operational narratives to propose science diplomacy as a critical space for institutional humility, narrative awareness, and inclusive future-making. It argues that meaningful cross-border cooperation must do more than bring different experts to the table. It must enable different disciplines, cultures, and communities to actively shape how problems are defined, which forms of knowledge are valued, and what constitutes a desirable outcome.

To navigate this complexity, the address introduces narrative literacy and futures literacy as interconnected capacities for modern scientific leadership. Narrative literacy, supported by systematic storylistening, helps actors recognize the personal, institutional, and cultural narratives that frame problems, dictate whose expertise is recognized, and shape how cross-border collaborations are organized. Futures literacy complements this by moving beyond conventional forecasting to examine how present-day assumptions about tomorrow restrict or expand the futures we are able to imagine. Furthermore, the presentation highlights the fundamental interdependence of science and cultural diplomacy: while science enables technical knowledge to travel, culture dictates how meaning, memory, values, and imagination travel with it.

Drawing on storylistening and the Future Narratives approach developed by Traces&Dreams, the presentation proposes science diplomacy as a space not only for cooperation, but also for reflection, ethical questioning, and inclusive future-making. It asks us to move beyond “*Can we build this?*” toward a more demanding question: What kind of world are we building—and can we live in it together?

Science Diplomacy

Sat. Jul 18, 2026 1:30 PM - 3:00 PM JST | Sat. Jul 18, 2026 4:30 AM - 6:00 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science diplomacy and leadership

Chair:Amal Amin

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ejb9XLcK-04] **Cultivating Cooperation through Sustained Dialogue: The Hiroshima AI Process and Japan's Science Diplomacy**

Ayako Takemi (Associate Professor, Research Center for Advanced Science and Technology (RCAST), The University of Tokyo, Japan)

Background / Context

Emerging technologies present a distinctive governance challenge: the technologies themselves are only partly understood and still evolving, yet their impacts are far-reaching and their stakeholders many. As generative AI diffused globally in 2023, jurisdictions pursued divergent approaches—binding legislation, voluntary commitments, state-led oversight—raising the risk of regulatory fragmentation. Summit declarations alone rarely translate into durable cooperation.

Key Issues or Challenges

Under such uncertainty and divergence, dialogue and deliberation—often treated as peripheral—become essential. Because complexity and the potential for conflict run high, it is worth stepping back to build consensus on a shared, evidence-informed understanding. This talk asks whether that approach works in practice.

Approach / Perspective

Drawing on my research on Japan's science and technology diplomacy and advisory work for its government, I trace the Hiroshima AI Process, launched under Japan's 2023 G7 Presidency, asking what sustained dialogue has opened up. A shared baseline: the OECD's stocktaking of risks and opportunities—welcomed by ministers as a first step—subtitled *Towards a G7 Common Understanding on Generative AI*. Adaptable norms: the International Guiding Principles and Code of Conduct, framed as living documents. A learning loop: nineteen organisations' first voluntary reports, published in 2025, generated OECD analysis, while pilot feedback and stakeholder input informed Framework Version 2.0 (2026), streamlined to ease participation for smaller enterprises. Deliberation at scale: at the second in-person Friends Group meeting (Tokyo, March 2026), 190 participants from thirty-five countries and regions met in three-hour breakout sessions, a university researcher among the moderators. A widening circle, in Japan's wider AI diplomacy: the AI×Trust Program, a week-long programme for AI policy officials from Brazil and six Southeast Asian countries.

Key Messages

The record suggests the foundations of cooperation were cultivated rather than declared: questionnaires, consultations, meetings, and reporting helped participants build a shared vocabulary and comparable practices. For technologies this uncertain and consequential, stepping back to science appears a practical route, not a detour.

Implications for Science and Society

Convening, listening deeply, and translating across scientific, industrial, and policy communities are forms of leadership scientists can exercise—as the women scientists gathered at this Forum demonstrate. Launched at the 2023 G7 Hiroshima Summit, the process shows how sustained scientific dialogue can serve as an instrument of peace.

Innovation for Education and Health

📅 Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | 🏛️ Main Hall(Main Conference Hall in Kojin Kaikan)

Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

This session will focus on how digital health innovations can support stronger health systems. It will highlight tools and examples where digital technologies are improving healthcare access, efficiency, and quality. The discussion will address barriers including infrastructure limitations, data privacy concerns, workforce readiness, and policy gaps that slow adoption. The session will explore collaboration among governments, academic institutions, industry partners, and organizations to scale solutions. The aim is to share insights and identify achievable steps for policymakers, researchers, and practitioners to build sustainable, digitally enabled health systems.

Duration: 90 Minutes

Session Objectives:

1. **Highlight practical digital health tools and innovations that are already improving healthcare delivery.**
2. **Discuss common challenges in adopting digital solutions within existing health systems.**
3. **Explore collaborative and cross-sector models** among governments, academia, industry, and international partners to accelerate scalable digital health solutions.
4. **Identify simple, actionable steps to strengthen health systems through sustainable digital approaches.**

3:10 PM - 3:20 PM JST | 6:10 AM - 6:20 AM UTC

[7MN.fwfq-01] **Smart 2D Nanomaterial Biosensors: Advancing Mobile Health and Digital Healthcare Systems**

*Ashima Bagaria¹ (1. Dept of Physics, School of Physical and Biological Sciences, Manipal University, Jaipur, Rajasthan, India-303007)

3:20 PM - 3:30 PM JST | 6:20 AM - 6:30 AM UTC

[7MN.fwfq-02] **The need for workforce development to advance digital health innovation: 20 years of insights from telemedicine in Asia**

*Kuriko Kudo¹ (1. Kyushu University Hospital, Department of International Medicine, Telemedicine Development Center of Asia (Japan))

3:30 PM - 3:40 PM JST | 6:30 AM - 6:40 AM UTC

[7MN.fwfq-03] **Address the Triple Burden of Malnutrition in Tanzania: Opportunities for Scalable Digital Health in Maternal Nutrition Education**

*Sanmei Chen Chen¹ (1. Hiroshima University (Japan))

3:40 PM - 3:50 PM JST | 6:40 AM - 6:50 AM UTC

[7MN.fwfq-04] **Healthcare in the Digital Age: Empowering Patient Self-Management through mHealth Innovations**

*Bilkis Banu¹ (1. Independent University, Bangladesh (IUB) (Bangladesh))

3:50 PM - 4:00 PM JST | 6:50 AM - 7:00 AM UTC

[7MN.fwfq-05] **Digital Technologies for Sustainable Clinical Skills Development Among Healthcare Providers in Remote Areas**

Sayaka Horiuchi (Department of Epidemiology and Global Public Health, Gifu University, Japan)

4:00 PM - 4:10 PM JST | 7:00 AM - 7:10 AM UTC

[7MN.fwfq-06] **Strengthening Digital Health Innovation and Healthcare Systems in Tanzania: Lessons from a Tanzania-Japan Midwifery Research Collaboration**

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

Dr. Beatrice Mwilike (Lecturer, School of Nursing, Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania

President, Tanzania Midwives Association (TAMA), Tanzania

Visiting Faculty, Senior Lecturer, Organization for International Education and Research, Mie University, Japan)

4:10 PM - 4:40 PM JST | 7:10 AM - 7:40 AM UTC

Discussion

Innovation for Education and Health

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:10 PM - 3:20 PM JST | 6:10 AM - 6:20 AM UTC

[7MN.fwfq-01] Smart 2D Nanomaterial Biosensors: Advancing Mobile Health and Digital Healthcare Systems

*Ashima Bagaria¹ (1. Dept of Physics, School of Physical and Biological Sciences, Manipal University, Jaipur, Rajasthan, India-303007)

Digital transformation of healthcare is revolutionizing the way that diseases are detected, monitored and managed. Mobile health (mHealth) technologies are becoming an integral part of resilient and patient-centered healthcare systems. The combination of advanced biosensing technologies with digital platforms presents unique opportunities for improving health systems through rapid diagnosis, continuous monitoring, remote patient management, and data-driven clinical decision making. In this sense, two-dimensional (2D) nanomaterials such as graphene, MXenes, transition metal dichalcogenides (TMDs), and black phosphorus have emerged as promising materials for next-generation digital diagnostic devices thanks to their extraordinary electrical, optical, and mechanical properties. Herein we highlight recent progress in the development of 2D nanomaterial based electrochemical, optical and wearable biosensors linked to smartphone, cloud computing, artificial intelligence (AI) and Internet of Medical Things (IoMT). Such intelligent diagnostic platforms enable fast and sensitive detection of disease biomarkers associated with cancer, cardiovascular diseases, infectious diseases, diabetes and inflammatory conditions, and also allow real-time health monitoring outside traditional clinical settings. The convergence of nanotechnology and digital health ecosystems supports telemedicine, electronic health records, predictive analytics and personalized healthcare, thus improving access to quality healthcare. Thus, the convergence of nanotechnology and digital health represents a paradigm shift towards predictive, preventive, personalized and participatory (P4) healthcare.

Innovation for Education and Health

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Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:20 PM - 3:30 PM JST | 6:20 AM - 6:30 AM UTC

[7MN.fwfq-02] The need for workforce development to advance digital health innovation: 20 years of insights from telemedicine in Asia

*Kuriko Kudo¹ (1. Kyushu University Hospital, Department of International Medicine, Telemedicine Development Center of Asia (Japan))

Keywords : Digital Health、 Telemedicine

Background / Context

The global healthcare landscape faces unprecedented challenges, including chronic physician shortages and surging demand for high-quality services. Digital health innovations have emerged as essential tools for improving healthcare access, efficiency, and quality. However, Digital Health Education and Training (DH E&T) is now a critical necessity to ensure that rapid scientific advancements translate into stronger, more resilient health systems.

Key Issues or Challenges

Despite the potential of digital technologies, a significant gap remains between technological availability and the workforce's ability to utilize them effectively. Barriers such as infrastructure limitations, and a lack of standardized educational metrics hinder the broad adoption of digital solutions. Without robust human resource development, these challenges slow the essential transformation of modern healthcare.

Approach / Perspective

The speaker will share their work and insights regarding digital health workforce development through the following two themes: 1) International Technical Training: Training programs developed and delivered through the extensive international network of the Asia Pacific Advanced Network, Medical Working Group (APAN-MWG) and Telemedicine Development Center for Asia (TEMDEC). 2) Competency Research in Japan: The latest research on digital health education competencies in Japanese medical education, aimed at standardizing the skills required of future healthcare professionals.

Key Messages

The audience will gain insights into practical, scalable tools and resources for DH E&T. The presentation identifies achievable steps to integrate digital competencies into existing medical frameworks, strengthening the foundation of healthcare delivery.

Implications for Science and Society

Prioritizing human resource development in digital health fosters a new generation of physicians capable of leading future healthcare systems. Promoting international telemedicine education ensures that scientific advancements contribute to diversity and the equitable distribution of healthcare worldwide, regardless of geographical boundaries.

Innovation for Education and Health

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Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:30 PM - 3:40 PM JST | 6:30 AM - 6:40 AM UTC

**[7MN.fwfq-03] Address the Triple Burden of Malnutrition in Tanzania:
Opportunities for Scalable Digital Health in Maternal Nutrition Education**

*Sanmei Chen Chen¹ (1. Hiroshima University (Japan))

Keywords : Maternal Nutrition、 Malnutrition

Background / Context

The improved food availability with growing economy in Tanzania may insufficiently reduce pre-existing nutritional deficiencies and simultaneously increase overweight within the same individuals, household, and population. Presently Tanzania is experiencing a growing nutrition crisis marked by the coexistence of undernutrition, overnutrition, and micronutrient deficiencies, known as the triple burden of malnutrition, which disproportionately affects children and women.

Key Issues or Challenges

One of the main barriers for tackling the triple burden of malnutrition is low nutritional literacy. Governments are encouraging innovative ways to provide maternal nutrition education including digital modalities. However, evidence remains limited on how to design scalable digital nutrition education tools and integrate them effectively into perinatal care services.

Approach / Perspective

We performed clinical observations, collaborated with Tanzanian local nutritionists and co-designed digital contents of maternal nutrition education, based on data from previous surveys, the food environments and social and culture context in Tanzania. We surveyed and interviewed healthcare providers at maternal and child clinics about barriers and facilitators for the implementation of app-based maternal nutrition education to inform future interventions.

Key Messages

Paper-based materials and face-to-face explanations are the primary modes of nutritional education in routine perinatal care. This increases the workload of healthcare providers. Based on our clinical observations and quantitative data, digital content appears to be a promising approach that could be integrated into routine perinatal care services. We developed digital nutrition education content that is easy to understand, even for illiterate mothers. Our qualitative data showed that male partners and village elders are the primary gatekeepers. Successful implementation must include educational components for male partners as well. Healthcare providers see the digital nutrition education intervention as useful, but some worry it may be used mainly for data collection rather than patient care. Framing the implementation around these clinical goals will maintain high provider motivation.

Implications for Science and Society

Further evidence is needed to assess the feasibility and long-term sustainability of digitally enabled maternal nutrition education, and to determine how such tools can be effectively integrated into routine perinatal care services in Tanzania. We aim to strengthen partnerships with Tanzanian governments and industry. This is critical to support implementation, scale-up, and sustainability.

Innovation for Education and Health

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Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:40 PM - 3:50 PM JST | 6:40 AM - 6:50 AM UTC

[7MN.fwfq-04] Healthcare in the Digital Age: Empowering Patient Self-Management through mHealth Innovations

*Bilkis Banu¹ (1. Independent University, Bangladesh (IUB) (Bangladesh))

Keywords : mHealth、 Digital Health、 Patient Self-Management

Background / Context

The rapid expansion of digital technologies has transformed healthcare delivery, shifting from provider-centered models toward more patient-centered care. Mobile health (mHealth), encompassing text messages, voice calls reminder, smartphone applications, wearable devices, and remote monitoring tools, plays a crucial role in enabling individuals to actively manage their health. This is particularly significant in the context of rising chronic disease, vulnerable populations, and healthcare system constraints. In low- and middle-income countries (LMICs), mHealth offers scalable and cost-effective solutions to improve adherence, access, and health outcomes.

Key Issues or Challenges

Despite its potential, several challenges limit the effective implementation of mHealth for patient self-management. These include device affordability, digital literacy gaps, data services, internet connectivity, inequitable access to technology, and limited integration with existing healthcare systems. Additionally, the lack of culturally appropriate, evidence-based digital interventions, along with inconsistent user engagement, poses barriers to sustained impact. Data privacy concerns, regulatory and policy frameworks often lag behind technological advancements, further complicating large-scale adoption.

Approach / Perspective

This will approach current research, practical experience, and case studies from diverse settings to explore how mHealth innovations can strengthen patient self-management. It will highlight successful interventions in areas such as chronic disease management (e.g., diabetes), maternal and child health (e.g., antenatal and postnatal care, polycystic ovary syndrome), disaster preparedness, and other public health areas. Emphasis will be placed on user-centered design, community engagement, and the integration of a digital approach into routine healthcare services. Lessons from interdisciplinary collaborations and implementation research will also be discussed.

Key Messages

mHealth has the potential to empower patients by improving health literacy, promoting adherence, and facilitating real-time communication with healthcare providers. However, its success depends on addressing equity, usability, and system integration. Sustainable impact requires aligning technological innovation with patient needs, health system capacities, and policy support. Collaboration across sectors is essential to maximize effectiveness.

Implications for Science and Society

This discussion advances digital health by emphasizing evidence-based, inclusive, and context-sensitive approaches. It underscores the importance of leadership in fostering innovation, strengthening global partnerships, and ensuring equitable access. Ultimately, mHealth can play a transformative role in enhancing patient autonomy, improving health outcomes, and building resilient healthcare systems worldwide

Innovation for Education and Health

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Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:50 PM - 4:00 PM JST | 6:50 AM - 7:00 AM UTC

[7MN.fwfq-05] Digital Technologies for Sustainable Clinical Skills Development Among Healthcare Providers in Remote Areas

Sayaka Horiuchi (Department of Epidemiology and Global Public Health, Gifu University, Japan)

Background / Context

Worldwide, approximately 6,500 newborns die every day, with 98% of these deaths occurring in low- and middle-income countries (LMICs). Around 40% of newborn deaths occur within the first 24 hours of life, often from causes that are preventable through timely and appropriate medical intervention. Although many of the required interventions are relatively simple, more newborns in LMICs die from poor-quality care than from lack of access to care.

Key Issues or Challenges

Improving the quality of care is essential to preventing newborn deaths. However, providers' clinical skills often deteriorate quickly after training because of limited access to continuing education. This is particularly true for neonatal resuscitation skills, which are critical for managing non-breathing babies but require frequent practice to maintain, as providers have limited opportunities to encounter such cases during routine care. Frequent staff training is often difficult to provide in low-resource settings because of budget constraints.

Approach / Perspective

We introduced a mobile phone-based mentorship model that addresses key barriers to improving the quality of care. Providers perform simulation-based self-practice using a mannequin, film it and send it to facilitators through the WhatsApp group and receive feedback on their performance. This model can increase training opportunities by encouraging providers to practise repeatedly on their own.

We piloted the intervention in four district hospitals in Lao PDR. After three months, clinical skills in the intervention group were better than those in the control group, particularly in managing a non-breathing baby. The intervention was also well received by providers and facilitators.

Key Messages

Our pilot study suggests that this intervention can have a positive effect on newborn care skills. Importantly, it can be implemented with minimal investment, which is a critical advantage in resource-constrained settings where cost is often a major barrier to staff training.

Implications for Science and Society

Although this approach is promising for a short period, further research is needed to determine how it can be scaled up and sustained. Commitment from government stakeholders and hospital leadership will be essential for long-term implementation.

Innovation for Education and Health

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Digital Health Innovations and Health System Strengthening

Chair:Moshiur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:00 PM - 4:10 PM JST | 7:00 AM - 7:10 AM UTC

[7MN.fwfq-06] Strengthening Digital Health Innovation and Healthcare Systems in Tanzania: Lessons from a Tanzania-Japan Midwifery Research Collaboration

Dr. Beatrice Mwilike (Lecturer, School of Nursing, Muhimbili University of Health and Allied Sciences (MUHAS), Tanzania

President, Tanzania Midwives Association (TAMA), Tanzania

Visiting Faculty, Senior Lecturer, Organization for International Education and Research, Mie University, Japan)

Tanzania continues to face high neonatal mortality, with 24 deaths per 1,000 live births, and low completion of recommended antenatal visits. Poor-quality antenatal counseling, staff shortages, and limited real-time fetal monitoring contribute to preventable deaths. At the same time, growing smartphone access, even in low-resource communities, creates opportunities to deploy digital tools that strengthen the work of skilled midwives. Since 2019, a partnership between Muhimbili and Hiroshima Universities has co-developed and tested two such tools in routine maternal healthcare.

Two persistent challenges underlie maternal and newborn mortality in this setting: inconsistent, sometimes incomplete antenatal counseling and delays in detecting fetal distress during labour. Digital innovations must also navigate structural barriers, including unreliable power and internet connectivity, limited staff time to learn new technologies, and weak data management systems that constrain scale-up.

This abstract synthesizes findings from two implementation studies conducted through the partnership. A mixed-methods pilot (2019–2021) evaluated a Kiswahili smartphone app for midwifery education in two facilities in Dar es Salaam, involving 23 midwives and 207 pregnant women. A pragmatic trial (2023–2024) introduced a portable mobile cardiotocography device (iCTG) for real-time fetal heart monitoring in four primary healthcare facilities, enrolling 763 pregnant women. Both tools were embedded into routine care pathways rather than implemented as stand-alone research interventions.

The smartphone app sustained high engagement among midwives; 87.5% were still using it two months after initial training. Both midwives and pregnant women demonstrated marked improvements in knowledge and confidence. The iCTG device increased detection of abnormal fetal heart rate patterns approximately eight- to ten-fold and nearly halved perinatal mortality, from 6.6% to 2.6%. However, it did not independently improve antenatal visit attendance. Across both studies, local language content, on-site mentorship, and alignment with existing workflows were critical to real-world uptake.

These findings illustrate how long-term partnerships between African and Japanese institutions can generate practical evidence to strengthen health systems. They also highlight the leadership of women scientists and midwife-researchers in advancing innovations that link clinical practice, technology, and policy, offering a model for sustainable digital health collaboration among academia, private sector, and government globally.

Global Partnership

🗓 Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | 🏛 Main Hall(Main Conference Hall in Kojin Kaikan)

Science Exile

Chair: Encieh Erfani(International Science Council, Fellow)

4:50 PM - 5:00 PM JST | 7:50 AM - 8:00 AM UTC

[ScwNXsLf-01] **Science in Exile: Protecting At Risk Scholars**

Dr. Encieh Erfani (Perimeter Institute for Theoretical Physics, Canada)

5:00 PM - 5:20 PM JST | 8:00 AM - 8:20 AM UTC

[ScwNXsLf-02] TBA

Laura Oleson (IIE-SR)

5:20 PM - 5:40 PM JST | 8:20 AM - 8:40 AM UTC

[ScwNXsLf-03] TBA

Tomoko Ako (Graduate School of Arts and Sciences)

5:40 PM - 6:00 PM JST | 8:40 AM - 9:00 AM UTC

[ScwNXsLf-04] Scientific Exile as a Phenomenon of Academic Unfreedom

Sayaka Oki (The University of Tokyo)

6:00 PM - 6:20 PM JST | 9:00 AM - 9:20 AM UTC

Discussion

Global Partnership

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Exile

Chair: Encieh Erfani(International Science Council, Fellow)

4:50 PM - 5:00 PM JST | 7:50 AM - 8:00 AM UTC

[ScwNXsLf-01] **Science in Exile: Protecting At Risk Scholars**

Dr. Encieh Erfani (Perimeter Institute for Theoretical Physics, Canada)

Background / Context

Around the world, growing numbers of scholars are forced to leave their countries because of war, political repression, violations of academic freedom, and attacks on higher education. While international attention often focuses on humanitarian crises, the displacement of researchers receives far less attention despite its profound impact on scientific progress, education, and innovation. At the same time, universities, scientific organizations, and international networks have developed initiatives to support scholars at risk, yet many institutions remain unfamiliar with available mechanisms or the long-term challenges these scholars face after relocation.

Key Issues or Challenges

This panel explores the growing global challenge of science in exile. It addresses the risks faced by scholars under authoritarian regimes and in conflict-affected regions, the barriers encountered after displacement, and the responsibilities of universities, governments, and international organizations in protecting academic freedom. Particular attention will be given to the gap between emergency assistance and long-term academic integration.

Approach / Perspective

The panel brings together complementary perspectives from academia, international scholar protection, and civil society. Drawing on historical, institutional, and practical experiences, the discussion will examine the evolution of academic freedom, current global threats to researchers, institutional support mechanisms, and practical experiences supporting scholars forced into exile. The session will also reflect on lessons learned from international scientific organizations and initiatives working to protect displaced academics.

Key Messages

Participants will gain a deeper understanding of the challenges faced by scholars at risk, existing international support mechanisms, and the role universities can play in protecting academic freedom. The discussion will emphasize that supporting scholars extends beyond relocation and requires sustained institutional commitment, inclusion, and international cooperation.

Implications for Science and Society

Protecting scholars at risk is essential for protecting scientific knowledge, international collaboration, and the integrity of higher education. By strengthening global partnerships and expanding institutional support, universities and scientific organizations can contribute to a more resilient, inclusive, and internationally connected research community while safeguarding academic freedom as a fundamental condition for scientific progress.

Global Partnership

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Science Exile

Chair: Encieh Erfani(International Science Council, Fellow)

5:40 PM - 6:00 PM JST | 8:40 AM - 9:00 AM UTC

[ScwNXsLf-04] Scientific Exile as a Phenomenon of Academic Unfreedom

Sayaka Oki (The University of Tokyo)

Background / Context

Briefly describe the background of the topic and why it is important in the current scientific or societal context.

Key Issues or Challenges

Explain the key issues, gaps, or challenges that the presentation will address.

Approach / Perspective

Describe the perspective, research findings, experiences, or initiatives that will be introduced in the presentation.

Key Messages

Summarize the main insights or lessons that the audience will gain from the presentation.

Implications for Science and Society

Explain how the discussion contributes to advancing science, leadership, diversity, or international collaboration.

This paper examines scientific exile as a phenomenon of academic unfreedom, arguing that the displacement of scholars and institutions should be understood not only as an effect of war or disaster but also as a consequence of gradual restrictions on intellectual autonomy. We propose a staged perspective on scientific exile, beginning with visible crises such as violent conflict, climate-induced migration, disasters, and pandemics; moving through explicit threats including criminalization, intimidation, and death threats; and extending to more ambiguous pressures located between ordinary “brain drain” and forced departure under illiberal or authoritarian regimes. Drawing on indicators of academic freedom in Hungary and Poland, especially the sequencing of intimidation, legal regulation, parallel institution-building, research evaluation, funding redistribution, and personnel replacement, we try to show how exile can emerge before open repression becomes fully visible. We then turn to the “invisible exile” of researchers in the humanities and social sciences, with particular attention to women and queer scholars whose work may be marginalized, underprotected, or politically vulnerable. Examples include Ukrainian historians, Chinese gender studies researchers working abroad, and Japanese queer studies researchers based in Europe or North America. We further broaden the concept of exile from individuals to institutions, discussing universities displaced by political attack or war, including European Humanities University, Central European University, Donetsk National Technical University, and universities affected by the civil war in Sudan. The current situation suggests there have been already a series of important international initiatives which are essential, but still in developing phases. We conclude that protecting science in crisis requires a comprehensive approach that links academic freedom, gender & sexuality related vulnerability, institutional continuity, risk management, and post-crisis recovery, while also recognizing forms of exile that remain hidden because they occur before displacement is formally acknowledged.

Science Technology Diplomacy/SDGs

📅 Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | 🏢 Small Conference Hall (Small Conference Hall in Kojin Kaikan)

Poster Session 1

[50IXCzC1-01] "Mental Stress and Quality of Life among Mothers of Children with Special Needs"

*SADIA AFRIN BITHI¹ (1. Research Fellow, Department of Health Education, NIPSOM, Dhaka, Bangladesh (Bangladesh))

[50IXCzC1-02] Blue Hope in Post-Disaster Reconstruction: Redefining Ocean Literacy through Transformative Practices along the Sanriku Coastline of North-East Japan

*Yuri Oki¹, Hiroshi Kitazato², Toyonobu Fujii³, Hiroki Murata⁴, Megumi Kuraishi⁵, Kokichi Ito⁶ (1. St. Luke's International University (Japan), 2. Tokyo University of Marine Science and Technology (Japan), 3. Tohoku University (Japan), 4. Kitasato University (Japan), 5. Ocean Eyes Co., Ltd. (Japan), 6. Riken Food Co., Ltd. (Japan))

[50IXCzC1-04] Sex differences in the urban-rural disparity in suicide mortality in Japan: a Bayesian spatial epidemiological study of all municipalities nationwide

*Masahide Koda¹, Nahoko Harada² (1. Co-learning Community Healthcare Re-innovation Office, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University (Japan), 2. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

[50IXCzC1-05] Building Brotherhood: Enhancing Social Engagement Among Male Seniors Through Targeted Community-Building Activities in Active Ageing Centres what

*Anne Neo, Aqilah Nintendo Mohammad Yunus Noor, Sarah Swee, Eileen Yeo, Emily Ong, Olivia Leong

[50IXCzC1-06] *Alli Kawsay (Buen vivir)* in the indigenous movements of Colombia - Ecuador, political-economic practices as a global model, in defense of the rights of Mother Nature in the global south

*Vanessa-Eduardo Arteaga Bernal-Erazo Acosta¹ (1. Indigenous Independent Researcher in Ecuador-Colombia (Colombia))

[50IXCzC1-07] Young people in a warming world: an urgent call for action based on synthesis of the impacts of climate on child health across 22 countries

*Aparna Lal¹, Erin I Walsh¹, Zoe A Becvarik¹ (1. Australian National University (Australia))

[50IXCzC1-08] A three lever CMIP aligned roadmap to decarbonize and climate proof Japan's healthcare sector

*kazumi Kubota¹, Kubota Anna² (1. Shimonoseki City University (Japan), 2. Keio University (Japan))

[50IXCzC1-09] Investigation of Fully Depleted Silicon On Insulator Devices.

*Samiul Haque Touhid¹, Mubashara Maisha¹, Maisha Tasnim Adri¹, Zannatun Nahar¹, Dr. Towhid Adnan Chowdhury¹ (1. Ahsanullah University of Science and Technology (Bangladesh))

[50IXCzC1-10] Perspective on Governance Barriers to Effective Health Infrastructure Financing at the National and Subnational Levels in Indonesia

*Cynthia Febrina Febrina¹, Stanley Saputra² (1. Hiroshima University (Japan), 2. Ministry of Health (Indonesia))

[50IXCzC1-11] Insights of Dietary Habits Among Female Workers in Micro Industries of Bangladesh: A Cross-Sectional Study.

*Isfat Jahan Bristi¹, Bilkis Banu¹ (1. Independent University, Bangladesh (Bangladesh))

[50IXCzC1-12] GROWTH ANALYSIS OF SEVEN SWEETPOTATO GENOTYPES ON DEGRADED ULTISOLS IN SOUTHEASTERN NIGERIA

*OGECHI UCHE¹, EMMANUAL Ukaobasi MBAH² (1. NATIONAL ROOT CROPS RESEARCH INSTITUTE UMUDIKE (Nigeria), 2. MICHEAL OKPARA UNIVERISTY OF AGRICULTURE UMUDIKE (Nigeria))

[50IXCzC1-13] Proportion of Attention-Deficit/Hyperactivity Disorder and its associated factors among female University students of Bangladesh

*Marzana Hossain¹, Bilkis Banu¹ (1. Department of Public Health, Independent University, Bangladesh (IUB) (Bangladesh))

[50IXCzC1-14] International collaboration opportunity experience with Sakura Science program: focusing on building systems to minimize health hazards from disasters

*Mayumi Kako¹, Chie Teramoto¹, Sanmei Chen¹, Rahman MD Jiaur¹, Cai Juan¹, Yoko Shimpuku¹ (1. Hiroshima University School of Biomedical and Health Sciences (Japan))

[50IXCzC1-15] **Rising car dependence at Hiroshima University: A three-year empirical analysis of commuting behaviour, transit-service changes, and CO2 emissions (2023-2025)**

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

[50IXCzC1-16] **Toward carbon-neutral commuting at Hiroshima University: A joint residence-mode policy simulation**

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

[50IXCzC1-01] "Mental Stress and Quality of Life among Mothers of Children with Special Needs"

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Keywords : Mental Stress、 Quality of Life、 Disabled Children、 Caregivers、 Bangladesh

Raising children with special needs imposes substantial psychological and emotional burdens on mothers, often leading to elevated stress levels and diminished quality of life. Unlike parents of typically developing children, these mothers encounter complex and multidimensional stressors that significantly impact their mental health and family well-being

To assess the level of mental stress and QoL among these mothers and identify associated sociodemographic factors.

A cross-sectional study was conducted from July 2024 to June 2025 among 250 mothers of children with special needs residing in Dhaka city. Participants were selected using a convenience sampling technique. Data were collected through a pre-tested semi-structured questionnaire, utilizing the Perceived Stress Scale (PSS-10) to measure stress levels and the WHOQoL-BREF scale to assess quality of life. Descriptive and inferential statistics were applied to analyze associations between socio-demographic and stress-related variables

Among the respondents, 53.2% experienced moderate stress, 34.0% reported high stress, and only 12.8% had low stress levels. A large majority (75.2%) of mothers reported poor QoL, whereas only 2.8% enjoyed a good QoL. Autism was identified as the most prevalent condition among the children. Statistically significant associations were found between mental stress and factors such as age group, occupation, education level, number of children, type of special needs, and monthly family income. Quality of life was significantly associated with marital status, occupation, education, type, and age of the special needs child.

The majority of mothers experienced moderate-to-high stress and poor QoL. These results highlight the urgent need for targeted interventions focusing on stress management, self-care, psychosocial support, and family-centered education to enhance maternal mental health and overall well-being.

[50IXCzC1-02] Blue Hope in Post-Disaster Reconstruction: Redefining Ocean Literacy through Transformative Practices along the Sanriku Coastline of North-East Japan

*Yuri Oki¹, Hiroshi Kitazato², Toyonobu Fujii³, Hiroki Murata⁴, Megumi Kuraishi⁵, Kokichi Ito⁶ (1. St. Luke's International University (Japan), 2. Tokyo University of Marine Science and Technology (Japan), 3. Tohoku University (Japan), 4. Kitasato University (Japan), 5. Ocean Eyes Co., Ltd. (Japan), 6. Riken Food Co., Ltd. (Japan))

Keywords : Ocean Literacy、Transformative Agency、Indigenous/Local Ecological Knowledge、Habitat Mapping、Marine Citizenship、Community-Based Resource Management

【目的】

2011年の東日本大震災で甚大な被害を受けた宮城県南三陸町および女川町の沿岸漁業コミュニティを対象に、漁業者が持つ「地元の海に関する知恵（在来生態学的知識：IEK/LEK）」がいかんとして「海洋リテラシー」として機能しているかを明らかにすることを目的とする。特に、科学者との協働活動を通じて、科学的知見と経験的知見を統合する「知識の協働創出」が、コミュニティの変革的主体性（Transformative Agency）や社会・生態学的レジリエンス (Social-Ecological System: SES) をいかに強化するかを考察する。

【方法】

対象地域: 宮城県南三陸町（ラムサール条約湿地、エコツーリズム推進地）および女川町（商業漁業・加工業拠点、女川原子力発電所立地）。**アプローチ:** 社会・生態システム（SES）モデルおよび「Toolkit of Resilience in Socio-Ecological Production Landscapes and Seascapes (SEPLS)」指標を用いた質的研究。**調査手法:** 参加型マッピングワークショップ: 科学者と住民の協働によるハビタットマップの作成。**若手漁業者との対話:** 科学的知見（形式知）と現場の知恵（暗黙知）を統合する対話の観察。おながわ大学の取り組み事例など。

【結果】

知識の再定義: 漁業者の経験則が、単なる伝統ではなく、科学的データと相互補完的な関係にある「海洋リテラシー」の重要な構成要素であることが確認された。（事例：南三陸町における過密養殖の是正）**ハビタットマッピングの効用:** 生態系の可視化により、食物連鎖や海底地質への理解が深まり、持続可能な資源管理への意欲が向上した。（事例：出島の若手漁師主導による藻場再生の実践）**地域特性による差異:** 南三陸町ではかねてより「森・里・川・海」の連環を意識した自然資源管理の概念が住民間で広く共有されている一方、女川町では漁業者・加工業者・買い手の強力な社会ネットワークが復興の中核となっている実態が浮き彫りになった。**自発的活動の誘発:** 震災を機に、過密養殖の是正や、森林管理と海洋保全を結びつける「海の森」づくりなど、既存の慣習を変える「変革的主体性」が若い漁業者を中心に芽生えている。

【考察】

海洋リテラシーの進化: 海洋リテラシーを単なる知識提供（知識欠如モデル）ではなく、市民と科学者の双方向の対話を通じた行動へと昇華させる「Blue Hope」アプローチの重要性。**変革的研究 (Mode-2 Research or Transformative Research) :** 研究者は単なる観察者ではなく、地域社会の課題解決を共に行う「変革のエージェント（変革の行為主体）」として位置づけることで、地域の自己決定能力、つまり自主性・自律性・自立性が強化される。**レジリエンスの源泉:** Kurt Lewin (1947) の変化モデル (unfreeze, change, and re-freeze) を用いて、震災という「解凍」プロセスを経て、伝統的な海の知識と科学の融合が新たな持続可能な社会基盤（再凍結）を形成している。

【結論】 震災後の沿岸コミュニティにおける海洋リテラシーの向上は、環境教育の枠を拡張し、海と共生する「海洋市民権 (Marine Citizenship)」の確立に寄与している。地元の人た

ちにとっての「地先の海」とは日々の営為を通して理解されていくものであり、その経験的知見を科学的に検証・体系化するプロセスは、予測困難な環境変化に対する社会・生態学的レジリエンスを構築する上で不可欠である。これがグローバルな持続可能性の目標（UN Ocean Decade等）をローカルな文脈で実践する「Blue Hope」の具体像である。

[50IXCzC1-04] Sex differences in the urban-rural disparity in suicide mortality in Japan: a Bayesian spatial epidemiological study of all municipalities nationwide

*Masahide Koda¹, Nahoko Harada² (1. Co-learning Community Healthcare Re-innovation Office, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University (Japan), 2. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

Keywords : Suicide、Urban-rural disparity、Sex differences、Bayesian spatial epidemiology、Sustainable Development Goals

[Background] Approximately 20,000 people die by suicide each year in Japan. Sustainable Development Goal (SDG) 3.4 calls for the promotion of mental health and suicide prevention. Geographic variation in suicide mortality has been documented, but sex-specific patterns in the urban-rural gradient remain poorly characterized. Sex-stratified analysis is needed to inform targeted prevention.

[Methods] We conducted an ecological study of 58,584 suicide deaths (40,286 men, 16,252 women) across all 1,890 municipalities in Japan during 2017-2019, using vital statistics data. The exposure was geographic rurality, measured by the Rurality Index for Japan (RIJ). Area deprivation, measured by the Area Deprivation Index (ADI), was included as a covariate. We fitted Bayesian spatial Poisson models with spatially structured random effects and estimated sex-stratified rate ratios (RRs) for the association between rurality and suicide mortality. The change in RR after ADI adjustment was used to quantify the extent to which area deprivation explained the rurality-suicide association.

[Results] In the overall (non-stratified) analysis, rurality was not associated with suicide mortality (adjusted RR 0.985, 95% credible interval [CrI] 0.965-1.006). In sex-stratified analyses, both men (RR 0.952, 95% CrI 0.925-0.979) and women (RR 0.767, 95% CrI 0.716-0.820) had higher suicide mortality in urban areas. The urban excess was larger in women; suicide risk in urban areas was approximately 1.3 times that in rural areas among women. Area deprivation explained about 20% of the urban excess risk in women. In men, deprivation acted as a suppressor: after ADI adjustment, the urban excess became more apparent.

[Conclusions] Sex-specific concentration of suicide risk in urban areas exists but is masked in non-stratified analysis. The urban excess is larger in women. To achieve SDG 3 (Good Health and Well-being), sex-responsive suicide prevention in urban settings is needed, with particular attention to economic instability, social isolation, and housing insecurity among women.

[50IXCzC1-05] Building Brotherhood: Enhancing Social Engagement Among Male Seniors Through Targeted Community-Building Activities in Active Ageing Centres what

*Anne Neo, Aqilah Nintendo Mohammad Yunus Noor, Sarah Swee, Eileen Yeo, Emily Ong, Olivia Leong

Keywords : Health, Social engagement, Social prescribing, Well-being, Minority group

Purpose: Male senior participation rates in Active Ageing Centres (AACs) remain consistently lower than those of female seniors. This project hypothesises that male seniors who develop a stronger sense of community will engage more regularly and broadly with centre activities. The study aims to examine whether creating a male-focused community can increase overall social engagement and participation in AAC programmes.

Method: A cohort of 30 male seniors were recruited to participate in a curated series of male-targeted activities conducted over 8–10 sessions (conducted on a twice weekly basis). Activities include interest-based and skills-oriented programmes such as snooker, happy hour, drone flying, AI learning workshops, and male-specific health talks.

Each participant is expected to attend a minimum of four sessions.

Data collected will at specific time points- 2, 4, 6, 8 and 10th session using qualitative surveys with Likert-scale items and focus group discussions at the week 0, 6 and 10.

Proxy measures include (1) monthly number of centre programmes attended, (2) self-reported sense of community, happiness, and belonging, and (3) participation in activities beyond the curated male interest group.

Results: The primary outcome is a measurable increase in sense of community over time, with secondary outcomes including increased participation frequency and diversity of centre activities.

Correlational analysis will examine whether increases in perceived community belonging are associated with a linear increase in overall social engagement.

The study also identifies the session threshold at which meaningful attitudinal and behavioural changes emerge.

Considerations: Limitations include a small sample size, reliance on self-reported data, and potential selection bias, as participants may already possess some intrinsic motivation. Gender-specific programming may also require careful facilitation to avoid reinforcing stereotypes while remaining relevant and engaging.

Conclusions: This project explores a targeted, community-driven approach to engaging male seniors, addressing a known participation gap in AACs.

Findings may inform future minority related programme design and contribute to more inclusive, sustainable strategies for promoting social engagement among older adults.

[50IXCzC1-06] *Alli Kawsay (Buen vivir)* in the indigenous movements of Colombia - Ecuador, political-economic practices as a global model, in defense of the rights of Mother Nature in the global south

*Vanessa-Eduardo Arteaga Bernal-Erazo Acosta¹ (1. Indigenous Independent Researcher in Ecuador-Colombia (Colombia))

Keywords : Alternative economy to the world、indigenous womens coices、Sumak kawsay-Buen vivir、ancestral epistemology、Defense mother nature、Leaders in peace

From the decolonial theory, the indigenous economies, are part of the other/other economies, are part of the economies that take care of nature, establish other patterns of human relations with circularity, respect; besides it involves this type of economy the communality, the environmental dimension, family and the education as practice of decolonization, of humanization. This type of economy is part of the post-colonial studies, because it establishes patterns of analyzing alternative economies that can reestablish links of respect to nature, as bets of resilience in the middle of the climate change, key to change of economy in the middle of the climate change, diverse authors emphasize it; Arturo Escobar, Aram Ziai. The purpose of this research is to present the urgency of listening to indigenous epistemologies of *Sumak Kawsay* (in *kichwa* language: *Buen vivir*-Buen vivir) and also to accompany the care/defense of the biodiversity-rich indigenous territories of the Andean region. As a research question: What characteristics do the economies have from the philosophy of the *Alli kawsay - Buen vivir* as successful experiences of economic redistribution and its contributions to the global economy in the middle of the anthropocene to safeguard life on the planet? At present, the strengthening of green economy strategies, a fairer economy, sustainable with nature and with the capacity to be a model in the distribution of wealth, stands out. In practice, it recognizes minga, (community work), inclusive development, development in respect for nature of importance in the midst of the manifestations of climate change. *Buen vivir-alli Kawsay* (In *kichwa* indigenous language), is part of the epistemology of resistance, which in the practice of indigenous communities implies addressing the dimension/interrelationship: spiritual dimension, economic dimension (clean practices-sustainable economies), political dimension (defense of the territory) ancestral, family dimension, cultural, environmental. This model is a more just way of distributing wealth and income, which is part of the economies of resistance.

Science Technology Diplomacy/SDGs

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Small Conference Hall(Small Conference Hall in Kojin Kaikan)

Poster Session 1

[50IXCzC1-07] Young people in a warming world: an urgent call for action based on synthesis of the impacts of climate on child health across 22 countries

*Aparna Lal¹, Erin I Walsh¹, Zoe A Becvarik¹ (1. Australian National University (Australia))

Keywords : child health、 climate

[Purpose]Across the life course of current youth and future generations, the frequency and magnitude of climate extremes are projected to increase.

[Method]This talk presents a synthesising overview of the climate-related impacts of rainfall, temperature, and particulate matter on the health of young people. Key sources of insight discussed are an integrative narrative review of healthcare service utilisation associated with climate exposures in people aged 0 to 18 years in Australia, and analysis of demographic and Health Surveys data from 22 lower income countries, spanning over 12,000 locations.

[Results]Our findings reiterate the importance of health and climate literacy, and the need to centre child and youth health in preventative environmental and climate research and policy.

[Conclusion]Failure to do so risks leaving children vulnerable to disproportionate acute and long-term impacts that limit their life-long wellbeing, productivity, and potential.

[50IXCzC1-08] A three lever CMIP aligned roadmap to decarbonize and climate proof Japans healthcare sector

*kazumi Kubota¹, Kubota Anna² (1. Shimonoseki City University (Japan), 2. Keio University (Japan))

Keywords : Decarbonization、Climate resilience、Japan’s healthcare sector、Roadmap、Coupled Model Intercomparison Project (CMIP)

[Purpose] The Japanese healthcare sector holds a critical dual mandate to safeguard public health from intensifying climate hazards and to mitigate its own environmental footprint. Healthcare activities contribute about 4 to 5 percent of greenhouse gas emissions globally. While awareness is high, there is a clear need for a concrete strategy. This paper proposes a practical roadmap to accelerate decarbonization and ensure climate resilience within Japans medical infrastructure.[Method] This framework is developed by analyzing successful models such as the UK National Health Service and results from a 2025 survey of 152 Japanese organizations by the Health and Global Policy Institute. The strategy centers on three strategic levers which are Education, Measurement, and Incentives. These elements are synchronized with data cycles from the Coupled Model Intercomparison Project to maintain high scientific standards.[Results] The survey results indicate that Japanese medical bodies recognize climate threats but lack the technical expertise to act. In response, this roadmap introduces a minimum viable measurement set that focuses on high impact areas like anesthetic gases and energy consumption. Implementing these targeted actions allows facilities to achieve verifiable emission reductions and improved resilience within 12 to 36 months.[Consideration] Connecting healthcare operations with latest climate modeling allows providers to plan effectively for extreme heat and long term facility upgrades. Integrating climate competency into professional training and procurement standards is vital for sustainable implementation with low administrative burden. [Conclusion] This sequenced roadmap provides a credible pathway for the Japanese health sector to support national climate goals. By linking education and measurement with financial incentives, the framework helps systems transition from simple intent to measurable impact.

[50IXCzC1-09] Investigation of Fully Depleted Silicon On Insulator Devices.

*Samiul Haque Touhid¹, Mubashara Maisha¹, Maisha Tasnim Adri¹, Zannatun Nahar¹, Dr. Towhid Adnan Chowdhury¹ (1. Ahsanullah University of Science and Technology (Bangladesh))

Keywords : FD SOI MOSFET、Kink Effect Suppression、TCAD simulation、Gate Oxide Thickness、Buried Oxide Thickness、Channel Doping Concentration

[Purpose]: This paper was dedicated to modeling and optimization of the FD SOI MOSFET. It is mainly focused on the suppression of kink effect — an abnormal increase in the drain current for the high values of the drain voltage, imposing the negative effect on the device reliability and performance.

[Method]: With the scaling to the nanometer regime, the control of Short Channel Effect and body potential becomes more important. Herein, the structure dependences of FD SOI devices were studied by SILVACO TCAD simulation tool.

[Results]: After examining the numerous design parameters, three were found to be the most effective in suppressing this kink effect; viz., gate oxide thickness, channel doping concentration, and buried oxide (BOX) thickness.

[Consideration]: Gate oxide thickness, channel doping concentration and buried oxide (BOX) thickness was considered.

[Conclusion]: FD-SOI technology is an attractive option for the future because of its inherent benefits including low power, high-speed operation, and low parasitic effects. Simulation results show that by tuning these parameters such kink effect is greatly reduced and the overall performance of devices is retained. The results shed the first light not only on kink-effect phenomena in FD SOI technology, but also on the design methodology for next-generation low-power, high-reliable semiconductor devices.

[50IXCzC1-10] Perspective on Governance Barriers to Effective Health Infrastructure Financing at the National and Subnational Levels in Indonesia

*Cynthia Febrina Febrina¹, Stanley Saputra² (1. Hiroshima University (Japan), 2. Ministry of Health (Indonesia))

Keywords : Governance、Health、Infrastructure、Indonesia、Qualitative

The Indonesia Health Systems Strengthening (IHSS) Project is a health system transformation initiative led by the Government of Indonesia (GoI) under the Ministry of Health. It is financed through a loan agreement between the GoI and several Multilateral Development Banks (MDBs), including the World Bank, ADB, AIIB, and IsDB. The project aims to address challenges in Indonesia's public health and laboratory systems by procuring essential medical equipment for primary and referral healthcare facilities nationwide, including those in remote areas. Before receiving equipment through the project, healthcare facilities must meet specific readiness criteria. These include adequate infrastructure (such as sufficient electrical capacity and clean water supply), functional waste management systems, and the availability of trained healthcare personnel capable of operating the equipment. To support fulfillment of these criteria, several funding mechanisms are available, including the Physical Special Allocation Fund (DAK Fisik), through which the GoI transfers funds to subnational governments. These funds can be used to certain infrastructure needs, including to renovate facilities, upgrade electrical systems, and improve waste management system. However, challenges persist in both planning and fund absorption at national and subnational levels. Thus, this study conducted in-depth interviews and focus group discussions with representatives from relevant ministries and subnational governments to identify barriers to effective fund utilization. Findings indicate key barriers, including frequent regulatory changes, misalignment between central and subnational planning processes, and limited technical capacity due to staff turnover. Strengthening funding governance through more systematic reforms is essential to ensure healthcare facilities are fully prepared and able to deliver improved and equal healthcare services to the population.

[50IXCzC1-11] Insights of Dietary Habits Among Female Workers in Micro Industries of Bangladesh: A Cross-Sectional Study.

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Keywords : Dietary habit、 Workplace nutrition、 Women's health、 Industrial workforce

Background: Workplace wellness has been globally emphasized, yet women workers, especially those balancing productive and reproductive roles, remain highly vulnerable to poor nutrition and health risks. In South Asia, female informal-sector workers show alarming levels of low dietary diversity, nutrition knowledge gaps, anemia, and comorbidities, including in Bangladesh. Despite women constituting the majority of Bangladesh's micro-industry workforce, evidence on their dietary habits is scarce, underscoring the need for this study to inform targeted, gender-sensitive nutritional interventions. This study aimed to examine eating patterns and contributing factors among female cottage industry workers.

Method: A cross-sectional survey was conducted among 312 female workers randomly selected from micro-industries in Dhaka, Rajshahi, and Barishal divisions of Bangladesh. Face-to-face interviews using a pre-tested, semi-structured questionnaire were used to collect information. Bivariate and multivariate logistic regression analyses were performed to identify significant predictors for poor dietary habits, reporting odds ratios (95% CI).

Results: Poor dietary habits were observed in 63.1% of respondents. Higher odds seen among women with poor dietary habits from extended families (AOR = 2.38; 95% CI: 1.25-4.52), in service jobs (AOR = 2.58; 95% CI: 1.35-4.92), without business experience, and in small-scale food processing (AOR = 3.16; 95% CI: 1.21-8.23). Not retaining rice starch, not washing vegetables, and consuming sweetened traditional foods increased risk, while purifying water improved diet.

Consideration: Findings are limited by the cross-sectional design and focus on selected female micro-industry workers, which may restrict generalizability to other regions, industry types or male workers.

Conclusions: Dietary habits are shaped by sociodemographic, occupational, and food-handling factors. Interventions, such as balanced-plate training, workplace support, community programs, and long-term research, should involve female workers, men, and mothers-in-law to improve household-level nutrition.

[50IXCzC1-12] GROWTH ANALYSIS OF SEVEN SWEETPOTATO GENOTYPES ON DEGRADED ULTISOLS IN SOUTHEASTERN NIGERIA

*OGECHI UCHE¹, EMMANUAL Ukaobasi MBAH² (1. NATIONAL ROOT CROPS RESEARCH INSTITUTE UMUDIKE (Nigeria), 2. MICHEAL OKPARA UNIVERISTY OF AGRICULTURE UMUDIKE (Nigeria))

Keywords : Sweetpotato; growth analysis; principal component analysis; fresh storage root yield

[Purpose] The growth and yield of seven sweetpotato (*Ipomoea batatas* L.) genotypes were assessed for early maturity under rain-fed conditions during the 2014 and 2015 seasons at the National Root Crops Research Institute, Umudike, Nigeria, on a degraded ultisol

[Method] The experiment was laid in a randomized complete block design with four replications. Growth parameters are crop growth rate (CGR), relative growth rate (RGR), and net assimilation rate (NAR) were measured, and fresh storage root yield was recorded at harvest.

[Results] Principal component analysis identified traits contributing to genotypic variability. Significant ($P < 0.05$) genotypic differences were observed for NAR in both seasons, while CGR and RGR varied between years. Umuspo 1 shows the highest CGR, NAR, and fresh storage root yield across seasons. Principal component analysis (PCA) showed cumulative variances of 90.97% in 2014 and 98.49% in 2015.

[Consideration] Fresh storage root yield positively associated with key growth traits.

[Conclusion] The study reveals strong genetic variability and identifies Umuspo 1 as a high-yielding, early-maturing, and well-adapted genotype for cultivation and breeding on degraded ultisols in southeastern Nigeria.

[50IXCzC1-13] Proportion of Attention-Deficit/Hyperactivity Disorder and its associated factors among female University students of Bangladesh

*Marzana Hossain¹, Bilkis Banu¹ (1. Department of Public Health, Independent University, Bangladesh (IUB) (Bangladesh))

Keywords : Adult ADHD、 ADHD in female、 Gender awareness

Purpose The symptoms of Attention-Deficit/Hyperactivity Disorder (ADHD) in female children and female adults are more towards inattention and related symptoms compared to male children and adults hyperactivity symptoms. Due to that, female either don't get diagnosed as much as the male population, or they get misdiagnosed. In countries like Bangladesh, this scenario is even worse, with little to no diagnosis, along with little knowledge regarding the disorder. This study assessed the proportion of ADHD and its associated factors among female university students in Bangladesh.

Method This cross-sectional quantitative study interviewed 259 female university students (>18 years) from Akij College of Home Economics of Dhaka city, Bangladesh. A purposive, non-randomized sampling technique was used in this study, and data were collected via a pre-tested, semi-structured questionnaire administered via face-to-face interviews. The questionnaire included characteristics related to socio-demography, comorbidity, lifestyle, and the ASRS V1 to estimate the proportion of ADHD.

Results Among 259 respondents, 32.4% showed symptoms of having high ADHD, 22.4% showed symptoms of very high ADHD, 25.5% showed symptoms of mild to moderate ADHD, while 19.7% showed symptoms of low ADHD. Weight change over the last year, amount of sleep over the last month, exercise, amount of money spent on shopping per month, and living conditions of the female students were associated with ADHD.

Consideration Findings should be interpreted in light of the cross-sectional design, and more female students from both public and private universities should be interviewed to better understand the findings. In addition, females from different age groups and occupations should also be considered for further studies.

Conclusion The result obtained from this study only represents a very small fraction of female university student with ADHD in Dhaka, Bangladesh. But then again this finding can be a wake up call for conducting more studies to find the actual scenario in ADHD in female in Bangladesh.

[50IXCzC1-14] International collaboration opportunity experience with Sakura Science program: focusing on building systems to minimize health hazards from disasters

*Mayumi Kako¹, Chie Teramoto¹, Sanmei Chen¹, Rahman MD Jiaur¹, Cai Juan¹, Yoko Shimpuku¹ (1. Hiroshima University School of Biomedical and Health Sciences (Japan))

Keywords : disaster risk reduction、 collaborative learning、 cultural knowledge、 health care system

[Purpose]

Hiroshima University (HU) has contributed to strengthening Japan-Africa collaboration through its 2020 Global Expansion Initiative program, which implemented a triangular overseas study program involving Japan, North Africa (4 Egyptian universities), and Sub-Saharan Africa (University of Malawi and University of Zambia). To sustain the exchange opportunities developed through this program, HU and the University of Zambia, the two universities developed their exchange by exploring opportunities for joint research in the fields of health crisis management and community disaster prevention with the Sakura Science Program. This presentation will share the experience of the exchange program inviting one faculty member and six students from Zambian educational institutions.

[Method]

The program called “International Research Exchange for Building Systems to Minimize Health Impacts from Disasters” was developed under the application. The program will provide invited participants with opportunities to visit facilities where they can learn about community disaster prevention and disaster medical care and nursing in Japan. The young academics and researchers being invited have previously acquired knowledge and gained practical experience in public health and emergency medical care within Zambia.

[Results]

The program was held between November 29 and December 6, 2025 for eight days. A program hosted visitors from Zambia, primarily in Kobe and Hiroshima, for observation and training on disaster prevention, disaster medicine, and research exchange, as well as university research exchange. Reflections withdrew from the participants note summarized in following points: 1. The Importance of Disaster Preparedness, 2. Japanese Resilience and Recovery High-Level Organization and Technology in Japan, 4. Insights Into Disaster Management Systems (DRI, JICA, WHO, DMAT), 5. Knowledge Exchange and Research Development, and 6. Cultural Exposure and Human Stories.

[Conclusion]

The program provided the opportunity for both countries participants to observe and reflect on the differences and similarities of disasters and nursing roles in their practice as well as systems. Further communication will be beneficial to provide the opportunity to seek solutions with collaborative effort.

[50IXCzC1-15] Rising car dependence at Hiroshima University: A three-year empirical analysis of commuting behaviour, transit-service changes, and CO2 emissions (2023-2025)

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

Keywords : commuting; CO2 emissions; modal shift; transit-service withdrawal; carbon neutrality; Smart Campus

In 2021, Hiroshima University released its Smart Campus 5.0 declaration, committing to carbon neutrality by 2030 for direct operations and 2040 for indirect emissions including commuting. Using three years (2023-2025) of administrative commuter-allowance data covering approximately 1,600 faculty and staff annually, this paper examines whether commuting behaviour is moving toward this goal. The empirical pattern is the opposite. The private-car share rose from 62.0% in 2023 to 68.9% in 2025 (+6.9 percentage points), while the combined share of bicycle, motorcycle and walking nearly halved from 11.8% to 6.7%. Public-transit shares remained flat near 25%. Translated into emissions using Ministry of Land, Infrastructure, Transport and Tourism mode-specific factors, per-commuter annual CO2 rose from 663 to 752 kg (+13.4%). Decomposing the per-capita increase shows that essentially all of it stems from the modal shift; emission factors and commute distances changed by less than one percent. Beyond the cohort trend, we identify a specific accelerating event: the April-2024 termination of the Green Phoenix express bus between the CBD of Hiroshima and the Higashi-Hiroshima campus. Of the 52 affected commuters tracked, nine (17%) switched to private cars within a year, contributing an estimated additional 5.5 tonnes of CO2 per year. Spatial analysis further shows that commuters residing outside the residential inducement zones commute by car 14 percentage points more than zone residents and emit 29% more CO2 per person. The headline message is that commuting behaviour at Hiroshima University is moving counter to the institution's declared carbon-neutrality goal, with both incremental modal shift and discrete service withdrawals contributing. Reversing the trend will require targeted policy interventions on both location and transport dimensions.

[50IXCzC1-16] Toward carbon-neutral commuting at Hiroshima University: A joint residence-mode policy simulation

Sonoko Watanabe, Makoto Chikaraishi, Shinji Kaneko (Hiroshima University)

Keywords : residence-mode joint choice; mixed logit; self-selection; location optimization plan; transit-pass subsidy; carbon neutrality; Smart Campus

To meet the 2040 carbon-neutral commuting goal of Hiroshima University's 2021 Smart Campus declaration, this paper evaluates which policy levers can redirect commuting behavior toward the target and quantifies their costs and effects. We build a bivariate mixed-logit model of joint residence and commuting-mode choice estimated on 4,256 person-year observations from the Hiroshima metropolitan area. The model identifies two latent attitudinal dimensions: a strong pro-car attitude that jointly shapes suburban residential choice and car commuting, and a weaker pro-transit attitude that pulls households toward transit-accessible neighborhoods but, conditional on residence, does not translate into actual transit use — pinning down the residence-mode self-selection. We simulate ten policy scenarios for the 2025 cohort (N = 1,391): broad and geographically-targeted inducement-zone subsidies (residential and urban-function), three transit-pass subsidies, and four combinations. The simulation reveals that broad inducement subsidies applied uniformly across the 199-town zone — which spans both Higashi-Hiroshima and Hiroshima City — increase per-commuter CO₂, paying to worsen the carbon outcome because the broad zone redistributes car-oriented entrants toward longer commutes. Targeted subsidies restricted to the 36 inducement-zone towns inside Higashi-Hiroshima reverse the sign: both the residential subsidy and the urban-function subsidy achieve substantial reductions in CO₂. A fully-targeted combined scenario (urban-function plus spatially-restricted PT-pass subsidy) delivers -70 kg/commuter/year (-11.9%) and a 7.6-pp public-transit share gain at ¥12.5 M/month — the lowest cost among dual-objective packages. The direct implication is that residential inducement subsidies should not encourage residence far from the principal workplace, even within a designated inducement zone; otherwise they undermine the carbon-neutrality goal they should support.

Science Technology Diplomacy/Distributive Justice

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Presentation 1(Classroom 301)

Science Technology Diplomacy/Distributive Justice

Chair:Yasmine Mahmoud Moussa Osman (Zagazig University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[31q821XY-01] Science Diplomacy, Neuroscience, Technology, and Society: Contributions from a Women-Led Latin American and Caribbean Network to Wellness and Sustainable Development in the Global South

Miriam Argueta⁸, Victoria Cano Colazo⁹, María Castelló², Jorge Gómez¹⁰, *Itala Laurente¹, Lizbeth Murillo^{4,7}, Sabrina Pighin⁵, Romina Porreca⁶, Perla Berenice Sánchez Reyna³ (1. Universidade Estadual de Campinas (Brazil), 2. Instituto de Investigaciones Biológicas Clemente Estable (Uruguay), 3. Instituto Tecnológico y de Estudios Superiores de Monterrey (Mexico), 4. Universidad Nacional Abierta y a Distancia - UNAD (Colombia), 5. Universidad Nacional del Litoral (Argentina), 6. Municipalidad de San Fernando (Argentina), 7. Universidad Maimónides (Argentina), 8. Universidad de San Carlos de Guatemala (Guatemala), 9. Escuela Interdisciplinaria de Altos Estudios Sociales (Escuela IDAES-UNSAM) (Argentina), 10. Servicio Nacional de Aprendizaje - SENA (Colombia))

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[31q821XY-02] High Motivation, Low Capacity: Why Perinatal Mental-Health Screening Remains Rare in Frontline Midwifery Care

*Siti Khuzaiyah¹, Rufidah Maulina², Elsa Tursina³, Agustina Catur Setyaningrum⁵, Fadhila Tsania Richa⁴ (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universitas Negeri Sebelas Maret (Indonesia), 3. Politeknik Negeri Jember (Indonesia), 4. Universitas Brawijaya (Indonesia), 5. Badan Pelatihan Tenaga Kesehatan, Semarang (Indonesia))

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

[31q821XY-03] Patients' satisfaction and perceived inequality in Non-Communicable Diseases (NCD) care across different financing groups: *A case study at Khmer Soviet Friendship Hospital in Cambodia*

*Sokchamroeun Sim¹ (1. Hiroshima University (Japan))

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[31q821XY-04] Distributive Justice in Global Science: Policy Pathways for Empowering Women Scientists

*Noushin Arfatahery¹ (1. Freie University Berlin (Germany))

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[31q821XY-05] Predicted Fe_{1-x}Y_xAl Ternary Systems Doped with Pt and Ru Metal: High-temperature Materials for Component Coating in Steel

*Christine Mkhonto¹, Ndanduleni Lesley Lethole², Phuti Esrom Ngoepe³ (1. University of Limpopo (South Africa), 2. Sefako Makgato Institution (South Africa), 3. University of Limpopo (South Africa))

Science Technology Diplomacy/Distributive Justice

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Science Technology Diplomacy/Distributive Justice

Chair: Yasmine Mahmoud Moussa Osman (Zagazig University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[31q821XY-01] Science Diplomacy, Neuroscience, Technology, and Society: Contributions from a Women-Led Latin American and Caribbean Network to Wellness and Sustainable Development in the Global South

Miriam Argueta⁸, Victoria Cano Colazo⁹, María Castelló², Jorge Gómez¹⁰, *Itala Laurente¹, Lizbeth Murillo^{4,7}, Sabrina Pighin⁵, Romina Porreca⁶, Perla Berenice Sánchez Reyna³ (1. Universidade Estadual de Campinas (Brazil), 2. Instituto de Investigaciones Biológicas Clemente Estable (Uruguay), 3. Instituto Tecnológico y de Estudios Superiores de Monterrey (Mexico), 4. Universidad Nacional Abierta y a Distancia - UNAD (Colombia), 5. Universidad Nacional del Litoral (Argentina), 6. Municipalidad de San Fernando (Argentina), 7. Universidad Maimónides (Argentina), 8. Universidad de San Carlos de Guatemala (Guatemala), 9. Escuela Interdisciplinaria de Altos Estudios Sociales (Escuela IDAES-UNSAM) (Argentina), 10. Servicio Nacional de Aprendizaje - SENA (Colombia))

Keywords : Science diplomacy、neuroscience、Latin America、gender equality、Global South、open science

Science diplomacy (SD), a strategic field integrating science, politics, and society to solve global problems through international cooperation, has seen its intersection with neuroscience and technology become increasingly relevant in Latin America and the Caribbean (LAC) and the Global South (GS). The SD, Neuroscience, Technology, and Society Network (DICIENTS), the world's first to link these disciplines from an LAC and GS perspective, aims to address complex social challenges. Its mission is to foster all SD dimensions to improve mental and brain health, advance the right to science, and promote gender equity, thereby achieving the Inner Development Goals (IDGs) and the Sustainable Development Goals (SDGs) during the International Decade of Science for Sustainable Development (IDSSD). DICIENTS is a multidisciplinary community of practice of 73 academics and professionals (64% women) from 17 countries, co-founded by a woman neuroscientist. Preliminary analysis of DICIENTS' impact suggests it has significantly empowered women by fostering an inclusive & diverse, horizontal network. Persistent challenges were identified in integrating underrepresented groups, particularly indigenous women, indicating the need for targeted inclusion strategies. Horizontal interchange proved vital in overcoming gender and geographic limitations, demonstrating how the GS can reduce structural gaps in science and technology while promoting equitable international cooperation from an intersectional perspective. This work concludes by discussing DICIENTS' potential as a scalable model for other GS regions, contributing to the SDGs, IDSSD, and knowledge democratization. The high female representation allows for analysis of women's specific needs in science and diplomacy, ultimately aiming to reverse historical inequalities. Considering the global geopolitical context and its impact on wellness worldwide, this human-centered SD initiative is expected to contribute to a culture of peace.

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[31q821XY-02] High Motivation, Low Capacity: Why Perinatal Mental-Health Screening Remains Rare in Frontline Midwifery Care

*Siti Khuzaiyah¹, Rufidah Maulina², Elsa Tursina³, Agustina Catur Setyaningrum⁵, Fadhila Tsania Richa⁴
(1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universitas Negeri Sebelas Maret (Indonesia), 3. Politeknik Negeri Jember (Indonesia), 4. Universitas Brawijaya (Indonesia), 5. Badan Pelatihan Tenaga Kesehatan, Semarang (Indonesia))

Keywords : perinatal mental health、 screening、 midwifery、 Indonesia

[Purpose] To assess Indonesian midwives' knowledge, attitudes, and experiences regarding perinatal mental-health care and to identify factors influencing their use of screening tools.

[Method] A mixed-methods study was conducted using a cross-sectional online survey of 300 midwives from diverse health-care settings, complemented by qualitative analysis of open-ended responses. Quantitative variables included training exposure, access to resources, knowledge levels, and screening practices. Data were analysed using descriptive statistics and pathway modelling, while attitudes were measured on Likert scales. Qualitative findings explored perceived system-level barriers and individual readiness to implement screening.

[Results] Participants had a mean of 15 years of professional experience, yet only 9.7% had ever used a mental-health screening tool. Formal training was limited (8.7%), and only 34.3% reported access to guidelines; among them, just one-third actively used these resources. Higher screening knowledge significantly predicted greater utilisation ($\beta=3.05$, $p<0.001$). Access to structured information sources, such as public-health offices or academic mentors, significantly increased knowledge ($\beta=1.42$, $p<0.001$). Qualitative themes revealed strong commitment to holistic maternal care but highlighted institutional barriers, including limited policy support, unclear referral pathways, and heavy administrative workloads.

[Consideration] Midwives in Indonesia are willing to screen for perinatal mental-health problems, but gaps in training, guidelines, and institutional support hinder implementation. Addressing these gaps is critical to translating commitment into consistent, early mental-health care for mothers and babies.

[Conclusion] Indonesian midwives demonstrate high motivation but insufficient preparation to address perinatal mental-health needs effectively. Expanding access to culturally sensitive training, validated and user-friendly screening tools, clear referral systems, and supportive policy frameworks is essential. Strengthening these areas may enable routine early detection and intervention, improving maternal and infant health outcomes nationwide.

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

[31q821XY-03] Patients' satisfaction and perceived inequality in Non-Communicable Diseases (NCD) care across different financing groups: *A case study at Khmer Soviet Friendship Hospital in Cambodia*

*Sokchamroeun Sim¹ (1. Hiroshima University (Japan))

Keywords : Health Care Access, Health Equity, Disparities, NSSF, HEF, OPE, Non-Communicable Diseases (NCDs)

Background: Non-Communicable Diseases (NCDs) are the leading cause of death in Cambodia, accounting for approximately 60,000 deaths annually. Nearly one in four Cambodians dies prematurely between the ages of 30 and 70 due to cardiovascular diseases, diabetes, cancer, and chronic respiratory diseases. Despite ongoing health system reforms aimed at achieving Universal Health Coverage (UHC) by the Cambodian Government by 2035, disparities in healthcare access may still persist across different health financing schemes. Understanding whether patients enrolled in various financing mechanisms experience differences in satisfaction and perception of disparities in access, equity, and quality of NCD care is critical as inputs for strengthening Cambodia's public health system. This study aims to explore the patients' satisfaction and perceived disparities in healthcare access and the NCD care across different financing groups at the National Level Hospital, *Khmer Soviet Friendship Hospital* in Phnom Penh, Cambodia.

Method: In this cross-sectional study, the structured questionnaire survey has been utilized to interview approximately 420 patients aged over 18 years old. Patients were categorized into three financing groups: NSSF members, HEF/Poor ID members, and out-of-pocket patients. Participants were selected using convenience sampling, based on their availability and willingness to participate during the data collection period. Descriptive statistics and ANOVA were conducted to assess group differences.

Results: Despite policy commitments to equitable healthcare provision to all patients, significant differences were observed among financing groups in perceived disparities in access to Healthcare Services, $F=6.297, p=0.002$, and perceived quality of Healthcare Services, $F=3.491, p=0.035$. With statistical evidence, HEF got the highest score for satisfaction in the quality of NCD care, but NSSF got the lowest, and out-of-pocket is in between (or similar to NSSF).

Conclusion: The relatively favourable results among HEF may provide the key improvement insights for strengthening equity-oriented improvements within other financing schemes, particularly NSSF. Addressing these disparities is essential for advancing equitable NCD care and supporting Cambodia's progress toward UHC.

Science Technology Diplomacy/Distributive Justice

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Science Technology Diplomacy/Distributive Justice

Chair:Yasmine Mahmoud Moussa Osman (Zagazig University)

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[31q821XY-04] Distributive Justice in Global Science: Policy Pathways for Empowering Women Scientists

*Noushin Arfatahery¹ (1. Freie University Berlin (Germany))

Keywords : Distributive justice、 Women in science、 Science diplomacy、 Gender equality、 Global research collaboration

Gender inequality remains a structural challenge in global science systems, shaping access to research funding, leadership roles, and participation in international collaboration. Addressing these inequities is essential not only for social justice but also for strengthening the effectiveness of science in responding to global challenges. This contribution examines distributive justice as a policy framework for promoting gender equity in science and highlights the role of women scientists as key drivers of innovation, peacebuilding, and sustainable development. This policy-oriented analysis draws on interdisciplinary research experience in environmental microbiology, sustainable aquaculture, and gender-inclusive research leadership across Europe and the Global South. Evidence is synthesized from women-led international research collaborations, institutional practices, and applied projects integrating microbial ecology, circular food systems, and community engagement to identify structural barriers and enabling mechanisms within global research ecosystems. The analysis shows that unequal distribution of resources, visibility, and decision-making authority significantly constrains women scientists' contributions to global research agendas. In contrast, initiatives that embed distributive justice through inclusive leadership models, equitable partnerships, and recognition of mentorship and coordination work demonstrate enhanced scientific quality, societal relevance, and cross-regional collaboration. Empowering women scientists through equitable research frameworks strengthens scientific excellence and innovation capacity while enhancing the contribution of science and technology to peace, sustainability, and inclusive development

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[31q821XY-05] Predicted $\text{Fe}_{1-x}\text{Y}_x\text{Al}$ Ternary Systems Doped with Pt and Ru Metal: High-temperature Materials for Component Coating in Steel

*Christine Mkhonto¹, Ndanduleni Lesley Lethole², Phuti Esrom Ngoepe³ (1. University of Limpopo (South Africa), 2. Sefako Makgato Institution (South Africa), 3. University of Limpopo (South Africa))

Keywords : $\beta 2$ FeAl, ternary doping, stability, ductility, temperature effect

[Purpose]

Iron aluminide is a metal alloy with unique properties such as high strength and temperature resistance, making it suitable for applications in the aerospace, automotive, and energy sectors. The FeAl alloy has a higher specific modulus, strength-to-weight ratio, corrosion and oxidation resistance. However suffer from limited room temperature ductility above 873 K. Low-density steels are in demand in the steel market for lighter materials with optimal mix of structural and mechanical properties. The FeAl system is characterised by 156 super-lattice, minimising dislocation and diffusion at increased temperatures, making them desirable for high temperature applications.

[Method]

Cluster expansion (CE) was used to determine thermodynamic properties and First-principles method was used to determine mechanical properties. Furthermore, molecular dynamics was used to investigate lattice expansion, binding energies, and Gibbs free energies.

[Results]

We investigated the thermodynamic properties of the predicted $\text{Fe}_{1-x}\text{Y}_x\text{Al}$ ternary systems to understand the effect of temperature, ductility enhancement for superior protection steel-IT. CE demonstrated increased thermodynamic stability. The FePt_3Al_4 , FePtAl_2 , and $(\text{FePt}_2\text{Al}_3)_2$ structures outperformed the predicted $\text{Fe}_{1-x}\text{Ru}_x\text{Al}$ ternary systems in stability. MC showed that the $\text{Fe}_{1-x}\text{Ru}_x\text{Al}$ systems reached an equilibrium phase between 2600 K to 3100 K. Moreover, the bulk moduli, Pugh ratios, and Poisson ratios showed that hardness and ductility are significantly enhanced by Pt and Ru ternary alloying and FePt_3Al_6 is the most ductile system.

[Consideration]

These findings showed that $\text{Fe}_{1-x}\text{Pt/Ru}_x\text{Al}$ ternary systems are promising materials for component coating for high-strength application superior protection.

[Conclusion]

Pt and Ru showed improvement and stabilised in their properties on $\beta 2$ FeAl alloy. Thus, the concentration of Al is maintained high enough to form a compact, well-adhered layer for coating with high capacity adhesion for superior protection in steel market.

Innovation for Education and Health

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Education/Health 1

Chair:Sanmei Chen(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[kNAyHR2S-01] Development of an AI-Enhanced Decision Support System for Female Patients with Stress Urinary Incontinence

*Haoran Zhu¹, Liwei Jing¹ (1. Capital Medical University (China))

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[kNAyHR2S-02] Unveiling men's knowledge on women's menopause: Insights and predictors focused on urban Bangladesh

*Bilkis Banu¹, Nasrin Akter², Md Jiaur Rahman³ (1. Independent University, Bangladesh (IUB) (Bangladesh), 2. University of Sydney (Australia), 3. Hiroshima University (Japan))

5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[kNAyHR2S-03] Mathematical Modelling of Family-Based Approach as a Control Strategy for Gastric Ulcers and Gastric Cancer

*Glory Kawira Mutua¹, Musyoka Kinyili¹, Dominic Makaa Kitavi¹ (1. University of Embu (Kenya))

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[kNAyHR2S-04] "From Shock to Learning to Live with Uncertainty":A Qualitative Exploration of Caregivers' Emotional and Cognitive Adaptation to a Child's Leukemia Diagnosis

*Xiaowan Li^{1,2,3}, Sanmei Chen¹, Yishuang Yang^{2,3}, Hua Wei^{2,3}, Qiurong Chen^{2,3}, Jingjing Ma^{2,3}, Feng Lu^{2,3}, Yoko Shimpuku¹ (1. Hiroshima university (Japan), 2. West China Second University Hospital (China), 3. Key Laboratory of Birth Defects and Related Diseases of Women and Children (Sichuan University) (China))

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[kNAyHR2S-05] The association between Woman-Centred Care and antenatal depressive symptoms in Tanzania: A cross-sectional study

*XUENI XIE¹, Dorkasi L Mwakawanga², Sanmei Chen¹, Ni Ning¹, Beatrice Mwilike², Agnes F Massae², Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. Muhimbili University of Health and Allied Sciences (Tanzania))

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[kNAyHR2S-06] Revealing the crosstalk between gut and breast microbiota and the role of their metabolites with breast cancer in obese females: A case control study

*walaad saad hanafy mahmoud¹, Mahmoud M. Kamel², Mohammed Abu-Elghait³, Osama Azmy⁴ (1. Assistant professor, faculty of medicine, Galala university (Egypt), 2. Clinical Pathology, National Cancer Institute, Cairo University, Cairo, Egypt (Egypt), 3. Department of Botany and Microbiology, Faculty of Science, Al-Azhar University, Cairo, Egypt (Egypt), 4. Department of Reproductive Health Research, Cairo, Egypt (Egypt))

Innovation for Education and Health

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Education/Health 1

Chair:Sanmei Chen(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[kNAyHR2S-01] Development of an AI-Enhanced Decision Support System for Female Patients with Stress Urinary Incontinence

*Haoran Zhu¹, Liwei Jing¹ (1. Capital Medical University (China))

Keywords : Older Women、 Stress Urinary Incontinence、 Severity Assessment、 Decision Support System

Purpose: Stress urinary incontinence (SUI) is common among middle-aged and older women, significantly affecting their quality of life. However, current severity assessments are often subjective and inefficient, and patients also lack adequate support when facing treatment decisions. This study aims to develop an AI-driven decision support system (DSS) that enables accurate SUI severity assessment and provides personalized decision guidance for older women. **Methods:** The assessment indicator system was built upon patients' chief complaints, ICIQ-SF scores, and pelvic muscle physiological signals. An ensemble learning strategy was applied to construct an innovative unconstrained probabilistic embedding framework, centered on support vector regression (SVR) and integrating multiple models for precise severity quantification. A decision guidance module was also developed based on the Ottawa Decision Support Framework (ODSF), structuring decision-related information in a cognitively accessible manner. **Result:** The study constructed a decision support system for middle-aged and older women with urinary incontinence. The dual-module system consists of a severity assessment engine and a personalized decision guidance interface, classifying severity levels and generate individualized decision suggestions aligned with older patients' needs, preferences, and comprehension levels. **Consideration:** This study focuses on the conceptual design and technical realization of the system. In future stages, real-world testing and optimization will be needed to further improve usability and clinical applicability. The current design prioritizes interpretability and simplicity for aging users. **Conclusion:** This study successfully developed an AI-based decision support system tailored for middle-aged and older women with SUI. By integrating objective severity assessment with structured decision guidance, the system provides a novel tool to support early identification, informed choice, and proactive participation in managing urinary health.

Innovation for Education and Health

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5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[kNAyHR2S-02] Unveiling men's knowledge on women's menopause: Insights and predictors focused on urban Bangladesh

*Bilkis Banu¹, Nasrin Akter², Md Jiaur Rahman³ (1. Independent University, Bangladesh (IUB) (Bangladesh), 2. University of Sydney (Australia), 3. Hiroshima University (Japan))

Keywords : Men's knowledge、 Menopause、 Reproductive health、 Gender awareness

Purpose: In patriarchal societies like Bangladesh, men play a key role in household decisions and health-seeking behaviors. Little is known about their understanding of menopause, which may affect emotional and healthcare support provided to women. This study assessed men's knowledge of menopause and explored its predictors in urban Bangladesh.

Method: This cross-sectional study employed 200 adult men (≥ 18 years) from five randomly selected areas of Dhaka city. Sample selection used systematic random sampling, and data were collected via a pre-tested questionnaire through face-to-face interviews. Knowledge was measured across components including age of menopause, symptoms, causes, consequences, health facilities, diagnostic procedures, supportive behaviors, physical support, and psychological support. Overall knowledge was categorized as "good" ($\geq 50\%$) or "poor" ($< 50\%$). Data were analyzed using descriptive statistics, and binary logistic regression identified significant predictors of poor menopause knowledge.

Results: Among 200 respondents, 66% demonstrated poor overall knowledge regarding menopause. Education, income, and marriage duration were strongly associated with knowledge level. After model adjustment, lower educational status (AOR = 3.79; 95% CI: 1.58-9.08), shorter marital duration (< 20 years) (AOR = 2.24; 95% CI: 1.28-8.14), and lower monthly income (< 252 USD) (AOR = 2.48; 95% CI: 1.12-5.49) were identified as significant predictors of poor knowledge.

Consideration: Findings should be interpreted considering the cross-sectional design and urban-only sample, highlighting the need for male-focused menopause education programs while limiting causal and rural generalizability.

Conclusion: Urban Bangladeshi men possess limited awareness of women's menopause, particularly those with less education and lower income. Targeted health education programs for men are crucial to enhance empathy, strengthen family support, and improve women's reproductive health outcomes during menopause.

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5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[kNAyHR2S-03] Mathematical Modelling of Family-Based Approach as a Control Strategy for Gastric Ulcers and Gastric Cancer

*Glory Kawira Mutua¹, Musyoka Kinyili¹, Dominic Makaa Kitavi¹ (1. University of Embu (Kenya))

Keywords : gastric cancer、gastric ulcers、compartmental model、family-based approach、numerical simulation

This study formulates a compartmental model to assess the effect of a family-based *Helicobacter pylori* infection control and management (FBCM) strategy against the transmission of *Helicobacter pylori* infection and its consequent development of gastric ulcers and gastric cancer. We perform a thorough mathematical analysis as well as validate the model by fitting it to real data of gastric cancer cases as recorded by Meru Teaching and Referral Hospital, Kenya. We find out that the model has a unique disease-free equilibrium that is locally and globally asymptotically stable when $R_0 < 1$, and a unique endemic equilibrium exists whenever $R_0 > 1$. The best numerical results are achieved when we combine both preventive measures (sensitization and family-based approach) and curative measures (prompt treatment and adherence), leading to the highest decrease in the cases of gastric ulcers and gastric cancer. The study produces clear evidence that the combination of effective sensitization campaigns, high efficacy of FBCM, effective treatment of gastric ulcers, and adherence to drug protocols makes integrated household-level interventions highly effective in reducing the transmission and preventing the progression of mild to severe disease. The use of such strategies offers an effective means of reducing *Helicobacter pylori*-related gastric ulcers and gastric cancer outcomes. This trend eventually leads to the eradication of the diseases over time.

Innovation for Education and Health

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 1(Classroom 301)

Education/Health 1

Chair:Sanmei Chen(Graduate School of Biomedical and Health Sciences, Hiroshima University)

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[kNAyHR2S-04] “From Shock to Learning to Live with Uncertainty”:A Qualitative Exploration of Caregivers’ Emotional and Cognitive Adaptation to a Child’s Leukemia Diagnosis

*Xiaowan Li^{1,2,3}, Sanmei Chen¹, Yishuang Yang^{2,3}, Hua Wei^{2,3}, Qiurong Chen^{2,3}, Jingjing Ma^{2,3}, Feng Lu^{2,3}, Yoko Shimpuku¹ (1. Hiroshima university (Japan), 2. West China Second University Hospital (China), 3. Key Laboratory of Birth Defects and Related Diseases of Women and Children (Sichuan University) (China))

Keywords : Acute lymphoblastic leukemia、 Illness uncertainty、 Caregiving preparedness、 Support

[Purpose] This study aimed to explore the emotional and cognitive experiences of caregivers following a child’s acute lymphoblastic leukemia (ALL) diagnosis and to understand how they gradually adapt to caregiving roles during the early treatment phase.

[Method] Semi-structured interviews were conducted with 17 caregivers of children newly diagnosed with ALL at West China Second Hospital between March 2024 and January 2025. Data were analyzed inductively using Braun and Clarke’s six-phase thematic analysis. Ethical approval was obtained from the West China Second Hospital Ethics Committee (YXKY2024006), and all participants provided written informed consent.

[Results] Four themes were identified: (1) emotional and cognitive disruption after diagnosis, including overwhelming emotional responses, heightened threat perception, existential fear, and gaps in illness-related information; (2) living with ongoing illness uncertainty, characterized by persistent anxiety, vigilance regarding infection or relapse, and continuous information seeking; (3) reconstructing meaning and rebuilding control, involving reassurance from clear medical information, trust in healthcare professionals, perceived external and financial burdens, and family role shifts, often with career sacrifice; and (4) ongoing adaptation under residual uncertainty, marked by acceptance of uncertainty and continued needs for care continuity and follow-up.

[Consideration] The findings highlight caregiving preparedness as a gradual and adaptive process shaped by emotional adjustment, information acquisition, and trust in healthcare professionals during early treatment.

[Conclusion] Caregivers of children newly diagnosed with ALL experience an early adjustment period marked by emotional distress, ongoing uncertainty, and evolving caregiving roles. Early supportive interventions should emphasize clear information, emotional support, and smooth transitions from hospital to home.

Innovation for Education and Health

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 1(Classroom 301)

Education/Health 1

Chair:Sanmei Chen(Graduate School of Biomedical and Health Sciences, Hiroshima University)

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[kNAyHR2S-05] The association between Woman-Centred Care and antenatal depressive symptoms in Tanzania: A cross-sectional study

*XUENI XIE¹, Dorkasi L Mwakawanga², Sanmei Chen¹, Ni Ning¹, Beatrice Mwilike², Agnes F Massae², Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. Muhimbili University of Health and Allied Sciences (Tanzania))

Keywords : Woman-centred care、 Antenatal depressive symptoms、 Tanzania

[Purpose] Woman-centred care (WCC) is an essential component of quality care; the quality of healthcare received by pregnant women plays a crucial role in their mental health outcomes. However, the association between WCC and antenatal depressive symptoms remains understudied. The purpose of this study is to explore the relationship between WCC and antenatal depressive symptoms among pregnant women.

[Method] A cross-sectional study was conducted among 741 pregnant women (15-49 years old) in Tanzania. Pregnant women valued the perceived service provided by midwives using the 23-item WCC scale. Antenatal depressive symptoms were measured by using the 10-item Edinburgh Postnatal Depression Scale (EPDS). Independent T-test and logistic regressions were used to examine the relationship between WCC and antenatal depressive symptoms. The ethical clearance was obtained from the Hiroshima University Clinical Research Ethics Committee in Japan and the National Institute for Medical Research in Tanzania.

[Results] 21.2% of participants scored above the cut-off of 9 for probable depression. The median (IQR) score of WCC was 85 (49-113). Participants with depressive symptoms had significantly lower WCC scores than those without depression symptoms ($t = 4.503$, $p < 0.001$). A significant association between WCC and antenatal depressive symptoms was observed in both unadjusted and adjusted analyses by adjusting for pregnancy week, maternal age group, marital/partner status, educational attainment, household spending level, social support, occupation/employment, parity, pregnancy intention, and history of pregnancy loss. A lower WCC score was associated with probable depression (aOR: 0.961, 95% CI: 0.946-0.977; $p < 0.001$).

[Consideration] Although causality cannot be inferred due to the cross-sectional design, the findings indicate that enhancing woman-centred care may be an important component of maternal mental health promotion strategies in Tanzania.

[Conclusion] WCC was relatively associated with antenatal depressive symptoms among Tanzanian pregnant women. The results suggest that the implementation of WCC could improve the mental health status of pregnant women. A positive birth experience should be promoted to maintain a good mental health status for pregnant women.

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[kNAyHR2S-06] Revealing the crosstalk between gut and breast microbiota and the role of their metabolites with breast cancer in obese females: A case control study

*wala saad hanafy mahmoud¹, Mahmoud M. Kamel², Mohammed Abu-Elghait³, Osama Azmy⁴ (1. Assistant professor, faculty of medicine, Galala university (Egypt), 2. Clinical Pathology, National Cancer Institute, Cairo University, Cairo, Egypt (Egypt), 3. Department of Botany and Microbiology, Faculty of Science, Al-Azhar University, Cairo, Egypt (Egypt), 4. Department of Reproductive Health Research, Cairo, Egypt (Egypt))

Keywords : breast microbiota、metabolites、breast cancer、obese females

Background: The relationship between the microbiome and breast cancer pathogenesis remains incompletely understood. This study aimed to compare the abundance of selected bacterial genera (Lactobacillus, Bifidobacterium, and Streptococcus) and associated metabolite levels in stool and breast tissue samples between breast cancer patients and healthy controls.

Methods: In a case-control study, stool and breast tissue samples from 137 newly diagnosed, treatment-naïve breast cancer patients and 57 healthy controls were analyzed. Bacterial abundance was quantified using real-time PCR with genus-specific primers targeting the 16S rRNA gene. Levels of seven metabolites (estradiol, cadaverine, propionic acid, isobutyric acid, isovaleric acid, caproic acid, and heptanoic acid) were measured using liquid chromatography-mass spectrometry. Statistical analyses included Mann-Whitney U tests, Wilcoxon signed-rank tests, and Spearman correlations.

Results: Breast cancer patients showed significantly lower abundances of Lactobacillus and Bifidobacterium in both stool and breast tissue samples compared to controls ($p < 0.05$ for all comparisons). Within the patient group, stool samples showed higher concentrations of Lactobacillus and Bifidobacterium than matched breast tissue samples ($p < 0.001$). Streptococcus abundance did not differ between groups or sample types. Levels of estradiol, cadaverine, propionic acid, isovaleric acid, and caproic acid were significantly elevated in patient stool samples compared to controls ($p < 0.01$ for all). A weak negative correlation was observed between tissue Bifidobacterium concentration and caproic acid levels ($r = -0.254$, $p = 0.003$). No significant differences in bacterial abundances or metabolite levels were observed across BMI subgroups.

Conclusions: This study identifies differences in the abundance of specific bacterial genera and metabolite levels between breast cancer patients and healthy controls, independent of BMI. These findings provide preliminary evidence of microbial and metabolic alterations associated with breast cancer. However, due to methodological limitations including the targeted analysis of only three bacterial genera and the absence of dietary data, these results should be considered hypothesis-generating rather than conclusive. Further studies with comprehensive metagenomic and metabolomic profiling, along with dietary assessment, are needed to validate and extend these observations.

Food Security

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Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[PveJL7OM-01] COMPARATIVE NUTRITIONAL AND MICROBIAL OF BOILED AND FRESH *Clarias gariepinus* STORED UNDER FREEZED CONDITION

*Kafayat Aina Iyapo¹, Adewole Muniru Adeyemo², Khairat Olamide Abdullahi³ (1. Kwara State University, Malete (Nigeria), 2. Adekunle Ajasin University, Akungba Akoko (Nigeria), 3. Ojaja University, Eyenkorin, Ilorin Kwara State (Nigeria))

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[PveJL7OM-02] Upcycled coconut dietary fiber from virgin coconut oil processing waste: a potential sustainable functional food ingredient

*Casiana Blanca Villarino¹, Jin Mark Pagulayan¹, Mary Michelle Velasquez¹ (1. Food Application and Sensory Laboratory, Department of Food Science and Nutrition, College of Home Economics, University of the Philippines- Diliman (Philippines))

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

[PveJL7OM-03] Valorization of Indigenous Purple Yam into Functional Flour: Nutritional Characterization and Implications for Food Security

*Airisae Rae Basinang¹, Edward Peter De Guzman¹, Casiana Blanca Villarino¹ (1. University of the Philippines Diliman (Philippines))

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[PveJL7OM-04] Social-Demographic Inequalities Shaping Food Insecurity among Indonesian Women: Insights from a National Survey

*Lini Anisfatus Sholihah¹ (1. Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan))

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[PveJL7OM-05] Antioxidant and gene expression of Juvenile catfish *Clarias gariepinus* (Burchell, 1822) fed maggot meal diets

*Tunmise Odunola Folorunso¹ (1. Adekunle Ajasin University Akungba-Akoko, Ondo State, Nigeria (Nigeria))

4:25 PM - 4:40 PM JST | 7:25 AM - 7:40 AM UTC

[PveJL7OM-06] Hurdles on Plant-based alternatives: Labeling, Safety, and Nutritional Standardization—A Policy Recommendation

*GERIEKA ANAPI ANAPI¹, Airisse Rae P. Basinang¹, Jin Mark DG. Pagulayan¹, Casiana Blanca J. Villarino¹ (1. University of the Philippines Diliman (Philippines))

Food Security

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Oral Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:10 PM - 3:25 PM JST | 6:10 AM - 6:25 AM UTC

[PveJL7OM-01] COMPARATIVE NUTRITIONAL AND MICROBIAL OF BOILED AND FRESH *Clarias gariepinus* STORED UNDER FREEZED CONDITION

*Kafayat Aina Iyapo¹, Adewole Muniru Adeyemo², Khairat Olamide Abdullahi³ (1. Kwara State University, Malete (Nigeria), 2. Adekunle Ajasin University, Akungba Akoko (Nigeria), 3. Ojaja University, Eyenkorin, Ilorin Kwara State (Nigeria))

Keywords : Food safety、 Public health、 Fish spoilage、 Lipid peroxidation、 *Clarias gariepinus*

[Purpose]: This study investigated the comparative nutritional, microbial quality and antioxidant status of boiled and fresh *C. gariepinus* stored under freezed conditions.

[Method]: Four *C. gariepinus* were bought and divided into two portions: one portion was analysed freshly, while the other was boiled prior to storage under a freezed environment. Both samples were stored at -18°C in a freezer and analysed at day zero and three. Nutritional composition such as protein, carbohydrate, moisture content etc and microbial analyses were carried out to determine total viable bacterial count (TVC), using standard culture techniques. Total Volatile Basic Nitrogen (TVBN) and Thiobarbituric Acid Reactive Substances (TBARS) are chemical indices of fish freshness and lipid oxidation to support microbial findings. Isolated microorganisms were identified using standard antimicrobial procedures. Data were analysed using descriptive statistics and ANOVA at ($p < 0.05$).

[Results] : Higher protein value ($25.03 \pm 0.15\%$; $19.24 \pm 0.12\%$) was from boiled fish sample at day zero and three of freezed storage. Higher TVC ($1.56 \times 10^3 \text{ cfu g}^{-1}$; $2.62 \times 10^1 \text{ cfu g}^{-1}$) was from fresh sample at day zero and day three of freezed condition. Coliform counts ($1.86 \times 10^2 \text{ MPN g}^{-1}$) was higher in fresh sample at day zero of storage. *Staphylococcus aureus* and *Bacillus cereus* were among the persistent isolated microorganisms at day zero and three of freezed condition. The TVBN and TBARS values observed at day three demonstrated that freezing do not completely halt spoilage processes.

[Consideration] : Both fresh and boiled catfish fillets stored under freezed condition for three days can be still be consume because the total viable counts are within the permissible limit for human consumption.

[Conclusion] : The study concluded that boiling combined with freezing significantly improves the microbial quality and freshness of *Clarias gariepinus*, although strict hygienic handling and limited storage duration are still required. The findings provide valuable insights into fish preservation, food safety, and public health.

Food Security

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Oral Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:25 PM - 3:40 PM JST | 6:25 AM - 6:40 AM UTC

[PveJL7OM-02] Upcycled coconut dietary fiber from virgin coconut oil processing waste: a potential sustainable functional food ingredient

*Casiana Blanca Villarino¹, Jin Mark Pagulayan¹, Mary Michelle Velasquez¹ (1. Food Application and Sensory Laboratory, Department of Food Science and Nutrition, College of Home Economics, University of the Philippines- Diliman (Philippines))

Keywords : Upcycling、Coconut dietary fiber、Sustainable food ingredient、Virgin coconut oil

Coconut residue is a by-product of virgin coconut oil (VCO) processing. Despite its high amounts of dietary fiber, it is usually discarded due to its rapid spoilage. This study aimed to measure the dietary fiber of the upcycled coconut dietary fiber from virgin coconut oil processing waste. Fifty (50) kg of coconut residue (CR) was collected from two (2) production runs of VCO processing from a manufacturing plant in Quezon Province, Philippines. Samples were thermally treated before the extraction of dietary fiber. Dietary fiber (DF) was extracted from the CR samples using a hot water extraction method. The total, insoluble and soluble dietary fiber of the extracted CDF samples were evaluated using the enzymatic-gravimetric method. Likewise, protein and other proximate composition (e.g. fat, ash) were determined. The mean total dietary fiber (TDF) was 75.45 g/100 g, divided into 70.91 g/100 g of insoluble dietary fiber and 4.74 g/100 g of soluble fiber. The CDF samples also contained 4.62 g/100 g of protein and 3.37 g/100 g of fat with low amounts of ash (i.e., 0.15 g/100 g). The upcycled CDF with the presence of both insoluble and soluble dietary fiber can be a sustainable functional ingredient in food products or even as a food supplement.

Food Security

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Oral Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:40 PM - 3:55 PM JST | 6:40 AM - 6:55 AM UTC

**[PveJL7OM-03] Valorization of Indigenous Purple Yam into Functional Flour:
Nutritional Characterization and Implications for Food Security**

*Airisae Rae Basinang¹, Edward Peter De Guzman¹, Casiana Blanca Villarino¹ (1. University of the Philippines Diliman (Philippines))

Keywords : ube, purple yam flour, aeta community, valorization, proximate composition

Indigenous root crops represent an underutilized resource with potential to strengthen food security through value-added processing and diversification of staple foods. This study developed flour from four indigenous purple yam (*Dioscorea alata*) varieties cultivated by an Aeta community in Porac, Pampanga, Philippines, and evaluated their proximate composition to assess their nutritional potential and suitability as a functional food ingredient. The resulting flours exhibited comparable proximate profiles across varieties, with moisture content ranging from 5.20 to 10.78 g/100 g, ash from 2.38 to 3.48 g/100 g, protein from 5.38 to 8.22 g/100 g, crude fat from 0.44 to 0.96 g/100 g, crude fiber from 1.50 to 2.50 g/100 g, and carbohydrates from 79.18 to 82.63 g/100 g. While most components did not differ significantly ($p>0.05$) among varieties, variations in ash and crude fiber contents were observed, reflecting varietal differences in mineral and dietary fiber composition. The findings demonstrate that indigenous purple yams can be transformed into a nutritionally viable flour with potential applications in commonly consumed food products, such as bread, pastries, and noodles. By converting locally cultivated indigenous crops into shelf-stable, widely usable commodities, this study provides scientific evidence supporting their integration into diversified diets and sustainable food systems, highlighting a way to enhance local food security, promote sustainability, and strengthen community-based food systems.

Food Security

Sat. Jul 18, 2026 3:10 PM - 4:40 PM JST | Sat. Jul 18, 2026 6:10 AM - 7:40 AM UTC | Oral Presentation 2(Classroom 302)

Food security 1

Chair:Yuki Monden(Okayama University)

3:55 PM - 4:10 PM JST | 6:55 AM - 7:10 AM UTC

[PveJL7OM-04] Social-Demographic Inequalities Shaping Food Insecurity among Indonesian Women: Insights from a National Survey

*Lini Anisfatus Sholihah¹ (1. Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan))

Keywords : food security、Indonesia、 socio-demographic inequality、 women

Background: Women in the developing countries often suffer from food insecurity due to socio-economic and demographic inequalities. National-level evidence investigating the most vulnerable group of women whose food insecurity in Indonesia is still lacking.

Purpose: This study aims to identify socio-demographic inequalities that associated with food insecurity among Indonesian women.

Method: This cross-sectional study analysed 16,723 women from the Indonesia Family Life Survey (IFLS) 2014. Food security was assessed using Food Consumption Score (FCS) based on the food frequency data and categorised into food insecure (poor) and food secure (borderline/acceptable). Logistic regression was used to assess the association and odds ratios (ORs) were calculated.

Results: Nearly half of Indonesian women (49%) were classified as food insecure. Food insecurity was socially patterned. Javanese women had almost twice the odds of experiencing food insecurity compared to non-Javanese women (OR=1.99; $p<0.001$). Women with elementary education had 56% higher odds of food insecurity compared to those with higher education (OR=1.56; $p<0.001$). Adults and female household heads were also significantly more vulnerable. In our crude analysis, initially unmarried women had substantially higher odds of food insecurity than those who were married (OR=1.89; $p<0.01$) however this association attenuated and became non-significant after adjustment for other socio-demographic factors.

Conclusion: Food insecurity remains a major public health concern among Indonesian women. The observed disparities reflect underlying socio-demographic and ethnic inequalities that shape women's access to adequate food. Targeted policies addressing the disadvantaged groups are urgently needed to accelerate progress toward Sustainable Development Goal 2 (Zero Hunger).

Food Security

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Food security 1

Chair:Yuki Monden(Okayama University)

4:10 PM - 4:25 PM JST | 7:10 AM - 7:25 AM UTC

[PveJL7OM-05] Antioxidant and gene expression of Juvenile catfish *Clarias gariepinus* (Burchell, 1822) fed maggot meal diets

*Tunmise Odunola Folorunso¹ (1. Adekunle Ajasin University Akungba-Akoko, Ondo State, Nigeria (Nigeria))

Keywords : *Clarias gariepinus*; Growth; Antioxidants; Gene expression

[Purpose]Over the years, there has been research on/about how to improve fish yield. Through the adoption or utilization of novel feed resources. Therefore, this study investigated maggot meal diets on antioxidant activities and gene expressions in juvenile *Clarias gariepinus* (African catfish).

[Method]The Maggot meal (MMDs) were incorporated with the other feed ingredients to produce 25% (MMD1), 50% (MMD2), 75% (MMD3), and 100% (MMD4) diets, while the control diet (CON) was without the maggot meal. Nitric oxide (NO), Malondialdehyde (MDA), Catalase, Superoxide dismutase (SOD), and Reduced Glutathione (GSH) were evaluated. The mRNA expression of Growth hormone (GH), Heat Shock Protein (HSP70), Melatonin (MEL 1C), tumour necrosis factor-alpha (TNF- α), and interleukin 1 beta (IL-1 β) was investigated in the liver and muscle of *C. gariepinus* fed with varying doses of Maggot meals (MMDs) using reverse transcriptase–polymerase chain reaction.

[Results]There were significant ($p>0.05$) variations in all antioxidant parameters in all the treatments. There was a significant upregulation ($p<0.05$) in the gene expression of GH, HSP70, MEL1C, and TNF- α in fish fed MMD1 compared to fish fed control in both tissue groups. In addition, there was significant downregulation ($p<0.05$) in interleukin 1 (IL-1 β) gene expression in the liver of fish fed MMD2.

[Conclusion] This study suggests that dietary variations involving MMDs have the potential to alleviate oxidative stress and improve immune responses of this fish species.

Food Security

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Food security 1

Chair:Yuki Monden(Okayama University)

4:25 PM - 4:40 PM JST | 7:25 AM - 7:40 AM UTC

[PveJL7OM-06] Hurdles on Plant-based alternatives: Labeling, Safety, and Nutritional Standardization—A Policy Recommendation

*GERIEKA ANAPI ANAPI¹, Airisse Rae P. Basinang¹, Jin Mark DG. Pagulayan¹, Casiana Blanca J. Villarino¹
(1. University of the Philippines Diliman (Philippines))

Keywords : plant-based alternatives、nutrient profile、labeling、standards、regulatory framework

Driven by rising consumer demand for sustainable and ethical food choices, the rapid growth of plant-based milk and meat alternatives has outpaced existing regulatory frameworks in many developing countries, including the Philippines. Despite positioning these products as substitutes for conventional animal-based foods, significant regulatory gaps persist in product labeling, food safety oversight, and nutritional standardization. In particular, the absence of clear definitions for plant-based “meat” and “dairy,” inconsistent labeling practices, and limited guidance on nutrient fortification contribute to regulatory ambiguity. Fragmented international standards and uneven local regulatory capacity further compound these challenges. This work synthesizes available literature and policy documents to identify key regulatory bottlenecks affecting the governance of plant-based alternatives in the Philippine context. Preliminary findings highlight the need for harmonized labeling standards that ensure transparency without misleading consumers, strengthened food safety guidance specific to plant-based products, and nutrient profiling frameworks that account for both fortification practices and dietary relevance. This paper proposes initial policy directions aimed at enhancing regulatory clarity while supporting innovation in the alternative protein sector. By addressing gaps in labeling, safety, and nutritional standardization, the recommendations seek to strengthen consumer trust and improve regulatory preparedness as the plant-based alternative continues to gain market prominence.

Disaster/SDGs

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Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[w5gNzYeC-01] GENDERED POWER IN TYPHOON-INDUCED DISPLACEMENT: A QUALITATIVE CASE STUDY OF WOMEN IN LAGUNA, PHILIPPINES

*Lea Espadilla Licong¹, Ryan Vincent Rites¹, Jason Rodriguez¹, Thi Thi Soe^{2,1}, Jessica Villanueva-Peyraube¹ (1. University of the Philippines Los Baños (Philippines), 2. Yezin Agricultural University (Myanmar))

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[w5gNzYeC-02] The 10-Minute Promise and Its Limits: Safety, Care, and Gendered Access in Nusantara

*Krismiyati Krismiyati¹ (1. The University of Queensland (Australia))

5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[w5gNzYeC-03] Disaster Preparedness Among University Students Who Participated in a Collaborative Online International Learning (COIL) Program on "Disaster Resilience and Community Health"

*Chie Teramoto¹, Mayumi Kako¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan))

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[w5gNzYeC-04] Responding to Trauma in Non-Formal Education: A Quantitative Needs Assessment of Trauma-Informed Informal Educators within the COPE Project

*Tomislav Mestrovic^{1,2,3}, Ena Bandov⁴, Goran Bandov⁵ (1. Department of Nursing, University North, University centre Varazdin, Varazdin (Croatia), 2. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 3. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA), 4. Clinical Hospital Centre Osijek, Osijek (Croatia), 5. International Relations and Sustainable Development Department University of Zagreb, Zagreb (Croatia))

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[w5gNzYeC-05] A Mixed-Methods Approach to Advancing Trauma-Informed Practice in Informal Education through the COPE Project

*Goran Bandov¹, Ena Bandov², Tomislav Mestrovic^{3,4,5} (1. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 2. Clinical Hospital Centre Osijek, Osijek (Croatia), 3. Department of Nursing, University centre Varazdin, University North, Varazdin (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[w5gNzYeC-06] Innovative use of algae in bioplastic production

*Shymaa Sabry Zaher¹, Sayed Makawy Ibrahim¹ (1. National Institute of Oceanography and Fisheries (Egypt))

Disaster/SDGs

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

4:50 PM - 5:05 PM JST | 7:50 AM - 8:05 AM UTC

[w5gNzYeC-01] GENDERED POWER IN TYPHOON-INDUCED DISPLACEMENT: A QUALITATIVE CASE STUDY OF WOMEN IN LAGUNA, PHILIPPINES

*Lea Espadilla Licong¹, Ryan Vincent Rites¹, Jason Rodriguez¹, Thi Thi Soe^{2,1}, Jessica Villanueva-Peyraube¹ (1. University of the Philippines Los Baños (Philippines), 2. Yezin Agricultural University (Myanmar))

Keywords : qualitative case study、women、Gendered Power in Displacement Matrix、typhoon-induced displacement、disaster risk reduction and management

The Philippines' persistent exposure to climate-related hazards, particularly typhoons and flooding, frequently results in forced evacuation and prolonged stays in temporary shelters. This qualitative case study examines women's lived experiences of typhoon-induced displacement in Barangay Malinta, Los Baños, Laguna, Philippines, using a Gendered Power in Displacement Matrix (GPDM) as an analytical framework. Data were generated through a focus group discussion (FGD) with women from two selected households and a separate FGD with four local government officials. Women's narratives were triangulated with barangay-level empirical data and institutional standards to analyze public service delivery related to evacuation, social protection, and household and community adaptation. The GPDM integrates household, community, and institutional dimensions with established disaster risk reduction and management (DRRM) and evacuation center standards. Results indicate that traditional gender roles largely persist during displacement, and, in some phases, are exacerbated. Decision-making power and access to information, learning opportunities, institutional support, and material resources remain unevenly distributed across households and within the community. At the institutional level, critical gaps were identified, including limited compliance with basic evacuation center standards—particularly those addressing women's needs—and the absence of structured, sustained, and gender-sensitive disaster preparedness programs. Overall, the study demonstrates the value of the GPDM as a practical diagnostic tool for revealing gendered power relations in displacement contexts and for informing more gender-responsive disaster preparedness and evacuation planning.

Disaster/SDGs

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Disaster/SDGs

Chair:Dorkasi Mwakawanga

5:05 PM - 5:20 PM JST | 8:05 AM - 8:20 AM UTC

[w5gNzYeC-02] The 10-Minute Promise and Its Limits: Safety, Care, and Gendered Access in Nusantara

*Krismiyati Krismiyati¹ (1. The University of Queensland (Australia))

Keywords : feminist planning、 gender and transport planning、 new capital cities、 Nusantara

[Purpose: This study evaluates the physical planning of Indonesia’s new capital city, Nusantara, through a feminist planning lens, asking how far spatial strategies and design principles recognise and operationalise gender justice, care, and social reproduction.]

[Method: The study combines qualitative document analysis with semi-structured interviews with stakeholders involved in, or affected by, Nusantara’s planning and early implementation. Analysis focuses on how land use structure, mobility and accessibility logics, public-space design, and “smart/technical” modelling practices shape (or constrain) gender-responsive outcomes.]

[Results: Findings show that Nusantara’s physical planning contains several principles with potential to support everyday caregiving and women’s mobility—especially the emphasis on compact urban form, 10-minute access to services, walkability, and a high target for public and active transport. However, interviews and documents suggest a persistent translation gap between inclusive intent and operational requirements. Gender considerations are not consistently embedded in baseline data, accessibility verification, or binding design standards.]

[Consideration: As a result, key feminist planning concerns—such as safety perceptions across routes and interchanges, time poverty and trip-chaining, equitable service distribution across different zones, and differentiated needs by caregiver status, age, and vulnerability—remain weakly specified and difficult to govern through statutory instruments]

[Conclusion: Overall, Nusantara’s physical planning is “care-supportive” at the level of concepts, but structurally under-instrumented for gender-responsive delivery, leaving outcomes contingent on discretionary implementation rather than enforceable requirements and accountability]

Disaster/SDGs

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

5:20 PM - 5:35 PM JST | 8:20 AM - 8:35 AM UTC

[w5gNzYeC-03] Disaster Preparedness Among University Students Who Participated in a Collaborative Online International Learning (COIL) Program on "Disaster Resilience and Community Health"

*Chie Teramoto¹, Mayumi Kako¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan))

Keywords : disaster preparedness、 university students、 japanese students、 international students、 mutual assistance

[Purpose] Since 2022, we have implemented a Collaborative Online International Learning (COIL) program focused on disaster resilience and community health. Given that disasters are a universal concern, this theme facilitates meaningful intercultural collaborative learning. This study aims to identify the disaster preparedness of university students who participated in this COIL program.

[Method] This cross-sectional and qualitative descriptive study surveyed COIL participants from March 2022 to August 2025. Students were asked "What can you do to prepare for a disaster? Please list at least three items." Data were analysed using descriptive statistics and text analysis to establish coding categories. The study was approved by the Hiroshima University Epidemiology Ethics Review Committee.

[Results] Analysis of 212 students from 24 universities (104 Japanese; 108 international) revealed three primary categories of preparedness: (1) Preparing physical resources, such as stockpiling supplies and assembling emergency kits; (2) Acquiring information and planning, including studying hazard maps and evacuation strategies; and (3) Building skills and community ties, through disaster drills and strengthening local networks.

[Consideration] While both groups shared common preparedness, distinct differences emerged. Japanese students focused primarily on individual actions (Self-help/Jijo), whereas international students emphasized the necessity of education, training, and public awareness (Mutual assistance/Kyojo). These align with the three pillars of disaster risk reduction defined by Japan's Fire and Disaster Management Agency: Self-help, Mutual assistance, and Public support.

[Conclusion] Educational programs emphasizing "mutual assistance" among young people are crucial to enhancing community resilience.

Disaster/SDGs

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

5:35 PM - 5:50 PM JST | 8:35 AM - 8:50 AM UTC

[w5gNzYeC-04] Responding to Trauma in Non-Formal Education: A Quantitative Needs Assessment of Trauma-Informed Informal Educators within the COPE Project

*Tomislav Mestrovic^{1,2,3}, Ena Bandov⁴, Goran Bandov⁵ (1. Department of Nursing, University North, University centre Varazdin, Varazdin (Croatia), 2. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 3. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA), 4. Clinical Hospital Centre Osijek, Osijek (Croatia), 5. International Relations and Sustainable Development Department University of Zagreb, Zagreb (Croatia))

Keywords : trauma-informed care、 non-formal education、 informal educators、 traumatized learners、 Europe

[Purpose] Conducted within the COPE Project “Preparing Non-formal Education in Europe for Traumatized Learners” (ERASMUS+ KA220-ADV, project 2023-1-DE02-KA220-ADU-000155022), this study quantitatively assessed preparedness, knowledge gaps and psychosocial needs of non-formal educators working with trauma-affected learners across Europe, especially those from war-stricken contexts. It aimed to identify predictors of perceived competence, professional strain and training demands to inform development of a trauma-informed training program.

[Method] A multilingual online questionnaire yielded 321 complete responses. It captured sociodemographic data, professional context, prior trauma-related training, self-assessed knowledge of trauma-informed principles (including person-centred care and empathy), perceived competence in managing trauma and indicators of work-related stress, depression and anxiety. We analysed distributions and associations between training exposure, institutional context, stress indicators and perceived preparedness.

[Results] Participants were predominantly female (90.7%), highly educated and mainly employed in social work, education and NGO settings. Insufficient trauma-specific training was the most frequent challenge (61.1%). The analyses showed statistically significant associations between prior trauma-related training and higher perceived preparedness, greater confidence in managing trauma-related behaviours and lower reported difficulty in practice. Professional context influenced perceived institutional support, and higher work-related stress was associated with stronger requests for psychological support and supervision. Age and gender were not consistent predictors.

[Consideration] Findings indicate systemic and modifiable gaps in training and institutional support.

[Conclusion] Structured, culturally adaptable trauma-informed training combined with supervision and psychological support is essential to strengthen educator resilience and improve non-formal educational responses to trauma across Europe.

Disaster/SDGs

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

5:50 PM - 6:05 PM JST | 8:50 AM - 9:05 AM UTC

[w5gNzYeC-05] A Mixed-Methods Approach to Advancing Trauma-Informed Practice in Informal Education through the COPE Project

*Goran Bandov¹, Ena Bandov², Tomislav Mestrovic^{3,4,5} (1. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 2. Clinical Hospital Centre Osijek, Osijek (Croatia), 3. Department of Nursing, University centre Varazdin, University North, Varazdin (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

Keywords : trauma、trauma-informed practice、traumatized learners、mixed-methods、policy coordination

[Purpose] We aimed to identify systemic gaps and priority needs in trauma-informed care among informal educators working with refugees, displaced persons and other trauma-affected learners within the framework of the COPE Project "Preparing Non-formal Education in Europe for Traumatized Learners" (ERASMUS+ KA220-ADV Cooperation Partnership in Adult Education, project 2023-1-DE02-KA220-ADU-000155022). The aim was to provide an evidence-based foundation for non-formal education contexts.

[Method] A mixed-methods needs assessment combined literature review, non-directive interviews, qualitative questionnaires with educators across Europe and an expert survey. Best practices and international trauma-informed guidelines were reviewed to situate findings within broader European and global frameworks.

[Results] The assessment revealed fragmented knowledge of emotional trauma, limited trauma-specific training and challenges in recognizing and responding to trauma-related behaviours without re-traumatization. Educators strongly requested practical, experiential learning methods – including case studies, simulations and culturally sensitive strategies. The creation of safe and trust-based environments was widely acknowledged as essential; however, many reported a lack of consistent tools to achieve this. Ongoing supervision, peer networks, accessible resources and training in self-care and/or burnout prevention were identified as critical needs. Cultural diversity significantly shaped perceptions of trauma and required adaptable training design.

[Consideration] Findings point to structural shortcomings in preparation and institutional support rather than isolated individual deficits, emphasizing the need for integrated and context-sensitive capacity building.

[Conclusion] Experiential and culturally responsive trauma-informed training, embedded within sustained supervision and policy coordination, is essential to strengthen resilience and practice in non-formal education.

Disaster/SDGs

Sat. Jul 18, 2026 4:50 PM - 6:20 PM JST | Sat. Jul 18, 2026 7:50 AM - 9:20 AM UTC | Oral Presentation 2(Classroom 302)

Disaster/SDGs

Chair:Dorkasi Mwakawanga

6:05 PM - 6:20 PM JST | 9:05 AM - 9:20 AM UTC

[w5gNzYeC-06] Innovative use of algae in bioplastic production

*Shymaa Sabry Zaher¹, Sayed Makawy Ibrahim¹ (1. National Institute of Oceanography and Fisheries (Egypt))

Keywords : Microalgae、Spirulina、Bioplastic、Chlorella、ordinary plastic、macroalgae

[Purpose]The high awareness of the synthetic plastics pollution problem demands more efforts by the scientific community to find an alternative source (bioplastics) to protect our environment and health too.

[Method]

. The production source of bioplastics should be plant-based raw materials, and natural polymers like carbohydrates, protein, and others (fatty acids, sugar, disaccharides, etc.). Polyhydroxy butrate (PHB), Polyhydroxy alkanoates (PHA), and starch are the basic compounds produced by algae that enter bioplastic composition.

[Results]

The most common algal species used in bioplastics production are *Ulva lactuca* and *Gelidium sesquipedale* from macroalgae plus *Chlorella* and *Spirulina* from microalgae. The seaweeds are collected naturally or cultivated while microalgae need cultivation to obtain a high biomass. The most accepted common systems are the open system (raceway) and the closed photobioreactors. The present techniques for microalgal bio composite include melt mixing, compression molding, hot molding, injection molding, twin screw extrusion and solvent casting.

[Consideration]

Although algal bioplastics are promising on a laboratory scale large scale faces some challenges including species selection, polymer selection depending on biodegradability, and released products from bioplastic degradation

[Conclusion]Bioplastics have become essential in various industrial applications such as horticulture, composting bags, hygiene, biomedical, structural, electrical, and other consumer products.

Global Partnership

🗓 Sun. Jul 19, 2026 9:00 AM - 9:30 AM JST | Sun. Jul 19, 2026 12:00 AM - 12:30 AM UTC | 🏛 Main Hall(Main Conference Hall in Kojin Kaikan)

Coffee session

Chair: Jiaur Md Rahman(Graduate School of Biomedical and Health Sciences, Hiroshima University)

9:00 AM - 9:30 AM JST | 12:00 AM - 12:30 AM UTC

[5bJ3fGmU-01] Free talk time with participants

Leadership in Science beyond Gender

📅 Sun. Jul 19, 2026 9:45 AM - 11:15 AM JST | Sun. Jul 19, 2026 12:45 AM - 2:15 AM UTC | 🏛️ Main Hall(Main Conference Hall in Kojin Kaikan)

Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment-and Advancing Research Careers

Chair:Saki Sugano(Aoyama Gakuin University), Daisuke Matsumoto(Young Academy of Japan)

Abstract:

This symposium proposes a paradigm shift in how we view care work—not as a mere burden to be redistributed, but as a form of human richness to be shared and celebrated. Historically, care work has been marginalized as unpaid labor and feminized responsibility, often undervalued in both social policy and academic research environments.

By integrating insights from academic and business sides, the session will explore diverse care practices across home, community, institutions, and digital technologies. Beyond this, it will focus on how care as a research theme intersects with academic career trajectories—particularly for early-career and both female and male scholars—highlighting systemic barriers and institutional undervaluation. This symposium seeks to redefine care not only as a public good but also as a meaningful axis around which to construct equitable academic recognition and sustainable research careers. By doing so, we aim to contribute to building a more just society and a more inclusive scholarly community.

9:45 AM - 9:55 AM JST | 12:45 AM - 12:55 AM UTC

[HbDz7mzy-01] Care Is Not a Career Penalty:

Reclaiming Care as Fulfillment, Infrastructure, and Scientific Strength

Dr. Antonia Morita Iswari Saktiawati (Universitas Gadjah Mada, Indonesia)

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[HbDz7mzy-02] Reframing Women's Health: From Individual Burden to Societal Value

*Keiko Matsubara¹ (1. Chief, Discovery and Innovation Gateway, Integrated Center for Women's Health, National Center for Child Health and Development, Japan (Japan))

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[HbDz7mzy-03] Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment—and Advancing Research Careers

Hazuki Maehara (President, Life Portfolio Co., Ltd.)

10:15 AM - 10:25 AM JST | 1:15 AM - 1:25 AM UTC

[HbDz7mzy-04] TBA

Dr. Zille Anam (UK Research and Innovation India Office, Senior Programme Manager)

10:25 AM - 10:35 AM JST | 1:25 AM - 1:35 AM UTC

[HbDz7mzy-05] **The UK's Athena Swan gender equality charter: Reflections on a Gold Award**

Professor Rob Jenkins (Department of Psychology, University of York, UK)

10:35 AM - 11:15 AM JST | 1:35 AM - 2:15 AM UTC

Discussion

Leadership in Science beyond Gender

Sun. Jul 19, 2026 9:45 AM - 11:15 AM JST | Sun. Jul 19, 2026 12:45 AM - 2:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment-and Advancing Research Careers

Chair:Saki Sugano(Aoyama Gakuin University), Daisuke Matsumoto(Young Academy of Japan)

9:55 AM - 10:05 AM JST | 12:55 AM - 1:05 AM UTC

[HbDz7mzy-02] Reframing Women's Health: From Individual Burden to Societal Value

*Keiko Matsubara¹ (1. Chief, Discovery and Innovation Gateway, Integrated Center for Women's Health, National Center for Child Health and Development, Japan (Japan))

Women's Health

Women's health is a complex field that evolves throughout the entire life course—from adolescence through pregnancy, childbirth, menopause, and into old age—where physical, psychological, and social factors are intricately intertwined. Traditionally, however, medical care, research, and social systems have tended to treat these issues in isolation, either by specific disease or by life stage. While individual challenges at each stage may be addressed, a consistent framework for support throughout the entire life course has yet to be fully established. As a result, health issues specific to women, such as dysmenorrhea, menopausal symptoms, and postpartum depression, are often dismissed as matters of "individual endurance" or "self-responsibility," leading to delayed medical consultation and insufficient support. Furthermore, the profound social and economic impacts—including a decline in labor productivity, career attrition, and reduced quality of life—have been historically undervalued, despite estimates placing the annual economic loss at approximately 3.4 trillion yen.

In response to these challenges, the Integrated Center for Women's Health (ICWH) was established in 2024. As Japan's first national medical research hub to comprehensively address women's health, the ICWH builds upon the extensive expertise in maternal and perinatal medicine cultivated by the National Center for Child Health and Development (NCCHD). The center aims to create a new medical model that bridges previously fragmented domains by integrally promoting basic and clinical research incorporating gender-specific medicine, expanding clinical functions, building data infrastructure, and providing information dissemination and policy recommendations.

The ICWH functions as a platform that unifies data infrastructure, research, clinical functions, policy collaboration, and social implementation. Through cross-sector partnerships between industry, academia, government, and the private sector, the center strives to bridge the gaps that exist between medical care and daily life. In this presentation, I will redefine women's health from an "individual burden" to a "social value" and present a new framework that traverses care, research, and social implementation through our concrete initiatives.

Leadership in Science beyond Gender

Sun. Jul 19, 2026 9:45 AM - 11:15 AM JST | Sun. Jul 19, 2026 12:45 AM - 2:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment-and Advancing Research Careers

Chair:Saki Sugano(Aoyama Gakuin University), Daisuke Matsumoto(Young Academy of Japan)

10:05 AM - 10:15 AM JST | 1:05 AM - 1:15 AM UTC

[HbDz7mzy-03] Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment—and Advancing Research Careers

Hazuki Maehara (President, Life Portfolio Co., Ltd.)

Context

Achieving gender equality and improving the social status of women require a more equitable distribution of care work. However, when efforts to promote this redistribution are framed primarily as protests against or struggles with men, they may unintentionally deepen tensions between women and men, making it more difficult to foster mutual understanding and cooperation.

Key Issues

How can we encourage greater participation of men in care work? What approaches can motivate men to see care work as personally meaningful and to engage in it proactively, rather than as an external obligation?

Approach

This presentation proposes redefining care work as activities that promote the well-being of oneself and one's loved ones. By recognizing that engaging in care work enriches one's own life—not only the lives of others—we can encourage men to take greater ownership of care responsibilities. This presentation offers a broad conceptual perspective rather than reporting the findings of a specific academic research study.

Key Messages

Time is one of our most valuable and irreplaceable resources. Intentionally investing time in care work and family life can enrich family relationships, create meaningful memories, improve health, and enhance overall quality of life.

Although Japan continues to face a significant gender gap and men's participation in childcare and care work remains limited, this situation also has consequences for men. Many become overly tied to their work, making it difficult to build strong family relationships, maintain their own health, develop connections within their communities, or find a meaningful "third place" beyond work and home. As a result, many men experience reduced well-being and a diminished quality of life.

Rather than framing participation in care work as a burdensome obligation imposed on men to compensate for gender inequality, this presentation proposes it as an opportunity for both women and men to lead healthier, more fulfilling, and more meaningful lives.

Implications for Science and Society

This perspective contributes to gender equality while promoting partnerships in which care responsibilities are shared more equitably. Such partnerships can help ensure that women—including women researchers—are not disadvantaged in their career development because of disproportionate care responsibilities. Ultimately, this approach supports the creation of a society in which both women and men can achieve greater well-being while realizing their full personal and professional potential.

Leadership in Science beyond Gender

Sun. Jul 19, 2026 9:45 AM - 11:15 AM JST | Sun. Jul 19, 2026 12:45 AM - 2:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Reframing Care: From Redistributing the Burden to Sharing Human Fulfillment-and Advancing Research Careers

Chair:Saki Sugano(Aoyama Gakuin University), Daisuke Matsumoto(Young Academy of Japan)

10:25 AM - 10:35 AM JST | 1:25 AM - 1:35 AM UTC

[HbDz7mzy-05] The UK's Athena Swan gender equality charter: Reflections on a Gold Award

Professor Rob Jenkins (Department of Psychology, University of York, UK)

Background / Context

It is a longstanding observation that the proportion of men in science, technology, engineering, and maths (STEM) subjects typically exceeds the proportion of women in those subjects.

Key Issues or Challenges

This observation raises at least two concerns. First, women may face unnecessary obstacles when pursuing careers in STEM. Second, society may be failing to realise up to half of its STEM potential.

Approach / Perspective

A number of initiatives have been developed to address these concerns. The UK's Athena Swan Charter is an accreditation scheme for higher education and research institutions in the UK, established to recognise and promote commitment to advancing gender equality.

Key Messages

In this talk, I will provide an overview of the Athena Swan scheme, the engagement of my academic department with the scheme, and some reflections on our recently renewed Gold award, drawing on personal experience leading our self-assessment team. I will also survey independent evaluations of the scheme's strengths and limitations.

Implications for Science and Society

I propose that aspects of the Athena Swan Charter could inform equality initiatives in other settings.

Climate Change / Planetary Health

📅 Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | 🏢 Main Hall(Main Conference Hall in Kojin Kaikan)

Planetary Health Justice: The Right to Health for Humanity and the Planet

Chair:Saori Kashima(IDEA Institute, Hiroshima University), Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

The planet's natural systems are undergoing unprecedented change, driven by climate change, environmental pollution, and biodiversity loss. These environmental transformations are increasingly affecting human health through multiple pathways, including weather patterns, food systems, water resources, living environments, and ecosystems. In response to these pressing challenges, the concept of Planetary Health—recognising the inseparable relationship between human health and the health of Earth systems—has emerged and is gaining global recognition. However, the impacts of these environmental changes are not experienced equally by all people. The increasing frequency of droughts and natural disasters is having particularly direct and severe effects on the daily lives of people in Pacific Island nations and equatorial regions. At the same time, ongoing conflicts and political instability in many parts of the world are accelerating environmental degradation while weakening healthcare and public health systems. These conditions threaten the foundations of life for people living in conflict zones and place vulnerable populations—particularly women and children who require support—at heightened risk to their health. Under such compounding crises, the protection of the right to health and fundamental human rights faces profound challenges. Traditional human rights frameworks have largely focused on human beings themselves. In contrast, the perspective of Planetary Health positions the protection of the Earth's environment—upon which human health fundamentally depends—as an indispensable precondition for the realisation of human rights. Against this backdrop, this session examines Planetary Health from a “Justice” perspective, bringing together the lenses of women's health, peacebuilding, and human rights to explore, from a transdisciplinary approach, how both humanity and the planet can achieve and sustain health and well-being.

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[i4CY8toL-01] Maternal obesity, social factors, environmental hormone and offspring adolescent development

*Aomi Katagiri¹ (1. Specially Appointed Assistant Professor, Department of Public Health, Institute of Science Tokyo (Japan))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[i4CY8toL-02] Reconsidering the Significance of Planetary Health from a Human Rights Perspective

*Kenta MINAMITANI¹ (1. Attorney at Mori Hamada & Matsumoto / Visiting Lecturer, Department of Public Health, Yokohama City University School of Medicine (Japan))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[i4CY8toL-03] Business-Led Women's Empowerment and Mental Health in Post-Conflict Societies

*Mari Katayanagi¹ (1. Professor, International Peace and Coexistence Program, Graduate School of Humanities and Social Sciences, Hiroshima University (Japan))

1:00 PM - 1:30 PM JST | 4:00 AM - 4:30 AM UTC

Discussion

1:30 PM - 1:40 PM JST | 4:30 AM - 4:40 AM UTC

Summary

1:40 PM - 1:45 PM JST | 4:40 AM - 4:45 AM UTC

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

Summary

Climate Change / Planetary Health

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Planetary Health Justice: The Right to Health for Humanity and the Planet

Chair:Saori Kashima(IDEA Institute, Hiroshima University), Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[i4CY8toL-01] Maternal obesity, social factors, environmental hormone and offspring adolescent development

*Aomi Katagiri¹ (1. Specially Appointed Assistant Professor, Department of Public Health, Institute of Science Tokyo (Japan))

Keywords : Pubertal Development

Children who enter puberty early may have increased risk of reproductive cancers and mental health disorders, from longer exposure periods to sex hormones. Maternal pre-pregnancy obesity is known to associate with offspring's childhood obesity, which in turn leads to earlier pubertal timing. Social factors, such as poverty, also influence pubertal timing. Furthermore, recent studies have suggested that exposure to environmental hormones during pregnancy may accelerate the onset of offspring puberty. In this study, we focused on heavy metals lead, cadmium, and mercury among endocrine disruptors. We analyzed data from 956 mother-child pairs in the Boston Birth Cohort in the United States, examining the concentrations of these heavy metals (lead, cadmium, and mercury) in the mothers' blood immediately after birth and the children's height data up to age 21. The results revealed that when fetal exposure to heavy metals coexists with maternal pre-pregnancy obesity and Black race, the onset of puberty in children is accelerated in additively. Specifically, in boys, the combination of lead exposure and maternal pre-pregnancy obesity resulted in puberty occurring 0.23 (0.10–0.52) years earlier, while in girls, the combination of cadmium exposure and maternal pre-pregnancy obesity resulted in puberty occurring 0.20 (0.04–0.37) years earlier. Exposure to heavy metals is by no means an issue of the past. In Japan, there are still more than 2 million water pipes containing lead, posing a risk of exposure to heavy metals. We must continue to work toward creating an environment where pregnant women and children can live safely.

Climate Change / Planetary Health

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Planetary Health Justice: The Right to Health for Humanity and the Planet

Chair:Saori Kashima(IDEA Institute, Hiroshima University), Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[i4CY8toL-02] Reconsidering the Significance of Planetary Health from a Human Rights Perspective

*Kenta MINAMITANI¹ (1. Attorney at Mori Hamada & Matsumoto / Visiting Lecturer, Department of Public Health, Yokohama City University School of Medicine (Japan))

Keywords : Human Rights

This presentation examines planetary health as a matter of law and justice, drawing on the presenter's dual background in law and public health.

The right to health, enshrined in the WHO Constitution (1946) and the ICESCR (Article 12, 1966), has become increasingly intertwined with environmental rights. UN General Assembly Resolution 76/300 (2022) recognized the right to a clean, healthy and sustainable environment as a universal human right, and the ICJ's Advisory Opinion of July 2025 explicitly linked environmental degradation to a broad range of human rights, including health. Planetary health, by providing scientific evidence of the interdependence between Earth systems and human well-being, offers a crucial empirical foundation for this legal nexus.

Japan's legal landscape, however, is different from this international situation. Neither environmental rights nor the right to health is guaranteed under the Japanese Constitution, and courts have addressed environmental harms through the lens of personality rights (*jinkaku-ken*). To date, no Japanese court has recognized climate-related health harms as a violation of *jinkaku-ken*. Planetary health holds transformative potential here: by reframing environmental issues as personal/community health concerns, it can provide the evidence-based foundation needed to advance climate justice advocacy and integrate environmental and health policy in Japan.

Finally, the business and human rights dimension is critical. The UN Guiding Principles on Business and Human Rights (UNGPs, 2011) and Japan's 2022 Human Rights Due Diligence Guidelines provide a framework through which planetary health can be embedded in corporate accountability. Connecting planetary health to human rights due diligence can drive the mainstreaming of climate and biodiversity risks as human rights issues within business practice.

Climate Change / Planetary Health

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Planetary Health Justice: The Right to Health for Humanity and the Planet

Chair:Saori Kashima(IDEA Institute, Hiroshima University), Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[i4CY8toL-03] Business-Led Women's Empowerment and Mental Health in Post-Conflict Societies

*Mari Katayanagi¹ (1. Professor, International Peace and Coexistence Program, Graduate School of Humanities and Social Sciences, Hiroshima University (Japan))

Keywords : Women's Empowerment

Since the end of WWII, the international community has steadily developed norms to achieve peace, including numerous human rights treaties, leading many to believe that the world is progressing toward a more just and humane order. Yet today this expectation faces a profound and alarming setback. A politician of a major power openly denies the importance of international law (Baio 2026), resorts to the use of force, and employs weapons whose environmental destruction remains impossible to fully measure. Blocking humanitarian assistance to civilians in conflict zones can cause deliberate starvation (Conley & de Waal 2019). Such conduct, particularly armed conflicts carried out in disregard of international humanitarian law and international human rights law, severely undermines human health. This presentation examines how armed conflict violates human rights—especially women's right to health—how justice is pursued in response, and how women themselves embody resilience. Although the author has long advocated a human rights-based approach (HRBA) to peacebuilding (Katayanagi 2017), recognition of this approach is limited in peace studies, unlike in development. If peace is understood, in line with the concept of positive peace, as a condition in which all people equally enjoy their fundamental human rights, then peacebuilding can be defined as the effort to create such a society. Conversely, armed conflict frequently entails grave and systematic human rights violations. The right to health is compromised through injury and death caused by attacks, malnutrition and famine due to blocked aid, disease resulting from deteriorated sanitation, and sexual violence used as a weapon of war, whose victims are overwhelmingly women. Transitional justice is therefore essential to uncover the truth, identify causes, and prevent recurrence, though it does not always heal physical or psychological wounds. UN Security Council Resolution 1325 (2000) recognises both women's distinct suffering in conflict and their role as agents of peace. Economic independence offers one path to recovery. For example, women who survived ethnic cleansing have built businesses based on traditional handicrafts, cooperating across ethnic divisions (Katayanagi 2026). Such empowerment restores dignity and mental health, enabling women to realise justice on their own terms and to grow into entrepreneurs who can ultimately contribute to planetary health.

Innovation for Education and Health

📅 Sun. Jul 19, 2026 2:00 PM - 3:30 PM JST | Sun. Jul 19, 2026 5:00 AM - 6:30 AM UTC | 🏛 Main Hall(Main Conference Hall in Kojin Kaikan)

The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

Chair: Megumi Ikemoto

2:00 PM - 2:45 PM JST | 5:00 AM - 5:45 AM UTC

[D2.juBx_-01] The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

*Allison Cummins¹ (1. School of Nursing and Midwifery, University of Newcastle, Australia (Australia))

2:45 PM - 3:30 PM JST | 5:45 AM - 6:30 AM UTC

[D2.juBx_-2add] ディスカッション

Innovation for Education and Health

Sun. Jul 19, 2026 2:00 PM - 3:30 PM JST | Sun. Jul 19, 2026 5:00 AM - 6:30 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

Chair: Megumi Ikemoto

2:00 PM - 2:45 PM JST | 5:00 AM - 5:45 AM UTC

[D2.juBx_-01] The Quality Maternal Newborn Care Research Alliance: a workshop to enhance research collaboration that improves the quality of maternal and newborn health.

*Allison Cummins¹ (1. School of Nursing and Midwifery, University of Newcastle, Australia (Australia))

Keywords : Maternal health、 Newborn health

Background: The Quality Maternal Newborn Care (QMNC) Research Alliance was developed in response to the 2014 Lancet Series on Midwifery. The alliance has established a global research network to foster research collaboration. The alliance has developed a clear mission, vision and strategic plan to address and prioritise quality maternal and newborn care. The alliance has three research priorities; 1. Midwifery and other care models, 2. Optimising childbearing physiology, 3. Measures and benchmarks

Aim and objective: The aim and objective of this workshop is to orient midwifery researchers (or future researchers) to connect, collaborate, and develop capacity in research to improve maternal and newborn health outcomes. It is critical that the profession of midwifery develop strong collaborative research networks and capacity.

Activities: The workshop will be facilitated by the current co-lead of the QMNC research alliance, Professor Allison Cummins. Activities include orientation the QMNC website and research groups, with a specific overview of each research priority area. The facilitator will work with participants to explore their current research projects or future projects in alignment with the QMNC research priorities. Participants will have the opportunity to identify specific areas of research interest and online connection with the research priority interest groups on the website. There will also be an opportunity for small group work on research activities and future collaboration.

Acknowledgements: The facilitator would like to acknowledge the contributions from current co-lead Distinguished Professor Melissa Cheyney and previous co-lead Professor Holly Kennedy and the entire interim steering committee of the QMNC research alliance.

Funding: The QMNC Research Alliance is supported by generous funding from the University of Oregon and the Skyline Foundation. Their contributions enable the alliance to advance their mission of improving maternal and newborn care through dedicated research and collaboration.

Gender/Career Development

📅 Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | 🏢 Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[aQrq5kgV-01] Midwives' Perspectives and Practices in Adolescent Pregnancy Care: A Qualitative Study in Northern Malawi

*Miyuki Toda¹, Crystal Patil², Balwani Chingatchifwe Mbakaya³, Dorkasi Mwakawanga⁴, Jing Zhou¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. University of Michigan (USA), 3. University of Livingstonia (Malawi), 4. Muhimbili University (Tanzania))

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[aQrq5kgV-02] **Effects of mHealth Intervention on Stress, Anxiety, and Depression Among Patients with Polycystic Ovary Syndrome: A Randomized Controlled Trial in Rural Bangladesh**

*Sadia Akter¹, Farkhanda Mahjebin², Mohammad Delwer Hossain Hawlader^{3,4}, Md Moshiur Rahman⁵, Sanmei Chen⁵, Saori Kashima^{6,7}, Sheuly Akter², Shamit Dasgupta⁸, Yoko Shimpuku^{1,5} (1. Graduate School of Innovation and practice for smart society, Hiroshima University (Japan), 2. Khwaja Yunus Ali Medical College and Hospital (Bangladesh), 3. Department of Public Health, North South University (Bangladesh), 4. NSU Global Health Institute, NGHI, North South University (Bangladesh), 5. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 6. Center for Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 7. Environmental Health Sciences Laboratory, Graduate School of Advanced Science and Engineering, Hiroshima University (Japan), 8. Ministry of Health, Government of British Columbia (Canada))

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[aQrq5kgV-03] Factors Influencing Breastfeeding Continuation After Returning to Work: A Cross-Sectional Study of Women Residing in Japan

*Saori Fujimoto¹, Hiromi Kawasaki¹, Nanami Funaki¹, Mari Murakami¹, Kaori Fujita¹ (1. Hiroshima University (Japan))

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[aQrq5kgV-04] Nursing practice environment, work-family conflict, and turnover intention among female nurses with children under 18 years of age in Japan: A nationwide cross-sectional study

*Liyuan Zheng¹, Hiromi Kawasaki¹, Wenjie Guo¹, Miyuki Toda¹, Yoko Shimpuku¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[aQrq5kgV-05] Fathers' experiences of supporting human milk feeding for preterm infants in Neonatal Intensive Care Units with parent–infant separation in China: a qualitative descriptive study

*Wenjie Guo¹, Li Wang², Haiyan Zhang³, Sanmei Chen¹, Maggie Zgambo⁴, Yan Wu⁵, Yanmei Bu⁶, Man Qi⁵, Ling Yang⁵, Yoko Shimpuku¹ (1. Global Health Nursing, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Department of Nursing, Maternal and Child Health Hospital of Jiaozuo (China), 3. Department of Medical Records Management, The Second People's Hospital of Jiaozuo (China), 4. School of Nursing and Midwifery, Edith Cowan University (Australia), 5. Neonatal Intensive Care Unit, Maternal and Child Health Hospital of Jiaozuo (China), 6. Neonatal Intensive Care Unit, The Second People's Hospital of Jiaozuo (China))

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[aQrq5kgV-06] Maternity Healthcare Professionals' Experience of Pregnant Adolescent Healthcare-Seeking Behaviour in Brunei Darussalam: A Phenomenological Study

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[aQrq5kgV-01] Midwives' Perspectives and Practices in Adolescent Pregnancy Care: A Qualitative Study in Northern Malawi

*Miyuki Toda¹, Crystal Patil², Balwani Chingatchifwe Mbakaya³, Dorkasi Mwakawanga⁴, Jing Zhou¹, Yoko Shimpuku¹ (1. Hiroshima University (Japan), 2. University of Michigan (USA), 3. University of Livingstonia (Malawi), 4. Muhimbili University (Tanzania))

Keywords : Adolescent pregnancy、Youth-friendly care、Malawi、Antenatal care

[Purpose]Adolescent pregnancy is highly prevalent in Malawi, with rates among the highest worldwide. Pregnancy has physical, psychological, and psychosocial effects on adolescent mothers and their offspring. Despite widespread awareness of these adverse outcomes, there remains limited focus on tailored care for this vulnerable group. Midwives are frontline providers for adolescents, addressing challenges throughout the maternity period. This study explored midwives' perspectives and practices regarding adolescent pregnancy care in Malawi to uncover the barriers to and facilitators of comprehensive care.

[Method]This study used a descriptive qualitative design. Six focus group discussions were conducted with 38 midwives purposefully recruited from three hospitals in Northern Malawi. Thematic analysis was used to identify key themes related to midwives' perspectives and practices.

[Results]Three themes emerged from the analysis: (1) perspectives and attitudes related to positive engagement, (2) care practice as holistic care, and (3) envisioning equitable opportunity to receive antenatal care. Midwives engaged empathetically with adolescents, building trust and providing individualized health education. They collaborated with families and other professionals to support pregnant adolescents. However, system inadequacies and sociocultural factors were identified as the primary challenges. In response, midwives advocated for youth-friendly care training, dedicated antenatal care sites, community engagement and peer support networks.

[Consideration]Addressing existing challenges and implementing the recommended strategies could improve the quality of care and maternal and newborn health outcomes. Moreover, the findings emphasize the need to invest in midwifery training and supportive infrastructure to ensure that midwives are equipped with skills to meet the unique needs of adolescent mothers.

[Conclusion]The findings underscore the critical role of midwives in delivering youth-friendly care and provide actionable insights to address the identified gap in comprehensive care for pregnant adolescents in Malawi.

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[aQrq5kgV-02] **Effects of mHealth Intervention on Stress, Anxiety, and Depression Among Patients with Polycystic Ovary Syndrome: A Randomized Controlled Trial in Rural Bangladesh**

*Sadia Akter¹, Farkhanda Mahjebin², Mohammad Delwer Hossain Hawlader^{3,4}, Md Moshir Rahman⁵, Sanmei Chen⁵, Saori Kashima^{6,7}, Sheuly Akter², Shamit Dasgupta⁸, Yoko Shimpuku^{1,5} (1. Graduate School of Innovation and practice for smart society, Hiroshima University (Japan), 2. Khwaja Yunus Ali Medical College and Hospital (Bangladesh), 3. Department of Public Health, North South University (Bangladesh), 4. NSU Global Health Institute, NGH, North South University (Bangladesh), 5. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 6. Center for Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 7. Environmental Health Sciences Laboratory, Graduate School of Advanced Science and Engineering, Hiroshima University (Japan), 8. Ministry of Health, Government of British Columbia (Canada))

Keywords : PCOS、mHealth、app-based health education.

Background: Polycystic ovary syndrome (PCOS) is a complex endocrine, metabolic, and reproductive condition affecting 6–20% of women of reproductive age. The condition has both physical and mental health outcomes. While the physical symptoms are often expressed and diagnosed, the mental health outcomes are ignored and undiagnosed. In Bangladesh, research exploring the impact of digital health interventions on the mental health burden is scarce. **Objective:** The study aims to explore the effect of mHealth education on the stress, anxiety, and depression levels among PCOS patients in Bangladesh. **Methods:** A single-blinded, randomized controlled trial was conducted at Khwaja Yunus Ali Medical College and Hospital, Sirajganj, Bangladesh. A total of 212 participants were randomly assigned and divided to 106 to either the intervention group or the control group in the study. The intervention group received PCOS-related health education via a smartphone app reinforced with app notifications and bi-monthly phone calls from the researcher. The primary outcome was psychological distress measured by the DASS-21 total score. Secondary outcomes included serum cortisol, total testosterone, BMI, and PCOS knowledge. **Results:** DID analysis showed a greater reduction in psychological distress in the intervention group, with an estimated effect of –13.64 points on DASS-21 total score. Total testosterone also decreased more in the intervention group, with a DID estimate of –0.42 nmol/L. Intention-to-treat analysis showed significant group-by-time effects for psychological distress ($p = 0.003$) and testosterone ($p = <0.001$). ANCOVA showed significantly lower endline testosterone in the intervention group ($\beta = -0.14$, $p = 0.023$), while the adjusted DASS-21 difference favored the intervention but was not statistically significant ($\beta = -2.99$, $p = 0.226$). BMI and cortisol showed variable effects. Qualitative findings revealed that participants found the app easy to understand and useful for improving awareness. However, household responsibilities, fatigue, irregular app use, and limited personal smartphone access affected engagement. **Conclusion:** A culturally adapted mHealth education intervention improved psychological well-being among women with PCOS.

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[aQrq5kgV-03] Factors Influencing Breastfeeding Continuation After Returning to Work: A Cross-Sectional Study of Women Residing in Japan

*Saori Fujimoto¹, Hiromi Kawasaki¹, Nanami Funaki¹, Mari Murakami¹, Kaori Fujita¹ (1. Hiroshima University (Japan))

Keywords : Breastfeeding continuation、Return to work、Cross-Sectional Study、Workplace support、Japan

[Purpose] To identify factors associated with breastfeeding continuation one month after returning to work and compare their relative contributions within a unified analytical framework.

[Method] A cross-sectional online panel survey was conducted in Japan in January 2023 among women who had returned to work after childbirth and whose first child was <36 months old. The outcome was any breastfeeding at one month after return. Key exposures included prenatal intention, supervisor/coworker understanding (three levels), and workplace support use score (seven items). The covariates included children's age at return, weekly working hours, and support recognition. Firth's penalized logistic regression was used to address low-frequency cells, with penalized likelihood ratio (PLR) tests for inference. Incremental contributions were examined by sequentially adding key exposures to the covariate-only model and evaluating the Δ PLR.

[Results] A total of 282 women were analyzed (breastfeeding continuers, n=124; non-continuers, n=158). Prenatal intention (aOR 4.75, $p<.0001$) and workplace support use (aOR 1.89, $p<.0001$) were independently associated with continuation, whereas later return was negatively associated (aOR 0.92, $p=.002$). Support recognition and working hours were not significant. Model fit improved after adding prenatal intention (Δ PLR=87.99, $df=1$, $p<.0001$) and support use (Δ PLR=18.54, $df=1$, $p<.0001$); supervisor/coworker understanding showed no significant incremental contribution (Δ PLR=3.03, $df=2$, $p=.219$). Model performance was acceptable (AUC=0.858; McFadden $R^2=0.343$).

[Consideration] Prenatal intention showed the largest contribution, and actual workplace support use had an independent positive association. Supervisor/coworker understanding had a minimal direct effect. The effect of return-to-work timing should be interpreted cautiously, given the possible confounding effect of age-related natural weaning.

[Conclusion] Prenatal intentions and actual workplace support use were the strongest contributors to early post-return breastfeeding continuation in Japan. Implementing (1) interventions that foster intention during pregnancy and (2) workplace systems that ensure the availability and actual use of support is essential.

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[aQrq5kgV-04] Nursing practice environment, work-family conflict, and turnover intention among female nurses with children under 18 years of age in Japan: A nationwide cross-sectional study

*Liyuan Zheng¹, Hiromi Kawasaki¹, Wenjie Guo¹, Miyuki Toda¹, Yoko Shimpuku¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

Keywords : female nurses、turnover intention、work-family conflict、nursing practice environment

[Purpose]

To investigate the levels of nursing practice environment, work-family conflict, and turnover intention, and explore the mediating role of work-family conflict between nursing practice environment and turnover intention among female nurses with children under 18 years.

[Method]

An online survey recruited 305 registered female nurses from 45 prefectures across Japan between July and September 2025. Variables were measured using demographic data, and scales of maternal feeling of childcare burden, the practice environment of the nursing work index, work-family conflict, and turnover intention. Data analyses were performed using one-way analysis of variance, *t*-tests, Pearson correlation analysis, multivariate linear regression analysis, and the Process 4.0 macro plug-in method (SPSS v. 26.0).

[Results]

Turnover intention among female nurses differed significantly according to their cohabitation status, youngest child's age, department, shift pattern, weekly overtime hours, night-shift frequency and the schedule notice period. Nurses who lived alone with children, had a child aged 16-18, with weekly overtime more than 8 hours, and received schedules only 1-3 days in advance showed significantly higher turnover intention. Participants scored 12.50 ± 7.22 on maternal feeling of childcare burden scale, 2.41 ± 0.51 on the practice environment scale, 3.08 ± 0.65 on work-family conflict scale, and 15.20 ± 4.89 on turnover intention scale. Higher work-family conflict was associated with greater turnover intention ($B=0.118$, $SE=0.023$, $\beta=0.282$, $p<0.001$) after controlling for the nursing practice environment.

[Consideration]

Resources should foster supportive workplace culture that enhance task efficiency to manage workloads and minimise excessive overtime. Beyond the hospital, long-term cultural change promoting equitable distribution of domestic labor is essential.

[Conclusion]

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[aQrq5kgV-05] Fathers' experiences of supporting human milk feeding for preterm infants in Neonatal Intensive Care Units with parent–infant separation in China: a qualitative descriptive study

*Wenjie Guo¹, Li Wang², Haiyan Zhang³, Sanmei Chen¹, Maggie Zgambo⁴, Yan Wu⁵, Yanmei Bu⁶, Man Qi⁵, Ling Yang⁵, Yoko Shimpuku¹ (1. Global Health Nursing, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Department of Nursing, Maternal and Child Health Hospital of Jiaozuo (China), 3. Department of Medical Records Management, The Second People's Hospital of Jiaozuo (China), 4. School of Nursing and Midwifery, Edith Cowan University (Australia), 5. Neonatal Intensive Care Unit, Maternal and Child Health Hospital of Jiaozuo (China), 6. Neonatal Intensive Care Unit, The Second People's Hospital of Jiaozuo (China))

Keywords : father、 human milk feeding、 neonatal intensive care unit、 preterm infant

Aims

Fathers play an important role in Human milk feeding during preterm infants' hospitalization. However, research on fathers' experiences in supporting breastfeeding remains limited. This study aimed to explore fathers' experiences and needs in supporting their partners' human milk feeding for preterm infants during Neonatal Intensive Care Units hospitalization in China.

Methods

This study employed a qualitative descriptive design. Using maximum variation and purposive sampling, 19 fathers of preterm infants hospitalized in the Neonatal Intensive Care Units were recruited. Between August and September 2025, semi-structured interviews were conducted in the Neonatal Intensive Care Units of two tertiary public hospitals in Jiaozuo, China. The interviews were transcribed verbatim and analyzed using a thematic analysis approach. Ethical approval was obtained from the Ethics Review Boards of the Second People's Hospital (Ref: KY2024-03-130) and the Maternal and Child Health Hospital of Jiaozuo City (Ref: 2024-K-Y-0408).

Results

Three main themes and seven subthemes were generated. The three main themes were: (1) Different paternal roles in human milk feeding support; (2) Navigating multilevel challenges in supporting human milk feeding; (3) A call for family-centered human milk feeding support.

Conclusions

Fathers of preterm infants in separation-based NICUs assumed differentiated roles in human milk feeding support, shaped by their role perceptions and caregiving contexts. Their experiences revealed substantial caregiving burdens and multilevel challenges, including knowledge and skill gaps as well as institutional barriers. Systematically integrating fathers into neonatal feeding support through family-centered care, continuous professional lactation guidance, and assessment of paternal role types may enable tailored interventions, strengthen paternal engagement, and optimize human milk feeding practices.

Gender/Career Development

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Main Hall(Main Conference Hall in Kojin Kaikan)

Education/Health/Career

Chair:Herwansyah Herwansyah(Graduate School of Biomedical and Health Sciences, Hiroshima University)

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[aQrq5kgV-06] Maternity Healthcare Professionals' Experience of Pregnant Adolescent Healthcare-Seeking Behaviour in Brunei Darussalam: A Phenomenological Study

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

Keywords : adolescent pregnancy、 healthcare-seeking behaviour、 socio-ecological model、 maternity healthcare professionals、 hermeneutic phenomenology

[Purpose] This study explored how maternity healthcare professionals (MHCPs) understand and experience pregnant adolescents' healthcare-seeking behaviour (HSB), and used these insights to inform a context-specific socio-ecological understanding of adolescent HSB in Brunei Darussalam.

[Method] Guided by a constructivist-interpretive paradigm and Van Manen's hermeneutic phenomenology of practice, semi-structured interviews were conducted with 35 MHCPs, including nurses, midwives, and doctors working in Brunei Darussalam. Data were analysed iteratively using the socio-ecological model (SEM) to organise findings across intrapersonal, interpersonal, social/community, and healthcare system levels. Van Manen's lifeworld existentials (lived body, lived time, lived space, and lived relation) informed deeper interpretation of participants' accounts.

[Results] At the intrapersonal level, adolescents' knowledge, emotional responses, bodily awareness, and developing maternal identity shaped how they interpreted and acted upon pregnancy. Interpersonally, parents and partners often acted as gatekeepers or facilitators of antenatal care access. Socially, gossip, religio-cultural expectations, and community visibility influenced decisions to disclose or conceal pregnancy. At the healthcare system level, service accessibility, clinic practices, and follow-up procedures functioned as both barriers and supports. Healthcare-seeking emerged not as a single decision, but as an ongoing negotiation of legitimacy, risk, and care within a closely connected socio-cultural and institutional context.

[Consideration] Adolescent pregnancy remains a significant public health and social concern in Brunei Darussalam. Despite available maternity services, little is known about how pregnant adolescents navigate and experience healthcare within everyday practice.

[Conclusion] . MHCPs experienced adolescent HSB and antenatal care engagement as complex and multi-layered. Improving service use requires empowering adolescents and families while strengthening adolescent-friendly healthcare systems.

Leadership in Science beyond Gender

🗓 Sun. Jul 19, 2026 5:30 PM - 6:00 PM JST | Sun. Jul 19, 2026 8:30 AM - 9:00 AM UTC | 🏛 Main Hall(Main Conference Hall in Kojin Kaikan)

Closing Ceremony

Chair:Yoko Shimpuku(Graduate School of Biomedical and Health Sciences, Hiroshima University)

5:30 PM - 5:40 PM JST | 8:30 AM - 8:40 AM UTC

Summary

5:40 PM - 5:50 PM JST | 8:40 AM - 8:50 AM UTC

[I77UvBAF-01] Greeting, Announcement of Award Receipient

Yoko Shimpuku (Chair, World Forum for Women in Science - Japan)

5:50 PM - 6:00 PM JST | 8:50 AM - 9:00 AM UTC

[I77UvBAF-02] Greeting

Health/Education/Gender

📅 Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | 🏢 Small Conference Hall (Small Conference Hall in Kojin Kaikan)

Poster Session 2

[FPoIQWB5-01] Dietary Knowledge for Non-Communicable Disease Prevention among Female University Students: A Descriptive Study in the Bangladesh Context

*Ami Das¹, Dr. Bilkis Banu¹ (1. Independent University, Bangladesh (Bangladesh))

[FPoIQWB5-02] Prevalence and contributing factors of Postnatal depressive symptom in rural Tanzania: Evidence from health-center

*Zarin Tasnim¹, Md Jiaur Rahman¹, Dorkasi Mwakawanga², yoko Shimpuku¹ (1. Hiroshima University (Graduate School of Biomedical and Health Sciences) (Japan), 2. Muhimbili University of Health and Allied Science (Tanzania))

[FPoIQWB5-03] A Research Protocol on Mobile Phone-Based Health Education for Improving Preconception Health among Adolescent Girls in Bangladesh

*Jesmin Ara Bubly¹, Md Jiaur Rahman², Md Moshir Rahman², Miyuki Toda², Zheng Liyuan¹, Masataka Tatsumi¹, Bilkis Banu³, Yoko Shimpuku¹ (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Department of Public Health, Independent University Bangladesh (Japan))

[FPoIQWB5-04] Digital Strategies for Preventing Adolescent Pregnancy through Sexual and Reproductive Education in Brunei Darussalam: Insight from Maternity Healthcare Professionals

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

[FPoIQWB5-05] “Pausing the Moment, Beginning the Healing”: Exploring the Impact of Mindfulness Activities on Nursing Students’ Mental Health

*Khadizah H. Abdul-Mumin^{1,2,3}, Nursyuhaidah Aida Johari³, Mohd Ersyad Sudirman³, Maria Massuni³, Siti-Sarah Shalehah Muhd-Zin³, Aqil Danish Hirman³, Hamiz-Ihtisyam Md Zul-Majdi³, Piyanee Klainin-Yobas⁴ (1. Universiti Brunei Darussalam, Midwifery Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 2. School of Nursing and Midwifery, La Trobe University, Melbourne VIC3086, Australia (Australia), 3. Universiti Brunei Darussalam, Nursing Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 4. Alice Lee Centre for Nursing Studies, National University of Singapore 119077, Singapore (Singapore))

[FPoIQWB5-06] Quality of Life and Mental Health Status Among Patients with Chronic Kidney Disease in Public Tertiary Hospitals in Bangladesh

*Shuvo Md Jobael¹, Dr. ABM Alauddin Chowdhury², Md. Biplob Hossain³ (1. The Kyoto College of Graduate Studies for Informatics (Japan), 2. Daffodil International University (Bangladesh), 3. German University Bangladesh (Bangladesh))

[FPoIQWB5-07] Implementation of Sphere Handbook training in Hiroshima Prefecture: building a common language for humanitarian response through multidisciplinary collaboration

*Kazushi Keito¹, Nahoko Harada², Kayako Chishima³, Masahide Koda⁴ (1. Hiroshima Prefectural Hospital, Hiroshima, Japan (Japan), 2. Department of Nursing Science, Graduate School of Interdisciplinary Science and Engineering in Health Systems, Okayama University, Okayama, Japan (Japan), 3. Division of

[FPoIQWB5-09] Experience, challenges, and motivations in the provision of antenatal care among healthcare providers in Tanzania: a qualitative study

*Jing Zhou¹ (1. Hiroshima University (Japan))

[FPoIQWB5-10] 将来の女性リーダー育成に向けた東京大学 #WeChangeの実践報告

*Madoka Nakano¹, Kyoko Kubo¹, Mariko Ogawa¹ (1. IncluDE, University of Tokyo (Japan))

[FPoIQWB5-11] Factors influencing the utilization of sexual and reproductive health services among im/migrant women

*Kozue Yamauchi¹ (1. Otemae University (Japan))

[FPoIQWB5-12] Digital Health Intervention to Improve Maternal Mental Health in Rural Bangladesh: A Randomized Controlled Trial Protocol

*Asma Begum¹, Md Jiaur Rahman², Md Moshir Rahman², Yoko Shimpuku^{2,1} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

[FPoIQWB5-13] Effectiveness of an mHealth-Based Educational Intervention to Reduce Anemia in Pregnancy in Rural Bangladesh: Protocol for a Randomized Controlled Trial

*Taiyaba Tabassum Ananta¹, Md Moshir Rahman², Md Jiaur Rahman², Sanmei Chen², Saori Kashima³, Miyuki Toda², Mohammad Habibur Rahman Sarker⁴, Taslima Khatun⁵, Yoko Shimpuku² (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing, Graduate School of Biomedical and Health Science, Hiroshima University (Japan), 3. Center for the Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 4. Technical Training Unit, International Centre for Diarrhoeal Disease Research (Bangladesh), 5. Department of Community Nutrition, Faculty of Public Health, Bangladesh University of Health Sciences, Dhaka (Bangladesh))

[FPoIQWB5-14] Mental Health Status and Associated Factors among Chinese Female Workers Living in Japan

*Weng Li¹ (1. Graduate School of Nursing, Hiroshima Bunka Gakuen University (Japan))

[FPoIQWB5-15] **TBA**

[FPoIQWB5-16] TBA

Health/Education/Gender

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Poster Session 2

[FPoIQWB5-01] Dietary Knowledge for Non-Communicable Disease Prevention among Female University Students: A Descriptive Study in the Bangladesh Context

*Ami Das¹, Dr. Bilkis Banu¹ (1. Independent University, Bangladesh (Bangladesh))

Keywords : Dietary knowledge, Noncommunicable diseases, Nutrition education, University students, Bangladesh

Purpose: Non-communicable diseases (NCDs) are a major public health concern in Bangladesh, largely driven by unhealthy dietary practices and inadequate nutrition knowledge. University students are at a critical stage of forming lifelong eating behaviors. Female students are particularly important due to their role in household nutrition. This study evaluated dietary knowledge regarding NCD prevention among female university students and identified associated factors.

Method: This descriptive cross-sectional study was conducted from January to June 2025 among 385 female university students in Dhaka, Bangladesh. Data were collected using a pre-tested, semi-structured questionnaire through face-to-face interviews. Dietary knowledge was assessed using 7 items, with total scores ranging from 0–13. Knowledge levels were categorized using percentage cut-offs. Multivariate logistic regression was performed to determine factors associated with poor knowledge.

Results: Overall, 77% of participants had poor knowledge of preventive diets for NCDs. Poor knowledge was evident regarding dietary risk factors (85.7%) and the protective role of fruit and vegetable intake (83.4%). Students without a family history of NCDs were more likely to have poor knowledge (AOR=2.57, 95% CI:1.54–4.33). Third-year students also showed higher odds of poor knowledge (AOR=2.34, 95% CI:1.18–4.63).

Consideration: Interpretation should consider the cross-sectional design and the urban, female university-based sample, which may limit causal inference and generalizability.

Conclusion: Dietary knowledge regarding NCD prevention was inadequate among female university students. Targeted nutrition education interventions are needed. Findings should be interpreted cautiously due to the cross-sectional design and self-reported data.

Health/Education/Gender

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Poster Session 2

[FPoIQwB5-02] Prevalence and contributing factors of Postnatal depressive symptom in rural Tanzania: Evidence from health-center

*Zarin Tasnim¹, Md Jiaur Rahman¹, Dorkasi Mwakawanga², yoko Shimpuku¹ (1. Hiroshima University (Graduate School of Biomedical and Health Sciences) (Japan), 2. Muhimbili University of Health and Allied Science (Tanzania))

Keywords : PPD、maternal mental health、Tanzania

Background: Postpartum depression (PPD) is a global maternal health problem affecting about 1 in 5 mothers after delivery and can adversely impact both mother and newborn if not properly addressed. The global prevalence of PPD is 19.18% but higher rates in developing countries. There is still lack of epidemiological evidence regarding PPD in Tanzania. Therefore, this study aimed to assess the prevalence and associated factors of PPD among mothers in rural Tanzania.

Method: This study is a health-center based cross sectional analysis including 763 postpartum mothers from the Pwani region of Tanzania. This study was conducted between December 2023 to September 2024. Four health centers from Kisarawe and Bagamoyo districts were selected randomly. Data was collected by structured questionnaire. Postpartum depressive symptoms were measured by administering 10-item Edinburgh Postnatal Depression Scale (EPDS). A cut of value ≥ 10 was used to indicate the presence of postpartum depressive symptoms. Data analysis was conducted in STATA 18.5 software. Descriptive data were analyzed using frequencies and percentages. Univariate regression analysis was performed to identify the associations between dependent variable and independent variables, with a p value < 0.05 was considered as a statistically significant.

Results: Among 763 participants the overall prevalence of postpartum depressive symptoms was 19.79%. The mean age of the mothers was 27.55 years; most were married (71%) and literate (93%). Over half were employed (60%), two-thirds owned family assets (68%), and 75% reported a monthly household income above 5,000 Tanzanian shillings (> 2 USD). In the univariate analysis, mothers with ≥ 35 years of age (OR:1.67, 95% CI:1.04-2.68; $P=0.035$), and unmarried mothers (OR:1.75; 95% CI:1.06-2.90; $P=0.029$) were associated with PPD.

Conclusion: The prevalence of postpartum depressive symptoms among mother in the Pwani region of Tanzania is similar with the global prevalence. Unmarried and older mothers were associated with developing PPD. Implementation of routine mental health screening during postnatal checkups might help in reducing postpartum depressive symptoms.

[FPoIQWB5-03] A Research Protocol on Mobile Phone-Based Health Education for Improving Preconception Health among Adolescent Girls in Bangladesh

*Jesmin Ara Bubly¹, Md Jiaur Rahman², Md Moshiur Rahman², Miyuki Toda², Zheng Liyuan¹, Masataka Tatsumi¹, Bilkis Banu³, Yoko Shimpuku¹ (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Department of Public Health, Independent University Bangladesh (Japan))

Keywords : Preconception、mobile health education、adolescent girls

Purpose: Preconception health during adolescence determines future maternal and neonatal outcomes. In many low- and middle-income countries, adolescent girls face high rates of anemia, undernutrition, early marriage, and limited access to reproductive health information. In rural Bangladesh, inadequate awareness and poor health behaviors among adolescent girls contribute to long-term reproductive risks. Community health programs mainly focus on pregnant women and young children, overlooking adolescents and limiting early behavioral change opportunities. Mobile health education offers a scalable strategy to deliver timely, culturally appropriate information and promote improvements in preconception knowledge, attitudes, and practices (KAP). However, evidence targeting rural school-going adolescents remains limited.

Objective: To evaluate the effectiveness of mobile phone-based education in improving preconception knowledge, attitudes, and practices among adolescent girls in rural Bangladesh.

Methods: A school-based quasi-experimental study will be conducted from April 2026 to March 2027 in Kalapara Upazila, Bangladesh. A total of 190 adolescent girls aged 14-19 years will be recruited from two secondary schools, with one assigned as experiment and the other as control group. This design ensures equitable educational access while minimizing information contamination. Community health workers will implement a six-month mobile health education with weekly phone calls, SMS messages, and group counseling sessions. Educational modules will cover preconception KAP, including balanced nutrition, iron and folic acid intake, menstrual hygiene, reproductive awareness, prevention of early marriage, and healthy lifestyle behaviors. Outcomes will be assessed at baseline and endline using validated questionnaires. The control group will receive routine school health information. Ethical approvals will be obtained from institutions in Bangladesh and Japan.

Expected Outcomes: The intervention is expected to enhance preconception knowledge, foster positive attitudes, and promote healthy practices among adolescent girls, providing evidence for a scalable digital education model to strengthen adolescent reproductive health in resource-limited settings.

Health/Education/Gender

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Poster Session 2

[FPoIQWB5-04] Digital Strategies for Preventing Adolescent Pregnancy through Sexual and Reproductive Education in Brunei Darussalam: Insight from Maternity Healthcare Professionals

*Siti Khuzaiyah^{1,2}, Khadizah Haji Abdul-Mumin², Sarena Haji Hashim² (1. Universitas Muhammadiyah Pekajangan Pekalongan, Central Java, Indonesia (Indonesia), 2. Universiti Brunei Darussalam (Brunei))

Keywords : Adolescent pregnancy、digital health education、Brunei Darussalam、maternal healthcare professionals、qualitative study

[Purpose] To explore maternal healthcare professionals' perspectives on using digital technologies to prevent adolescent pregnancy in Brunei Darussalam

[Method] Thirty-five maternal healthcare professionals were purposively sampled from Maternal and Child Health Clinics across Brunei Darussalam. Data were analysed using thematic content analysis to identify key patterns and insights related to technology use in adolescent pregnancy prevention.

[Results] Four central themes emerged: Technology and Media Utilization, Educational Content, Settings for Adolescent Education, and Policy on Adolescent Pregnancy Prevention. Subthemes under Technology and Media Utilization included the use of digital platforms and social media for health education. Educational Content covered topics such as teenage pregnancy, antenatal care, adolescent social behaviour, and culturally grounded perspectives within Brunei's religious context. The Settings theme referred to education delivered in schools, clinics, and public spaces, while the Policy theme addressed existing adolescent pregnancy prevention education and interagency collaboration. Digital platforms and social media were perceived as useful in disseminating culturally appropriate sexual and reproductive education in religious settings. Integrating religious values into educational materials ensures both cultural sensitivity and effectiveness. Multi-sectoral collaboration between healthcare, educational, and religious institutions is also important to strengthen adolescent pregnancy prevention strategies and align digital initiatives with community norms and values.

[Consideration] Despite the risk of adolescent pregnancy, Cultural and religious sensitivities often restrict open discussions on sexual and reproductive health, leading to misinformation among adolescents and increasing the risk of early pregnancy

[Conclusion] This study reveals that with particular concerns, technology-based sexual and reproductive health education in religious setting could benefit to improve adolescent awareness on adolescent pregnancy prevention. Furthermore, collaboration and culturally sensitive contents deemed as essential aspects to strengthen this education.

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Poster Session 2

[FPoIQWB5-05] “Pausing the Moment, Beginning the Healing”: Exploring the Impact of Mindfulness Activities on Nursing Students’ Mental Health

*Khadizah H. Abdul-Mumin^{1,2,3}, Nursyuhaidah Aida Johari³, Mohd Erysyad Sudirman³, Maria Massuni³, Siti-Sarah Shalehah Muhd-Zin³, Aqil Danish Hirman³, Hamiz-Ihtisyam Md Zul-Majdi³, Piyanee Klainin-Yobas⁴ (1. Universiti Brunei Darussalam, Midwifery Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 2. School of Nursing and Midwifery, La Trobe University, Melbourne VIC3086, Australia (Australia), 3. Universiti Brunei Darussalam, Nursing Programme, Institute of Health Sciences, Gadong BE1410, Brunei Darussalam (Brunei), 4. Alice Lee Centre for Nursing Studies, National University of Singapore 119077, Singapore (Singapore))

Keywords : Mindfulness, Nursing, Curriculum, Mental health

[Purpose]

explore nursing students’ experiences and the impacts of mindfulness activities in enhancing mental health.

[Method]

A qualitative exploratory design was employed within the largest university in Brunei Darussalam. All undergraduate nursing students were invited to participate. Open-ended questionnaires were administered via qualtrics. Data were analysed using thematic analysis to generate patterns of meaning grounded in participants’ narratives.

[Results]

A total of 64 students participated. Four interrelated themes emerged. First, students demonstrated an “evolving conceptual understanding of mindfulness,” shifting from perceiving it as a relaxation technique to recognising it as intentional awareness and presence. Second, participants described the “integration of mindfulness into academic and clinical learning”, such as in managing anxiety, and sustaining attentional focus. Third, mindfulness was experienced as a “mechanism for self-regulation and psychological well-being”, fostering emotional control, stress reduction, and reflective capacity. Students also identified “challenges to consistent practice”, including time constraints, competing academic demands, and difficulty sustaining habitual engagement.

[Conclusion]

Findings suggest that mindfulness activities embedded within nursing education may extend beyond stress reduction, contributing to community of practice, emotional regulation, and reflective clinical practice. However, sustainability requires structured programme, institutional scaffolding, and curricular integration rather than reliance on individual motivation alone. Mindfulness, when pedagogically situated and structured, may serve as a mental health intervention within contemporary nursing education.

[FPoIQwB5-06] Quality of Life and Mental Health Status Among Patients with Chronic Kidney Disease in Public Tertiary Hospitals in Bangladesh

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Keywords : Chronic kidney disease, quality of life, anxiety, depression, mental health, Bangladesh

Background: Chronic kidney disease (CKD) affects approximately 800 million people globally and represents a major public health challenge. In Bangladesh, the estimated prevalence is 22.48%, considerably higher than the global average, and CKD is among the leading causes of mortality. While clinical management primarily addresses physical complications, but psychological well-being and quality of life (QoL) remain underexplored, particularly in resource-constrained public hospitals. This study assessed QoL and mental health status among CKD patients in Bangladesh and identified associated factors.

Methods: A cross-sectional study was conducted from January 2025 to December 2025 among 309 CKD patients, recruited through purposive sampling at Bangladesh Medical University a public tertiary hospital. Data were collected through face-to-face interviews using a structured Bengali questionnaire. QoL was measured using the validated Kidney Disease Quality of Life (KDQOL) instrument. Anxiety and depression were assessed using the Hospital Anxiety and Depression Scale (HADS). Statistical analyses were performed using Stata. Associations between variables and QoL were examined using regression analysis, with $p < 0.05$ considered statistically significant.

Results: The mean age of participants was 39.96 years; 52.75% were male and 76.0% were married. Clinically significant anxiety was present in 97.41% of participants, of whom 55.66% had a prior history of depressive symptoms. Overall, 63.75% reported poor quality of life. Poor QoL was significantly associated with age above 50 years (OR 3.14; 95% CI 1.37-7.21; $p = 0.007$), male gender (OR 2.36; 95% CI 1.47-3.79; $p < 0.001$), smoking (OR 1.63; 95% CI 1.00-2.64; $p = 0.046$), alcohol consumption (OR 4.36; 95% CI 1.78-10.66; $p = 0.001$), and cancer (OR 5.00; 95% CI 1.72-14.60; $p = 0.003$).

Conclusions: CKD patients in Bangladesh experience a high burden of anxiety and poor QoL. Key factors include older age, male gender, unhealthy behaviors, and comorbidities. Integrating psychosocial care and lifestyle interventions into CKD management is essential to improve outcomes.

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Poster Session 2

[FPoIQWB5-07] Implementation of Sphere Handbook training in Hiroshima Prefecture: building a common language for humanitarian response through multidisciplinary collaboration

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Keywords : Sphere Handbook、 Multidisciplinary collaboration、 Disaster response、 Humanitarian standards、 Workforce development

[Purpose]

To report multidisciplinary training that built face-to-face networks among healthcare, welfare, and government professionals and used the Sphere Handbook to improve disaster response skills.

[Method]

We analyzed training records and post-training questionnaire data (descriptive statistics) from in-person workshops conducted since FY 2023.

[Results]

Three two-day workshops were held, each led by three trainers certified by the Humanitarian Standards Partnership. All trainers had field experience in DMAT and PCAT and had applied Sphere standards in the Japanese context. A total of 54 participants attended: nurses (35%), government officials (24%), pharmacists (5%), public health nurses (5%), midwives (5%), care managers (3%), physicians (2%), physical therapists (2%), and fire brigade members (2%). Satisfaction exceeded 90% at each session. Participants reported better understanding of the Humanitarian Charter and rights-based approaches. Cross-disciplinary discussion was rated as useful.

[Consideration]

Professionals from different fields shared "no-tolerance-for-suffering" as a common value. In multidisciplinary settings such as evacuation shelters, international standards were a "common language" that helped coordinate work across sectors. Face-to-face relationships built during training may support faster decision-making and rights advocacy during disaster response.

[Conclusion]

Multidisciplinary training based on international humanitarian standards helped participants share a rights-based approach to disaster support at the community level. In-person learning contributed to cross-sector disaster response and collaboration.

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Poster Session 2

[FPoIQwB5-09] Experience, challenges, and motivations in the provision of antenatal care among healthcare providers in Tanzania: a qualitative study

*Jing Zhou¹ (1. Hiroshima University (Japan))

Keywords : Maternal Mortality、Antenatal Care (ANC)、Qualitative Study、Tanzania

[Purpose] This study aimed to explore and describe the experiences of healthcare providers involved in antenatal care (ANC) service delivery in Tanzania, with a focus on their daily practices, challenges, and professional needs in routine work.

[Method] This study adopted a qualitative descriptive design to gain an in-depth understanding of healthcare providers' experiences in real working settings. Data were collected through semi-structured interviews with 16 healthcare providers working in ANC service facilities in Kisarawe District and Bagamoyo District in the Pwani Region. The participants included seven doctors, seven midwives, and two clinical service coordinators, all of whom were locally trained ANC providers. Data collection was conducted in June 2023. Participants were purposively selected based on their involvement in ANC services. The interviews allowed participants to freely express their experiences, perspectives, challenges, and expectations. Informed consent was obtained from all participants prior to the interviews.

[Results] Through thematic analysis, three main themes were identified: (1) healthcare providers' practices and initiatives in ANC, (2) challenges in delivering ANC services, and (3) motivations for improving ANC services.

[Conclusion] This study provides healthcare providers' perspectives on ANC services in Tanzania and offers in-depth insights into their experiences. The findings may inform strategies to improve the quality of maternal healthcare services in similar low-resource settings.

[FPoIQwB5-10] 将来の女性リーダー育成に向けた東京大学 #WeChangeの実践報告

*Madoka Nakano¹, Kyoko Kubo¹, Mariko Ogawa¹ (1. IncluDE, University of Tokyo (Japan))

Keywords : Female researchers、FD、Work life balance、networking

日本の女性研究者の割合は18%にとどまる。国内の代表的な総合大学である東京大学においては女性の学部生の入学が2割にとどまり、教員割合も教授では1割など海外トップ大学と比べても後塵を拝している。このような状況から、東京大学多様性包摂共創センター (IncluDE) のジェンダー・エクイティ推進オフィスでは、令和4年度科学技術人材育成費補助事業「ダイバーシティ研究環境実現イニシアティブ (女性リーダー育成型)」の事業のもと、女性リーダーの育成に向けた施策

「UTokyo男女+協働改革#WeChange」を実施している。

IncluDEのメンバーでもある中野・久保は東京大学の複数の研究科の博士課程出身者への調査で、指導教員の姿勢や学生同士の関わり合いの中で、女性が排除されやすい環境があることや、博士課程に在籍中から経済的不安や将来の家庭との両立を抱えやすいことを明らかにした。これらの調査を踏まえ、中野・久保は、大学に対し、(1)意識改革のためのFDの強化、(2)大学院生時代からの子育て環境整備、(3)ネットワーキングの重要性などを提言している。本発表では、これらの提言のうち、#WeChangeの一環として大学院生が過ごす環境を整備することで将来の女性リーダーを生み出すための施策について、詳しく実践報告をする。

(1)については各部局の要望に応じて実施する部局別教職員向け (FD・SD) 研修の中で女性を排除しない研究室運営についての研修も提供するなどして、教員側の意識改革を図っている。

(2)については東京大学では2026年度から「子育て中の大学院学生のためのご配慮のお願い」を教員向けに配布している。大学院学生が保育園・学童保育等の申請時に「就労」を証明するのに苦労しがちであることを踏まえ、自治体等へ提出する「就学状況説明書類」のテンプレートも作成した。

(3)については、「ワークライフバランスを重視する研究者のためのアカデミアキャリア構築スキルコース」の企画・運営や、女性研究者のキャリア形成及びネットワーク形成支援を主な目的とする『UTokyo Women+ 研究者ネットワークを作ろう!』というネットワーキングイベントを実施している。

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Poster Session 2

[FPoIQWB5-11] Factors influencing the utilization of sexual and reproductive health services among im/migrant women

*Kozue Yamauchi¹ (1. Otemae University (Japan))

Keywords : Im/migrant women、 Sexual and reproductive health、 Self-determination

[Purpose]

To identify the factors that influence the utilization of SRH services.

[Method]

Searches were conducted in PubMed and CINAHL on June 19–20, 2025. Controlled vocabulary was used when available and supplemented with free-text keywords related to immigration, international students, pregnancy, abortion, and self-determination. Inclusion criteria included papers that addressed im/migrant women, self-determination in the context of sexual and reproductive health, or factors influencing self-determination. Exclusion criteria included refugees, undocumented immigrants, detained immigrants, immigrants in transit, domestic migrants, papers focusing on reproductive coercion or abuse, and review articles.

[Results]

A total of 21 studies met the inclusion criteria. The review revealed that im/migrant women's SRH decision-making is shaped by multiple intersecting factors. Gender norms, such as expectations to become mothers and male-dominated decision-making, limited women's autonomy. Lack of partner support, domestic violence, and relationship breakdown were associated with unintended pregnancies and abortions. Cultural and religious beliefs, and family pressure to conceive soon after marriage, made contraception and abortion difficult. Additional barriers included economic hardship, lack of health insurance, limited knowledge of SRH services and laws, and poor understanding of public health systems. Many women had not received sexuality education, held myths or misconceptions, and experienced shame or cultural silence around pregnancy and contraception. Fear of job loss, deportation, and legal insecurity further discouraged help-seeking. Isolation, emotional distress, and dependence on partners or healthcare providers were also reported. These factors collectively undermined informed and autonomous SRH decision-making.

[Consideration]

Structural, cultural, and gendered factors constrain im/migrant women's reproductive choices and access to care.

[Conclusion]

Multilevel barriers must be addressed to ensure informed SRH choices.

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Poster Session 2

[FPoIQwB5-12] Digital Health Intervention to Improve Maternal Mental Health in Rural Bangladesh: A Randomized Controlled Trial Protocol

*Asma Begum¹, Md Jiaur Rahman², Md Moshir Rahman², Yoko Shimpuku^{2,1} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan))

Keywords : Postpartum Depression、 Digital Health、 Maternal Mental Health、 Bangladesh、 Women

Background: Postpartum Depression (PPD) is a mood disorder with depressive episodes after childbirth. The burden is worsened by stigma, limited awareness, economic dependency, and poor access to mental health care in rural areas. Despite studies on PPD prevalence and risk factors in Bangladesh, rigorous randomized controlled trials evaluating digital mental health education's impact on maternal mental health in rural settings are lacking. Digital health education can reach women with information supporting maternal well-being, yet evidence about these strategies' efficacy for rural women remains inadequate.

Objective: To assess the effectiveness of digital health education in improving maternal mental health in rural Bangladesh.

Methods: A community-based randomized control trial will be conducted over three months from May to July 2026 in Chandpur Upazila, Bangladesh. A total of 120 participants (per group 60) aged >18 years will be recruited. PPD will be identified using the Edinburgh Postnatal Depression Scale. Eligible participants with mild to moderate symptoms will be randomly assigned to intervention or control groups using stratified block randomization. The intervention group will receive app-based digital health education on PPD and control group receive usual care. Education will include psychoeducation on PPD, stress reduction methods, emotional coping skills, self-care techniques, newborn caregiving and help-seeking behaviors. Validated questionnaires will assess baseline and endline results. Ethical approvals will be obtained from institutions in Bangladesh and Japan.

Expected Outcomes: The digital health intervention will reduce PPD symptoms, improve maternal mental well-being, and enhance access to mental health support among rural Bangladeshi women. Findings will provide evidence on scalable digital mental health strategies for rural populations and inform maternal mental health policy in Bangladesh and similar resource-limited settings.

[FPoIQWB5-13] Effectiveness of an mHealth-Based Educational Intervention to Reduce Anemia in Pregnancy in Rural Bangladesh: Protocol for a Randomized Controlled Trial

*Taiyaba Tabassum Ananta¹, Md Moshir Rahman², Md Jiaur Rahman², Sanmei Chen², Saori Kashima³, Miyuki Toda², Mohammad Habibur Rahman Sarker⁴, Taslima Khatun⁵, Yoko Shimpuku² (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing, Graduate School of Biomedical and Health Science, Hiroshima University (Japan), 3. Center for the Planetary Health and Innovation Science, The IDEC Institute, Hiroshima University (Japan), 4. Technical Training Unit, International Centre for Diarrhoeal Disease Research (Bangladesh), 5. Department of Community Nutrition, Faculty of Public Health, Bangladesh University of Health Sciences, Dhaka (Bangladesh))

Keywords : Pregnant women, Anemia, mHealth, Rural Bangladesh

Background: Anemia in pregnancy remains highly prevalent in low-resource settings, including rural Bangladesh, and contributes to adverse maternal and neonatal outcomes. Mobile health (mHealth) services offer a feasible platform to deliver remote, low-cost health education and support for anemia prevention and management.

Objective: This study aims to evaluate the effectiveness of an mHealth-based educational intervention in reducing anemia by improving hemoglobin levels among pregnant women in rural Bangladesh.

Methods: A randomized controlled trial will be conducted in rural areas of Chandpur District, Bangladesh, from April to October 2026. Pregnant women will first undergo hemoglobin screening to identify anemia status. Women diagnosed with mild or moderate anemia according to World Health Organization criteria and with gestational age less than 14 weeks will be eligible for enrollment. A total of 132 participants will be randomly assigned in a 1:1 ratio to intervention and control groups using stratified block randomization. The control group will receive routine antenatal care. The intervention group will receive routine care plus a four-month structured mHealth-based education package consisting of regular mobile messages and phone calls, along with educational materials. Community health workers will provide health education on the importance of iron-rich diets, the appropriate use of iron-folic acid supplements, prevention of dietary inhibitors of iron absorption, basic maternal nutrition, hygiene practices, and the importance of regular antenatal check-ups. The primary outcome is the change in hemoglobin level will be measured at baseline and after four months, reflecting a reduction in anemia severity. Data will be analyzed using generalized estimating equations to evaluate the effect of the mHealth intervention on improvements in hemoglobin and reductions in anemia over time.

Conclusion: The intervention is expected to reduce the proportion of pregnant women with mild and moderate anemia after mHealth education. If this study demonstrates positive outcomes, the mHealth-based education model could be scaled and implemented across low-resource settings in Bangladesh and other developing countries.

Health/Education/Gender

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Poster Session 2

[FPoIQwB5-14] Mental Health Status and Associated Factors among Chinese Female Workers Living in Japan

*Weng Li¹ (1. Graduate School of Nursing, Hiroshima Bunka Gakuen University (Japan))

Keywords : Chinese female workers、 Depressive symptoms、 Mental health、 CES-D、 Japan

[Purpose]

This study examined mental health and sociodemographic factors associated with depressive symptoms among Chinese women in Japan.

[Method]

A cross-sectional survey was conducted among Chinese women working in Japan (Nov-Dec 2025). Depressive symptoms were assessed using CES-D (cutoff >16). Survey items included age, education, marital status, family in Japan, residence length, Japanese proficiency, residence status, occupation, employment, and income. Univariate analysis used chi-square or Fisher's exact tests. Multivariate logistic regression included variables with $p < 0.2$ (residence status, marital status, Japanese proficiency), calculating odds ratios and 95% CI.

[Results]

Of the 216 participants, 87 (40.3%) had depressive symptoms (CES-D ≥ 16). Univariate analysis showed a significant association only with status of residence ($p = 0.004$), with a higher proportion of depressive symptoms among students. No significant associations were found with other sociodemographic variables. Multivariate analysis revealed that students had significantly higher risk of depressive symptoms compared to permanent residents (OR=12.63, 95%CI: 2.76-93.40, $p = 0.003$), while no significant associations were observed for dependents, technical intern trainees, marital status, or Japanese language proficiency.

[Consideration]

Mental health among Chinese women in Japan appears to vary by status of residence. The higher prevalence of depressive symptoms among students may be related to academic pressure, career uncertainty, financial difficulties, and limited social support. The absence of associations with other variables suggests that depressive symptoms may be influenced by multiple factors.

[Conclusion] Mental health status among Chinese women living in Japan differs according to status of residence, with students showing higher vulnerability to depressive symptoms. Targeted and culturally sensitive mental health support for international students is needed.

Innovation for Education and Health

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Presentation 1(Classroom 301)

Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[xYqn.QJi-01] Mathematics Anxiety as a Barrier to Medication Safety Its Impact on Nursing Students' Drug Calculation Competence

*Zainab Zahr¹, Tamer AL-GHRAIYBAH¹, San Mei Chen², Jane Maguire¹, Chiara Torrelli¹, Leila Gholizadeh¹
(1. University of Technology, Sydney (Australia), 2. Hiroshima University (Japan))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[xYqn.QJi-02] Emotional Challenges Among Older Adults Living in Resident Care Facilities in Bangladesh: A Qualitative Study

*Fazilatun Nasa¹, Rahman Md Moshir², Rahman Md Jiaur², Salma Parvin³, Mosammet Khaleda Akter⁴, Yoko Shimpuku^{1,2} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing lab, Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Nurse specialist, Al-Quwarah General Hospital, Al Qassim (Saudi Arabia), 4. National Institute of Advanced Nursing Education and Research, Department of Mental Health and Psychiatric Nursing (Bangladesh))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[xYqn.QJi-03] CONJUGATION OF BIOACTIVE COMPOUNDS WITH BACTERIAL SURFACTIN FOR ENHANCED WOUND HEALING

*Mayesha Marzia Dipti Moni¹ (1. Student (Bangladesh))

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[xYqn.QJi-04] *From genes to communities: enhancing infection prevention through science and education*

*Silvia Castellanos Castro^{1,2}, Elisa Irene Azuara Liceaga² (1. Tokyo University, visitant researcher (Japan), 2. Universidad Autónoma de la Ciudad de México (Mexico))

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[xYqn.QJi-05] Differences in Discharge Destinations between Non-Emergency and Emergency Hospital Visits among Nursing Home Residents in Japan: A 12-Year Analysis (2011–2023)

*Haruka Imura^{1,2}, Chie Teramoto¹, Kazuaki Tanabe¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Nijinohana Nijinohana Home-Visit Nursing Center (Japan))

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[xYqn.QJi-06] **The burden of antimicrobial resistance (AMR) in men and women in different regions of the world: advancing equity from the lens of sustainable development goals and EURESTOP Action**

Tomislav Meštrović^{1,2}, Goran Bandov^{3,4}, Ena Bandov⁵, Marko Jelovac⁶, Ana Čikoš⁷, Mattia Mori⁸ ((1) Health Metrics Centre, University North, Croatia

(2) Institute for Health Metrics and Evaluation and the Department of Health Metrics Sciences, University of Washington, US

(3) Department of International Relations and Sustainable Development, University of Zagreb, Croatia

(4) The World Academy of Art and Science (WAAS) Fellow

(5) University Hospital Centre Osijek, Croatia

(6) Università Iuav di Venezia, Italy

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

- (7) Ruđer Bošković Institute, Croatia
- (8) Università degli Studi di Siena, Italy)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[xYqn.QJi-01] Mathematics Anxiety as a Barrier to Medication Safety Its Impact on Nursing Students' Drug Calculation Competence

*Zainab Zahr¹, Tamer AL-GHRAIYBAH¹, San Mei Chen², Jane Maguire¹, Chiara Torrelli¹, Leila Gholizadeh¹ (1. University of Technology, Sydney (Australia), 2. Hiroshima University (Japan))

Keywords : Students、anxiety、competence、Ability、safety

Objective

Medication calculation errors highlight the role of numeracy in nursing, yet mathematics anxiety may undermine accuracy. This study examined mathematics anxiety in nursing students and its relationship with drug calculation competence.

Method

Undergraduate nursing students at an Australian university completed a cross-sectional online survey. Mathematics anxiety was measured using the 25-item Short Mathematics Anxiety Rating Scale (SMARS), numeracy with the Numerical Ability Test, and drug calculation competence with the Drug Calculation Ability Test. Pearson correlations and fractional logistic regression adjusted for age and study year were used, with sensitivity analysis for perfect mastery. **Results**

SMARS scores indicated substantial mathematics anxiety (mean 68.3, SD 23.9). Anxiety correlated with lower numeracy ($r = -0.36$, $p = 0.0001$). In unadjusted models, higher anxiety predicted lower drug calculation competence (AME -0.027 per 10-point increase, 95% CI -0.053 to -0.001, $p = 0.041$). After adjusting for numeracy, teaching quality, last mathematics studied, age, and study year, anxiety was not independently associated with competence (AME -0.011, 95% CI -0.0347 to 0.0127, $p = 0.363$). Sensitivity analysis showed a borderline association with perfect mastery (OR 0.71, 95% CI 0.49-1.01, $p = 0.054$), with a ceiling effect as 50.5% achieved full marks. **Discussion**

Mathematics anxiety appeared to affect drug calculation performance mainly through its influence on numeracy. Anxiety was linked with weaker numeracy skills, consistent with evidence that anxiety disrupts working memory and engagement with mathematical tasks. The relationship weakened after adjusting for numeracy and teaching quality, suggesting an indirect rather than independent effect.

Conclusion

Mathematics anxiety is common among nursing students and indirectly reduces drug calculation performance. Supporting numeracy development and addressing anxiety-related barriers are essential for improving medication safety readiness.

Innovation for Education and Health

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 1(Classroom 301)

Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[xYqn.QJi-02] Emotional Challenges Among Older Adults Living in Resident Care Facilities in Bangladesh: A Qualitative Study

*Fazilatun Nasa¹, Rahman Md Moshir², Rahman Md Jiaur², Salma Parvin³, Mosammet Khaleda Akter⁴, Yoko Shimpuku^{1,2} (1. Global Health and Medical Science, Graduate School of Innovation and Practice for Smart Society, Hiroshima University (Japan), 2. Global Health Nursing lab, Department of Health Science, Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 3. Nurse specialist, Al-Quwarah General Hospital, Al Qassim (Saudi Arabia), 4. National Institute of Advanced Nursing Education and Research, Department of Mental Health and Psychiatric Nursing (Bangladesh))

Keywords : Older adults, Emotional challenges, Emotional insecurity, Resident care, Family conflict, Family Burden

Purpose: Rapid population ageing and socio-demographic changes in Bangladesh, including urbanization and weakened family support, increased the dependence of older adults on residential care. Prior studies emphasized physical health and facility conditions, while the emotional lives of resident remained unclear. This study examined the emotional challenges faced by older adults residing in old age homes in Bangladesh.

Methods: A descriptive qualitative design was used with purposive sampling. Nine residents aged 60 yrs. or older who had lived in care facility for at least six months participated in semi-structured, in-depth interviews between July to December 2023. Interviews were audio-recorded, transcribed verbatim and analyzed thematically. Trustworthiness was ensured and ethical approval was obtained from the National Institute of Advanced Nursing Education and Research, Bangladesh.

Results: Four major themes emerged. Loneliness and emotional isolation captured feelings of social isolation, stigma, sadness, and emotional insecurity. Disrupted family bonds reflected conflict and weakened relationship that reduced social interaction. Monotony of daily living described repetitive routines and limited meaningful activities that contributed to emotional fatigue and depressive moods. Diminished autonomy and dependence highlighted restricted decision-making and reliance on caregivers, leading to frustration and loss of personal control.

Conclusion: Older adults in resident care settings experience considerable emotional vulnerability shaped by isolation, family disruption, monotonous routines, and reduced autonomy. These findings highlight the need for institutional and national policies that prioritize geriatric mental health within facility. Integrating structured mental support, strengthening family engagement, and involving residents in making decisions may enhance emotional well-being and overall quality of life within the resident care facilities.

Innovation for Education and Health

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Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[xYqn.QJi-03] CONJUGATION OF BIOACTIVE COMPOUNDS WITH BACTERIAL SURFACTIN FOR ENHANCED WOUND HEALING

*Mayesha Marzia Dipti Moni¹ (1. Student (Bangladesh))

Keywords : Surfactin、 MCP

The skin serves as the primary line of defense against environmental harm in an animal's body. Once this barrier is broken, the wound healing process begins at the injury site to restore skin integrity and normal function. Inflammation, cell growth, and remodeling of the extracellular matrix are the three interconnected phases of wound healing involving coordinated and dynamic interactions. Specific factors such as diabetes, smoking, aging, malnutrition, and surgical procedures lead to delayed wound healing, potentially resulting in serious infections or fatalities. Active wound management, including regular dressing changes, wound cleansing, antibiotic treatment, and pressure stabilization, accelerates the healing process of chronic wounds. In recent years, *Bacillus subtilis* has been noted as a microbial factory because of its remarkable capacity to efficiently produce bioactive cyclic lipopeptides. Surfactin, a secondary metabolite produced by *Bacillus subtilis*, has been noted for its antimicrobial and anti-adhesion characteristics in wound dressing uses. Collagen peptides have recently attracted interest for their anti-aging, antimicrobial, and wound-healing benefits. Chitosan is a commonly accessible, naturally occurring polymer that possesses numerous biologically significant attributes, including antimicrobial, barrier, and homeostatic features. Collagen peptides from marine sources (MCPs) can be obtained from fish byproducts (such as scales and skin). These bioactive substances can create inexpensive bioactive conjugates with surfactin, sourced from *Bacillus subtilis*. Products derived from collagen and chitosan hold significant promise for enhancing wound healing in immunocompromised individuals, particularly those with a prolonged history of Type II diabetes. This study, therefore, uses locally extracted collagen peptides and surfactin to be loaded onto chitosan hydrogel, which will then be assessed for effective wound management. To the best of our knowledge, chitosan hydrogels incorporated with MCP-surfactin conjugates have not been used in the application of wound healing.

Innovation for Education and Health

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Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[xYqn.QJi-04] *From genes to communities: enhancing infection prevention through science and education*

*Silvia Castellanos Castro^{1,2}, Elisa Irene Azuara Liceaga² (1. Tokyo University, visitant researcher (Japan), 2. Universidad Autónoma de la Ciudad de México (Mexico))

Keywords : parasitic infections、 education for prevention、 health promotion、 molecular parasitology、 intestinal health

Intestinal infections caused by parasites continue to affect vulnerable populations worldwide, particularly in settings where biological factors intersect with environmental and social determinants of health. Amebiasis and other parasitic diseases persist despite advances in biomedical research, highlighting the need for integrative strategies that connect scientific knowledge with effective prevention and education. Under the framework *Deciphering amebiasis from genes to communities*, we developed an integrative model that connects experimental biology research with community-based health education to promote sustainable infection prevention. Our work investigates host–parasite interactions using molecular approaches to better understand pathogenic mechanisms and eventually identify potential therapeutic targets. Yet prevention often remains limited by entrenched social practices, insufficient access to health information, and structural inequities. To bridge this gap, we designed a structured educational strategy that integrates laboratory training with active student engagement in health promotion initiatives focused on prevention and behavioral change. This approach links scientific learning to real-world health challenges, encourages collaboration across disciplines, and supports community engagement grounded in scientific evidence. Students strengthen technical expertise while cultivating leadership, ethical responsibility, and social awareness. They also learn to translate complex biological concepts into accessible language, enabling different populations to better understand infection risks, intestinal health, and preventive practices. By positioning prevention as a bridge between laboratory research and community health, this model reinforces the role of universities as agents of social transformation and aligns with the Sustainable Development Goals related to health, quality education, and reduced inequalities.

Innovation for Education and Health

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Education/Health 2

Chair:Miyuki Toda(Graduate School of Biomedical and Health Sciences, Hiroshima University)

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[xYqn.QJi-05] Differences in Discharge Destinations between Non-Emergency and Emergency Hospital Visits among Nursing Home Residents in Japan: A 12-Year Analysis (2011–2023)

*Haruka Imura^{1,2}, Chie Teramoto¹, Kazuaki Tanabe¹ (1. Graduate School of Biomedical and Health Sciences, Hiroshima University (Japan), 2. Nijinohana Nijinohana Home-Visit Nursing Center (Japan))

Keywords : Nursing home、 Emergency Medical Services、 Older adults

[Purpose] With rapid population aging, emergency transport among older adults has increased, particularly from nursing homes (NHs), nearly doubling between 2011 and 2023. NH residents are frail and vulnerable to hospitalization-associated decline, which may hinder return to their original NH. This study examined whether hospital visit type (non-emergency vs. emergency) was associated with discharge destination among NH residents in Japan.

[Method] Secondary data from the nationally representative Patient Survey conducted every three years by the Ministry of Health, Labour and Welfare were analyzed for five waves (2011, 2014, 2017, 2020, 2023). The main variables were visit type and discharge destination (same NH, another location, or death). Descriptive statistics and chi-square tests were used.

[Results] No statistically significant differences in discharge destinations were observed between visit types across all waves (all p-value > .05). However, return to the same NH was consistently lower in the emergency group. Overall, return rates were modest.

[Consideration] Although statistically significant differences were not found, the consistently lower return proportion in the emergency group may indicate clinically relevant patterns. Given residents' baseline frailty, even short hospitalizations may contribute to functional decline and affect discharge decisions. Facility capacity and the circumstances leading to hospital visits may also influence outcomes.

[Conclusion] NH residents were unlikely to return to their original NH after hospitalization, regardless of visit type. Preventive approaches to maintain function and strengthen hospital–NH care coordination may support continuity of residence.

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[xYqn.QJi-06] **The burden of antimicrobial resistance (AMR) in men and women in different regions of the world: advancing equity from the lens of sustainable development goals and EURESTOP Action**

Tomislav Meštrović^{1,2}, Goran Bandov^{3,4}, Ena Bandov⁵, Marko Jelovac⁶, Ana Čikoš⁷, Mattia Mori⁸ ((1) Health Metrics Centre, University North, Croatia

(2) Institute for Health Metrics and Evaluation and the Department of Health Metrics Sciences, University of Washington, US

(3) Department of International Relations and Sustainable Development, University of Zagreb, Croatia

(4) The World Academy of Art and Science (WAAS) Fellow

(5) University Hospital Centre Osijek, Croatia

(6) Università luav di Venezia, Italy

(7) Ruđer Bošković Institute, Croatia

(8) Università degli Studi di Siena, Italy)

Antimicrobial resistance (AMR) threatens progress toward the Sustainable Development Goals (SDGs), especially SDG 3 on health, SDG 5 on gender equality and SDG 10 on reducing inequalities. In 2021, bacterial AMR was associated with 4.71 million deaths and attributable to 1.14 million deaths globally. Yet sex-disaggregated estimates show that AMR burden is not uniformly distributed among men and women. More specifically, in several regions of the world, we demonstrate that all-age female death rates exceeded male rates, revealing patterns that aggregate estimates may hide.

The clearest female excess was observed in Southern Latin America, where AMR-associated mortality reached 68.2 per 100,000 in females versus 62.7 in males, and AMR-attributable mortality 16.9 versus 15.8. Female rates were also higher in Andean Latin America (54.5 vs 52.7 associated; 12.6 vs 12.3 attributable) and Western Europe (49.4 vs 47.9 associated; 10.6 vs 10.4 attributable). Tropical Latin America showed a smaller female excess, particularly for associated mortality (58.7 vs 57.8), with attributable rates almost equal but marginally higher among females (14.23 vs 14.22). Conversely, the largest male excess was observed in Western sub-Saharan Africa, where associated death rates reached 102.4 per 100,000 in males versus 82.1 in females, and attributable rates were 22.5 versus 18.1.

These findings suggest that gendered AMR burden is region-specific and may reflect differences in infection syndromes, health-care use, antibiotic exposure, ageing, comorbidities, as well as access to timely treatment. European EURESTOP (European Network for diagnosis and treatment of antibiotic-resistant bacterial infections) COST Action aims to translate this evidence into action by prioritising sex-disaggregated surveillance, locally adapted diagnostics/stewardship strategies and equity-oriented training. By linking AMR control with the SDG principle of leaving no one behind, EURESTOP can support inclusive and policy-relevant responses to drug-resistant infections.

Career Development

📅 Sun. Jul 19, 2026 2:00 PM - 3:30 PM JST | Sun. Jul 19, 2026 5:00 AM - 6:30 AM UTC | 🗨️ Oral
Presentation 1(Classroom 301)

Rethinking Career Paths for Early-Career Researchers: Insights from the "10 Critical Issues" of the Young Academy of Japan

Chair:Saki Sugano(Aoyama Gakuin University)

Language: Japanese, English Slides available

The Young Academy of Japan (YAJ), part of the Science Council of Japan, brings together researchers under 45 across the humanities, social sciences, and natural sciences. In 2023, YAJ published its perspective paper, "The Outlook for Science and Society in 2040: 10 Critical Issues" The document identifies structural challenges surrounding early-career researchers and proposes solutions, including promoting interdisciplinary and cross-sectoral research, establishing career paths in science diplomacy, reducing household burdens of education costs and closing gender gaps, reforming academia's overwork culture, and expanding opportunities for PhD holders beyond academia. This session opens with an overview of the 10 issues, followed by presentations from YAJ members in diverse fields, including medicine and public health, engineering, and the humanities and social sciences. Each speaker will reflect on their own career path through the lens of the 10 issues, sharing concrete experiences of moving between academia, government, international organizations, and industry; conducting research abroad; and balancing career development with childbirth and caregiving. Through dialogue with participants from Japan and overseas, the session will explore how research ecosystems can enable the next generation to thrive across borders, disciplines, and sectors. In doing so, the session responds to the central theme of this forum: how to nurture and support the people through whom science and technology can contribute to a peaceful and equitable society.

2:00 PM - 3:30 PM JST | 5:00 AM - 6:30 AM UTC

Time Adjustment

Science Technology Diplomacy/SDGs

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Presentation 1(Classroom 301)

Food security/SDGs

Chair: Sonoko Watanabe (Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[J.6E72iz-01] Beyond blame: migration's limited role in Madagascar's deforestation

*Mirindra Sitraka Rakotoarisoa¹, Sarobidy Rakotonarivo¹, Valerie Mueller^{2,3}, Henintsoa Rakoto^{1,4}, Andrew Bell^{5,6} (1. École Supérieure des Sciences Agronomiques, University of Antananarivo, Antananarivo, Madagascar (Madagascar), 2. School of Politics and Global Studies, Arizona State University, Tempe, AZ, USA (USA), 3. Development Strategy and Governance Division, International Food Policy Research Institute, Washington, DC, USA (USA), 4. School for the Future of Innovation in Society, Arizona State University, Tempe, AZ, USA (USA), 5. Department of Global Development, Cornell University, USA (USA), 6. Boston University, Boston, USA (USA))

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[J.6E72iz-02] Strengthening Food Security through Sustainable Aquaculture and Microbial Ecology

*Noushin Arfatahery¹, Maryam Asefnejad² (1. Freie University Berlin (Germany), 2. Tehran Medical University (Iran))

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[J.6E72iz-03] 日本に障壁のない世界を創る ―欧州諸国から学ぶ日本のインクルージョンの未来―

*Yuko Kataoka¹ (1. Hearing Health Center, Okayama University Hospital (Japan))

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[J.6E72iz-04] (Withdrawn) Menstrual Pain, Dietary Practices, and Academic Performance During Menstruation among Young Adult Women at Selected Universities in Dhaka City, Bangladesh

*Sk Shareyar¹, Farhana Islam², Nusrat Hossain Sheba³, Bilkis Banu⁴ (1. Student, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh; (Bangladesh), 2. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences; 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh (Bangladesh), 3. PhD Student, Department of Family and Preventive Medicine, University of Utah, Salt Lake City, Utah 84108, USA (Bangladesh), 4. Associate Professor, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh (Bangladesh))

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[J.6E72iz-05] (Withdrawal) Integrating UN SDGs into Chemistry Education: Insights from Project-Based Learning in the UK and USA

*Yalinu Poya¹ (1. Wentworth Institute of Technology (USA))

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[J.6E72iz-06] Socio-cultural drivers and strategies for the control of excessive gestational weight gain and maternal obesity in the Pwani region, Tanzania

*Dorkasi Lushindiho Mwakawanga¹, Manase Kilonzi², Agnes Fredrick Massae¹, Notikela Nyamle³, Furahini Joram³, Ipyana M Kajembula¹, Emmanuel Mlay⁴, Pius M Temba¹, Nathanael Sirili³ (1. School of Nursing, Muhimbili University of Health and Allied Sciences (Tanzania), 2. School of Pharmacy, Muhimbili University of Health and Allied Sciences (Tanzania), 3. School of Public Health and Social Sciences,

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

Muhimbili University of Health and Allied Sciences (Tanzania), 4. School of Nursing and Midwifery, Aga Khan University (Tanzania))

Science Technology Diplomacy/SDGs

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Food security/SDGs

Chair: Sonoko Watanabe (Hiroshima University)

3:45 PM - 4:00 PM JST | 6:45 AM - 7:00 AM UTC

[J.6E72iz-01] Beyond blame: migration's limited role in Madagascar's deforestation

*Mirindra Sitraka Rakotoarisoa¹, Sarobidy Rakotonarivo¹, Valerie Mueller^{2,3}, Henintsoa Rakoto^{1,4}, Andrew Bell^{5,6} (1. École Supérieure des Sciences Agronomiques, University of Antananarivo, Antananarivo, Madagascar (Madagascar), 2. School of Politics and Global Studies, Arizona State University, Tempe, AZ, USA (USA), 3. Development Strategy and Governance Division, International Food Policy Research Institute, Washington, DC, USA (USA), 4. School for the Future of Innovation in Society, Arizona State University, Tempe, AZ, USA (USA), 5. Department of Global Development, Cornell University, USA (USA), 6. Boston University, Boston, USA (USA))

Keywords : Migration、Deforestation、Madagascar、Conservation、small-scale farmer

Worldwide, more people are migrating to the forest frontier, significantly altering land use in smallholder farming communities, yet there is limited empirical evidence on the environmental impacts of this migration. The common assumption is that migrants disproportionately contribute to resource degradation. In this study, we investigate if migration drives deforestation in Madagascar, using a national census data, global land cover datasets, and qualitative insights from drought-affected migrant-sending and forest margin migrant-receiving areas. Quantitative analysis showed no evidence of spatial overlap between net positive in-migration and forest loss, and only a marginally significant negative relationship between in-migration and forest cover for extreme in-migration. The qualitative findings suggested that while in-migrants may sometimes access lands through clearing forestlands, they were no more likely than local people to clear land. These results challenge narratives of migrants as primary drivers of environmental degradation and highlight the need for nuanced understanding of migration-environment interactions.

Science Technology Diplomacy/SDGs

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Oral Presentation 1(Classroom 301)

Food security/SDGs

Chair: Sonoko Watanabe (Hiroshima University)

4:00 PM - 4:15 PM JST | 7:00 AM - 7:15 AM UTC

[J.6E72iz-02] Strengthening Food Security through Sustainable Aquaculture and Microbial Ecology

*Noushin Arfatahery¹, Maryam Asefnejad² (1. Freie University Berlin (Germany), 2. Tehran Medical University (Iran))

Keywords : Food security、 Sustainable aquaculture、 Microbial ecology、 Circular food systems、 Aquatic food production

Food security remains a critical global challenge under increasing pressure from population growth, environmental degradation, and climate-related stressors. Sustainable aquatic food systems offer a promising pathway to enhance food availability, nutritional quality, and resilience while reducing environmental impact. This research-focused contribution examines the role of sustainable aquaculture and microbial ecology in strengthening food security through nature-based and circular production systems. Drawing on interdisciplinary research experience in environmental microbiology and sustainable aquaculture across Europe and the Global South, this study synthesizes evidence from applied research projects investigating microbial interactions, biofilm dynamics, and disease control in aquaculture systems. Particular attention is given to integrated and low-impact production models that improve resource efficiency, reduce pathogen pressure, and enhance ecosystem health. The analysis highlights how microbial processes contribute to nutrient recycling, animal health, and system stability, thereby supporting reliable and safe food production. Findings indicate that aquaculture approaches incorporating ecological principles and microbial management can increase productivity while minimizing environmental risks. Such systems are especially relevant for coastal and resource-limited regions, where sustainable aquatic foods play a vital role in local food security and livelihoods. This contribution demonstrates that advancing food security requires moving beyond volume-driven production toward scientifically informed, resilient aquaculture systems. Integrating microbial ecology into aquaculture design and management enhances both food system sustainability and long-term nutritional security. These insights support the development of scalable, science-based solutions aligned with global food security goals and sustainable development pathways.

Science Technology Diplomacy/SDGs

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Oral Presentation 1(Classroom 301)

Food security/SDGs

Chair: Sonoko Watanabe (Hiroshima University)

4:15 PM - 4:30 PM JST | 7:15 AM - 7:30 AM UTC

[J.6E72iz-03] 日本に障壁のない世界を創る ―欧州諸国から学ぶ日本のインクルージョンの未来―

*Yuko Kataoka¹ (1. Hearing Health Center, Okayama University Hospital (Japan))

Keywords : inclusion、barrier-free、hearing loss、diversity

共生社会という概念が謳われて久しい。日本は公共建築、交通機関等物理的バリアフリーは世界において先進的な順位にあるとされる。また近年障害児のインクルーシブ教育を受ける割合も増加している。2024年には合理的配慮の義務化、障害者の法定雇用率の引き上げも行われている。様々な機会が保障され、あたかも「障壁のない社会」の実現に向けて進んでいるように見受けられる。しかしながら、教育現場や職場、社会における理解不足、合理的配慮の不徹底、社会的スティグマなどの「見えない障壁」が、当事者の心理的負担の要因となり、社会参加を制限しているのが現状である。障害者だけでなく、LGBTIに対してもOECD諸国中での法整備の低迷や、社会における傍観者意識の高さも示されている。物理的バリアの解消に比し、制度整備や意識改革としてのインクルージョンにおいては、依然として課題を抱えている。本学耳鼻咽喉科、聴覚支援センターでは、特に聴覚障害児・者に対し、医療だけではなく、福祉や教育、開発との連携による支援に従事し、全国に展開してきた。県としても、点字ブロック発祥の地であるとともに、色覚障害者への支援アプリ開発、手話ニュースや実況放送などを通して、障害者のバリアフリー施策に積極的に取り組んでいる。このような背景からバリアフリーの国際賞Zero Project Award（オーストリア）を県内企業が受賞、本学もファイナリストに選出され、連携を取りながらインクルージョンを進めている。身体・知的・精神障害者、発達障害やLGBTIといった、いわゆるマイノリティとされる層は社会の大きな割合を占めている。欧州諸国では、教育の場において環境整備、人材の配置といった合理的配慮の徹底させている。またフィンランドでは教育目標を「良き納税者を育てる」と定義し、個々の長所を活かして社会で活躍・活用することを国家戦略としている。多様性を尊重する社会環境の整備は、労働人口の拡大、イノベーション創出、経済成長の促進等社会的・経済的便益をもたらすことが国際的にも示されている。転換に向けて、法制度、テクノロジー、教育、コミュニティ資源に加え、意識改革も統合した社会生態学的アプローチが不可欠である。本発表では、データと実践に基づき日本の課題の核心に迫るとともに、持続可能で実効性の高い誰一人取り残さない支援の未来像について提案する。

4:30 PM - 4:45 PM JST | 7:30 AM - 7:45 AM UTC

[J.6E72iz-04] (Withdrawn) Menstrual Pain, Dietary Practices, and Academic Performance During Menstruation among Young Adult Women at Selected Universities in Dhaka City, Bangladesh

*Sk Shareyar¹, Farhana Islam², Nusrat Hossain Sheba³, Bilkis Banu⁴ (1. Student, Department of Public Health, Independent University, Bangladesh (IUB)), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh; (Bangladesh), 2. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences; 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh (Bangladesh), 3. PhD Student, Department of Family and Preventive Medicine, University of Utah, Salt Lake City, Utah 84108, USA (Bangladesh), 4. Associate Professor, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh (Bangladesh))

Keywords : Menstruation、 Young Adult、 Women's Health、 Dietary habits、 Academic performance

Purpose: Menstrual health issues are prevalent among young adult women and can affect daily activities, especially academic engagement. Evidence on whether dietary practices during menstruation influence academic performance in Low and middle-income countries remains limited. This study aims to examine the menstrual characteristics, dietary habits during menstruation, and their relationship with academic performance among university-going young adult women aged 18–24 years.

Method: A total of 269 participants were enrolled from four universities in Dhaka city, Bangladesh. Data were collected via a structured questionnaire on socio-demographic, menstrual pain, characteristics, symptoms, cycle details, PCOS diagnosis, dietary practices (using the KI-DMT scale), and self-reported academic performance during menstruation (good vs poor). Dietary intake was categorized as low, moderate, or high adherence. Descriptive statistics and chi-square tests assessed associations between dietary practices and menstrual characteristics, while logistic regression examined the independent effects of menstrual pain and dietary practices on academic performance. Statistical analyses were performed using SPSS version 27, with significance set at $p < 0.05$.

Results: Menstrual pain was reported by 87.7% of participants. Most participants reported having low to moderate-quality diets 79.2%, and 16.7% adhered to high-quality diets; only 4.1% had very low-quality diets, showing a significant association between dietary intake and menstrual duration ($p < 0.001$). 64% experience Irregular cycles, while 22.3% had PCOS, and 62.1% used non-prescribed medication for menstrual issues. 89.2% reported “poor” academic performance during menstruation. However, menstrual pain negatively impacted academic performance (OR = 0.31, 95% CI= 0.125-0.784, $p = 0.013$).

Conclusion: Menstrual pain is highly prevalent among young adult women and significantly hampers academic performance during menstruation. Universities should implement targeted menstrual health education and support programs to empower female students, improve academic engagement, and promote overall well-being.

Science Technology Diplomacy/SDGs

Sun. Jul 19, 2026 3:45 PM - 5:15 PM JST | Sun. Jul 19, 2026 6:45 AM - 8:15 AM UTC | Oral Presentation 1(Classroom 301)

Food security/SDGs

Chair: Sonoko Watanabe (Hiroshima University)

4:45 PM - 5:00 PM JST | 7:45 AM - 8:00 AM UTC

[J.6E72iz-05] (Withdrawal) Integrating UN SDGs into Chemistry Education: Insights from Project-Based Learning in the UK and USA

*Yalinu Poya¹ (1. Wentworth Institute of Technology (USA))

Keywords : UN SDGs、Chemistry education、Project based learning、STEM Pedagogy、Global Competence

Chemistry education is essential to advancing the United Nations Sustainable Development Goals (UN SDGs) by promoting sustainability literacy and responsible scientific thinking. This presentation shares an international initiative conducted at the University of the West of Scotland (UK) and Wentworth Institute of Technology (USA), where project-based learning was used to integrate sustainability themes into the undergraduate chemistry curriculum. Students participated in inquiry-driven projects that linked fundamental chemical concepts to real-world SDG topics such as resource use, environmental protection, and community well-being. Through collaborative activities, presentations, and reflective tasks, students strengthened both subject knowledge and key transferable skills, including communication, leadership, and problem-solving in sustainability contexts. The findings indicate that SDG-aligned project-based learning increases student motivation and helps learners appreciate the social and global relevance of chemistry. This approach also encourages inclusive participation and supports confidence-building, which is especially valuable for empowering emerging scientists, including women entering STEM fields. Overall, this work offers a practical and adaptable framework for embedding sustainability within STEM education and provides insights for educators seeking to develop globally conscious, socially responsible chemists equipped to address future challenges.

5:00 PM - 5:15 PM JST | 8:00 AM - 8:15 AM UTC

[J.6E72iz-06] Socio-cultural drivers and strategies for the control of excessive gestational weight gain and maternal obesity in the Pwani region, Tanzania

*Dorkasi Lushindiho Mwakawanga¹, Manase Kilonzi², Agnes Fredrick Massae¹, Notikela Nyamle³, Furahini Joram³, Ipyana M Kajembula¹, Emmanuel Mlay⁴, Pius M Temba¹, Nathanael Sirili³ (1. School of Nursing, Muhimbili University of Health and Allied Sciences (Tanzania), 2. School of Pharmacy, Muhimbili University of Health and Allied Sciences (Tanzania), 3. School of Public Health and Social Sciences, Muhimbili University of Health and Allied Sciences (Tanzania), 4. School of Nursing and Midwifery, Aga Khan University (Tanzania))

Keywords : Gestational weight gain、 Maternal obesity、 Socio-cultural factors、 Tanzania

Purpose: Maternal obesity is a global health epidemic driven by excessive gestational weight gain (EGWG). EGWG has been linked to hypertensive disorders of pregnancy and gestational diabetes mellitus, which contribute to complications such as preeclampsia. In Tanzania, preeclampsia remains among the leading direct causes of maternal deaths. To reduce these adverse outcomes, urgent preventive strategies are needed. This study explored the socio-cultural drivers and strategies for controlling EGWG and maternal obesity in Tanzania.

Methods: A qualitative study using in-depth interviews was conducted with 20 providers, six CHWs, and 16 women. Participants were purposefully recruited from two districts in Pwani region. Data were analyzed using Braun and Clarke's thematic approach.

Results: Two main themes emerged: socio-cultural drivers of EGWG and strategies for the control. The socio-cultural factors included 1) food taboo practices during pregnancy and after childbirth, 2) beliefs about resting and recovery after birth, 3) women's role in meal preparation: favoring food preferences, and 4) myths and fears about exercising during pregnancy. The strategies for controlling EGWG included 1) promoting healthy dietary and physical activity, 2) adopting educational strategies, 3) identifying women at risk of EGWG, and 4) community-based preventive approaches.

Considerations: This study obtained ethical clearance from the Muhimbili University Research Ethics Committee (MUHAS-REC-08-2024-2396).

Conclusion: Findings indicate that EGWG and maternal obesity are driven by unhealthy diets, limited physical activity, and cultural food practices during and after pregnancy. Strengthened provider education and nutritional counseling to promote healthy eating and physical activity during pregnancy and the postpartum period are warranted. The findings support the need for community-led interventions to address the socio-cultural factors contributing to EGWG and maternal obesity in Tanzania.

Gender/Career Development

📅 Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | 🗣️ Oral
Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[ZE_VRU11-01] Gender-neutral Scientific Leadership in Bolivia: Evidence-Based Insights on Women's Participation Across the STEM Education and Research Pipeline

*Natalia Montellano Duran^{1,2}, Jose Alberto Limpas Hurtado¹, Brenda Mariola Cruz Benavent¹, Narel Paniagua-Zambrana² (1. Universidad Católica Boliviana San Pablo (Bolivia), 2. Organization for Women in Science in Developing Countries (Italy))

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[ZE_VRU11-02] Beyond building Empires: Scientific Leadership as Collective Capability

*Tomoko Sugiura¹, Aparna Lal¹ (1. Australian National University (Australia))

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[ZE_VRU11-03] Interactive Session at the World Forum for Women in Science 2026: The Female Science Talents Programme – Adaptive Support Systems for Women's Leadership in Science and Beyond

*Julia Milbredt¹ (1. Falling Walls Foundation (Germany))

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[ZE_VRU11-04] Building a Novel Humanitarian Support System Through Women's Leadership: A Decade of Practice with PCAT Across Multiple Disasters in Japan

*Nahoko Harada¹ (1. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[ZE_VRU11-05] Gender Bias, Professional Identity and Public Perception of Nursing Profession in the Republic of Croatia

*Tomislav Mestrovic^{1,4,5}, Danijela Sopic^{1,2}, Matjea Krizaj Grabant¹, Tina Kosanski¹, Rosana Ribic¹, Marijana Neuberg¹, Goran Bandov³ (1. University North, University centre Varazdin, Varazdin (Croatia), 2. Alma Mater Europaea University, Maribor (Slovenia), 3. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ZE_VRU11-06] Career Development of Women in Science and Higher Education: Changing Dynamics of the International and Japanese Science Communities

*Aysun Uyar Makibayashi¹ (1. Doshisha University (Japan))

Gender/Career Development

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

12:15 PM - 12:30 PM JST | 3:15 AM - 3:30 AM UTC

[ZE_VRU11-01] Gender-neutral Scientific Leadership in Bolivia: Evidence-Based Insights on Women's Participation Across the STEM Education and Research Pipeline

*Natalia Montellano Duran^{1,2}, Jose Alberto Limpas Hurtado¹, Brenda Mariola Cruz Benavent¹, Narel Paniagua-Zambrana² (1. Universidad Católica Boliviana San Pablo (Bolivia), 2. Organization for Women in Science in Developing Countries (Italy))

Keywords : STEM、Women education、Role Model、Bolivia、Women Career Development

To provide evidence-based insights into women's participation across the STEM education and research pipeline in Bolivia and to frame gender-neutral scientific leadership as a structural requirement for strengthening national scientific systems in low-income, multicultural contexts. A mixed-methods national diagnostic was conducted between 2024 and 2025 by IDRC, OWSD–UNESCO, and the OWSD Bolivia National Chapter. The study combined quantitative surveys (n = 1,962) across three stages; secondary education, university STEM programs (including dropouts), and professional practice; with qualitative interviews, focus groups, and institutional and policy mapping. Women represent approximately 50% of tertiary education enrollment and over 60% of graduates nationally; however, they account for only 34.2% of STEM students and graduates. STEM degrees represent just 22.2% of total tertiary graduates overall. At the postgraduate level, STEM programs remain scarce and weakly systematized, with limited gender-disaggregated data. In contrast, women comprise 52.6% of researchers and over 43% of the STEM-related workforce, revealing a mismatch between education pathways, labor insertion, and leadership trajectories. Women are predominantly represented in modern and interdisciplinary STEM areas such as biological sciences, biotechnology, environmental sciences, health-related technologies, and data-intensive research. Persistent barriers include limited mentorship and role models, uneven access to resources, cultural stereotypes, and weak institutional data systems, particularly outside major urban centers and at advanced career stages. Gender-neutral scientific leadership must be data-driven, institutional, and policy-oriented. In Bolivia, producing reliable national evidence is a foundational step toward redefining STEM role models, strengthening scientific governance, and ensuring inclusive and sustainable national scientific development.

Gender/Career Development

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

12:30 PM - 12:45 PM JST | 3:30 AM - 3:45 AM UTC

[ZE_VRU11-02] Beyond building Empires: Scientific Leadership as Collective Capability

*Tomoko Sugiura¹, Aparna Lal¹ (1. Australian National University (Australia))

Keywords : Collective Capability、 Scientific Leadership、 Power and Recognition

Purpose To reconceptualise scientific leadership through a gender-neutral lens by understanding leadership as a collective capability rather than an individual attribute, and to examine how everyday negotiations of recognition, authority, and power shape who is able to exercise leadership within research institutions.

Methods Drawing on our experiences as Japanese- and Indian-Burmese origin public health scientists working in an English-dominated research system, we use reflective, conceptually informed analysis to examine scientific leadership as a continuously negotiated process in everyday interactions -whose ideas are heard, whose work is recognised, and who is regarded as authoritative.

Results These negotiations are not experienced equally; some individuals must invest substantially more effort than others to achieve comparable recognition. Conversations about systemic bias in career progression often occur mainly among minoritised groups. For many well-intentioned individuals, recognising ongoing complicity in unequal systems can be uncomfortable. Without the ability to sit with discomfort, opportunities for growth and transformation remain limited.

Discussion We argue that gender-neutral scientific leadership requires a conversation beyond gender alone. It involves building research environments in which leadership is not tied to a single cultural or behavioural template, supports multiple ways of exercising leadership, recognises diverse contributions, and distributes responsibility and agency for change across the institution.

Conclusion We propose understanding scientific leadership as a collective capability that can be intentionally cultivated through making power discussable, broadening recognition, and sharing responsibility for equity-oriented change. In the presentation, we reflect on strategies we have tried in our own institutional contexts, what has opened space for dialogue, what has not worked, and what these experiences suggest for designing more inclusive leadership environments.

Gender/Career Development

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

12:45 PM - 1:00 PM JST | 3:45 AM - 4:00 AM UTC

[ZE_VRU11-03] Interactive Session at the World Forum for Women in Science 2026: The Female Science Talents Programme – Adaptive Support Systems for Women's Leadership in Science and Beyond

*Julia Milbredt¹ (1. Falling Walls Foundation (Germany))

Keywords : Female Leadership、Community-Building、Career Enhancement、International Exchange、Peer-to-Peer Support

The Female Science Talents (FST) programme, constitutes a 1-long international leadership development initiative designed to empower 20 exceptional women researchers across scientific disciplines. This session positions FST as an empirically grounded model for fostering science diplomacy and inclusive innovation, with particular emphasis on cross-sectoral bridge-building between academia, policy, industry, and civil society.

Rationale and Conceptual Framework

Drawing on intersectional gender studies and global STEM equity frameworks, the session elucidates how targeted support systems—encompassing mentorship networks, institutional flexibility, family-oriented policies, and career-stage-specific interventions—mitigate attrition and cultivate leadership trajectories. Insights from patriarchal contexts, such as Indonesia, reveal pervasive cultural norms associating motherhood with domestic primacy, engendering both overt and latent barriers to professional continuity. FST's dual-track architecture (Intensive Track and Women's Impact Award) exemplifies scalable, culturally congruent strategies: informal mentoring circles, supervisor advocacy, flexible temporal arrangements, and role model exemplars serve as sociocultural mediators, enabling re-entry post-caregiving interruptions while accommodating resource-constrained environments. These interventions transcend Western-centric paradigms, prioritising contextual adaptability to enhance research continuity, innovation, and long-term societal contributions.

Session Objectives and Structure

This interactive workshop aims to: (1) disseminate empirical lessons from FST cohorts and alumnae-led projects; (2) interrogate culturally embedded barriers and adaptive supports via facilitated dialogue; and (3) co-generate context-specific initiatives for Global South participants.

Expected Outcomes

Participants will acquire a transferable framework, fostering global networks for women's scientific agency. This aligns with the Forum's mandate to advance equitable leadership.

Gender/Career Development

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Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

1:00 PM - 1:15 PM JST | 4:00 AM - 4:15 AM UTC

[ZE_VRU11-04] Building a Novel Humanitarian Support System Through Women's Leadership: A Decade of Practice with PCAT Across Multiple Disasters in Japan

*Nahoko Harada¹ (1. Department of Nursing Science, Faculty of Interdisciplinary Science and Engineering in Health Systems, Okayama University (Japan))

Keywords : Nursing、 Leadership、 Humanitarian assistance、 Primay Care

Background: Conventional disaster medical systems in Japan focus on acute-phase emergency care, leaving critical gaps in primary care, public health, and mental health support during sub-acute and recovery phases. The Primary Care Assistance Team (PCAT), established under the Japan Primary Care Association, was created to address these unmet needs through long-term, multidisciplinary, community-oriented response.

Practice: PCAT was mobilized within six days of the Great East Japan Earthquake (2011) and has since responded to the Kumamoto Earthquake (2016) and the Noto Peninsula Earthquake and heavy rainfall disasters (2024). Led by a nurse-scientist with expertise in disaster psychiatry and international humanitarian standards, PCAT introduced the Sphere Handbook into Japanese domestic disaster response — among the first such applications nationally — and developed integrated coordination systems spanning health, welfare, and local government sectors. A defining innovation was the institutionalization of responder support (shien) as an organizational responsibility, a dimension long absent from Japanese disaster medicine.

Research: Mental health surveys conducted across all three disaster contexts identified elevated burnout and secondary traumatic stress among volunteer responders, with distinct patterns among women. Findings directly informed PCAT's internal support protocols and contributed to national-level advocacy for responder welfare policy.

Conclusion: Women's leadership — particularly nursing expertise — was foundational to building a humanitarian response system that bridges emergency medicine, public health, and human dignity. PCAT offers a replicable model demonstrating that women's leadership in science and health is essential to constructing more equitable and effective disaster response systems.

Gender/Career Development

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

1:15 PM - 1:30 PM JST | 4:15 AM - 4:30 AM UTC

[ZE_VRU11-05] Gender Bias, Professional Identity and Public Perception of Nursing Profession in the Republic of Croatia

*Tomislav Mestrovic^{1,4,5}, Danijela Sopic^{1,2}, Matjea Krizaj Grabant¹, Tina Kosanski¹, Rosana Ribic¹, Marijana Neuberg¹, Goran Bandov³ (1. University North, University centre Varazdin, Varazdin (Croatia), 2. Alma Mater Europaea University, Maribor (Slovenia), 3. International Relations and Sustainable Development Department, University of Zagreb, Zagreb (Croatia), 4. Department of Health Metrics Sciences, University of Washington School of Medicine, Seattle (USA), 5. Institute for Health Metrics and Evaluation, University of Washington, Seattle (USA))

Keywords : nurse、nursing profession、gender bias、cross-sectional study、Croatia

[Purpose] This cross-sectional study examined how the title "nurse" shapes perceptions of professional identity, gender stereotyping and perceived status of nursing in Croatia, and compared opinions between patients and the general population.

[Method] From 15 February to 16 March 2023, a structured questionnaire was administered using convenience sampling to patients and the general population (N=624; general population n=318, patients n=306). Analyses included descriptive statistics and inferential testing (χ^2 and Mann–Whitney U), with significance set at $p<0.01$ (two-tailed).

[Results] Overall, 38.1% associated "nurse" with a physician's assistant, while 49.5% viewed nurses as professionals working within their field; only 12.3% linked the term to leadership in the health system. Nursing was most often perceived as a true calling (38.1%) or vocation (34.5%), whereas 13.9% viewed it as an independent profession. Most respondents considered nursing suitable for men (73.7%). Patients and the general population differed significantly in perceived scope of nursing work ($p<0.001$) and in what level of education is sufficient ($p<0.001$). Across Likert-scale statements, significant group differences were observed in 10/15 items, including stronger patient agreement that nursing has characteristics of a service activity and that nurses follow physicians' orders, while the general population more strongly endorsed nurses' academic/scientific capacities (eg, degree progression, publishing, nursing diagnoses).

[Consideration] Convenience sampling, cross-sectional design and potential desirability/nonresponse bias limit generalisability and causal inference.

[Conclusion] Perceptions of nursing in Croatia remain shaped by role subordination and educational misconceptions, with clear differences between patients and the general population. Targeted public and patient-facing communication, greater media visibility and education on nursing competencies may reduce bias and strengthen professional recognition.

Gender/Career Development

Sun. Jul 19, 2026 12:15 PM - 1:45 PM JST | Sun. Jul 19, 2026 3:15 AM - 4:45 AM UTC | Oral Presentation 2(Classroom 302)

Gender/Career Development

Chair:Ririn Wulandari(Hiroshima University)

1:30 PM - 1:45 PM JST | 4:30 AM - 4:45 AM UTC

[ZE_VRU11-06] Career Development of Women in Science and Higher Education: Changing Dynamics of the International and Japanese Science Communities

*Aysun Uyar Makibayashi¹ (1. Doshisha University (Japan))

Keywords : Women、 Science communities、 Japan

Women's participation in research and higher education has long been a concern for advancing gender equality in research and education. International science communities have been developing and implementing new policies, roadmaps, and initiatives to attract and promote more women in science and technology. Most of the discussions in practice and research take place in STEM-related fields. Nevertheless, a more inclusive approach, covering all disciplines, is also necessary to research and introduce to the public and academic circles, generating more role models and encouragement for female students and women researchers to enter and remain in the fields of scientific research and higher education.

Japan's strong position in science and technology and related education, and the limited role of women in these fields, are also well known. Then, this study examines how international science communities have addressed the problem of limited representation of women in scientific research and higher education, and how Japanese academic and research-related environments have followed these international trends and promoted the participation of women within scientific and higher education-related communities.

The first part of the study examines recent developments within international organizations to promote greater participation of women in science and higher education. International science platforms, including science communities, associations, funders, and publishers, are examined in the second part in terms of their initiatives and programs to invite more women into academia, research in general, publishing, and projects. The last part examines how the "work and life balance" motto is endorsed in Japanese society, through government policies in recent years, initiatives by science communities, academic societies, and universities.

Recent data and literature are scrutinized to present the impact of international and official governmental efforts to encourage more women to enter the workforce in science and higher education. The study concludes that there is a slow but incremental movement towards inclusion and encouragement of more women in science and higher education sectors in Japanese society and suggests further steps to be taken to have more women's voices within our academia.

Planetary Health/SDGs

📅 Sun. Jul 19, 2026 2:00 PM - 3:30 PM JST | Sun. Jul 19, 2026 5:00 AM - 6:30 AM UTC | 🗣️ Oral
Presentation 2(Classroom 302)

Planetary Health/SDGs

Chair:Cynthia Maharani(Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ctkh3Px5-01] From Climate Crisis to Silent Harm: Synthesizing Evidence on Climate-related Stress and Violence Among Reproductive-Aged Women

*Yasmine Mahmoud Moussa Osman¹, Marwa Mamdouh Shaban², Mostafa Shaban³ (1. Department of Obstetrics and Gynaecology Nursing, Faculty of Nursing, Zagazig University, Zagazig, Egypt (Egypt), 2. Department of Community Health Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt), 3. Department of Geriatric Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt))

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ctkh3Px5-02] The Power of ancestral philosophy *Alli kawsay (Buen Vivir)* in indigenous movements of Colombia - Ecuador vs. the exclusion by big mining development, rights of Mother Nature from the global south

*Vanessa-Eduardo Arteaga Bernal-Eraza Acosta¹ (1. Indigenous Independents Researchers in Ecuador-Colombia indigenous womens (Colombia))

2:30 PM - 2:45 PM JST | 5:30 AM - 5:45 AM UTC

[ctkh3Px5-03] Gender difference in Greenness effect on preventable mortality among middle-aged people: evidence from 47 cities in Japan, 2001-2018

*Meng Xiaolu¹, Saori Kashima¹ (1. Hiroshima University (Japan))

2:45 PM - 3:00 PM JST | 5:45 AM - 6:00 AM UTC

[ctkh3Px5-04] Spatiotemporal analysis for Evaluating the Impact of Climate Change on Malaria among Under-5 Children in Nigeria

*Kelechi Genevieve Ukeoma¹, Saori KASHIMA¹ (1. Environmental Health Science Laboratory, Graduate School of Advanced Sciences and Engineering, Hiroshima University. (Japan))

3:00 PM - 3:15 PM JST | 6:00 AM - 6:15 AM UTC

[ctkh3Px5-05] Practical Project-Based Learning Education toward Co-Creative Branding across Coffee-Producing and Coffee-Consuming Countries

*Maiku Abe¹, Hyunjung Lim¹ (1. Department of Intercultural Studies, Yamaguchi Prefectural University (Japan))

3:15 PM - 3:30 PM JST | 6:15 AM - 6:30 AM UTC

[ctkh3Px5-06] (Withdrawn) Navigating Silence and Barriers: Experience of Sexual and Reproductive Health Among Married Adolescent Girls Living in an Urban Informal Settlement in Dhaka, Bangladesh

*Farhana Islam¹, Sk Shareyar², Asaduzzaman Hridoy³, Md. Rabbi Tarikujjaman⁴, Nadira Islam Nitu⁵, Dr. Md. Shahriar Mahbub⁶, Dr. Nasreen Nahar⁷ (1. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences(BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh. (Bangladesh), 2. Student, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh. (Bangladesh), 3. Student, Department of Anthropology, Comilla University; Road, Kotbari-3506, Cumilla, Bangladesh. (Bangladesh), 4. Student, BRAC James P Grant School of Public Health, BRAC University, 65, BRAC Tower, Floor 10-13, Bir Uttam AK Khandakar Rd, Dhaka 1212, Bangladesh, (Bangladesh), 5. Student, Department of Public Health & Informatics, Bangladesh University of Professionals (BUP), Mirpur Cantonment, Dhaka-1216, Bangladesh. (Bangladesh), 6. Lecturer, Department of Reproductive and Child

Session

World Forum for Women in Science – Japan/12th International Conference for Women in Science without Borders (WISWB)

Health, Bangladesh University of Health Sciences(BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216,
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Planetary Health/SDGs

Sun. Jul 19, 2026 2:00 PM - 3:30 PM JST | Sun. Jul 19, 2026 5:00 AM - 6:30 AM UTC | Oral Presentation 2(Classroom 302)

Planetary Health/SDGs

Chair: Cynthia Maharani (Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:00 PM - 2:15 PM JST | 5:00 AM - 5:15 AM UTC

[ctkh3Px5-01] From Climate Crisis to Silent Harm: Synthesizing Evidence on Climate-related Stress and Violence Among Reproductive-Aged Women

*Yasmine Mahmoud Moussa Osman¹, Marwa Mamdouh Shaban², Mostafa Shaban³ (1. Department of Obstetrics and Gynaecology Nursing, Faculty of Nursing, Zagazig University, Zagazig, Egypt (Egypt), 2. Department of Community Health Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt), 3. Department of Geriatric Nursing, Faculty of Nursing, Cairo University, Cairo, Egypt (Egypt))

Keywords : Climate change、 Gender-based violence、 Intimate partner violence、 Reproductive age、 Systematic review

Problem:

Climate change is an escalating global crisis with disproportionate effects on women, particularly regarding exposure to gender-based violence (GBV), which influences both the natural and human systems. Yet, a limited number of studies quantified the intersection between climate-related stressors and GBV among women of reproductive age, which remains underexplored.

Background:

Environmental disruptions such as droughts, heatwaves, and floods are increasingly linked to violence against women. These stressors often intensify economic hardship, displacement, and psychosocial stress factors known to elevate gender-based violence GBV risk.

Aim:

This study aims to systematically explore the association between climate-related stressors and experiences of gender-based violence GBV, including intimate partner violence (IPV), sexual violence, and child marriage among women aged 15–49 years.

Methods:

A systematic review was conducted following PRISMA 2020 guidelines. Six databases were searched for peer-reviewed studies (2010–2024) reporting empirical data on climate stressors and GBV. Eligible studies included quantitative or mixed-methods research focused on women of reproductive age. Data were extracted and assessed for risk of bias using the ROBVIS tool.

Findings:

The findings of this study indicated that seventeen studies met the inclusion criteria. Most were from low- and middle-income countries. Droughts and extreme heat were consistently associated with increased IPV, child marriage, and sexual violence. Mediating factors included displacement, food insecurity, and mental health challenges.

Discussion:

Climate-related stressors amplify GBV risks via multiple pathways. Displacement, economic strain, and disrupted social protection mechanisms heighten women's vulnerability during environmental crises.

Conclusion:

Climate adaptation efforts must incorporate gender-responsive strategies to prevent and respond to GBV. Addressing this intersection is essential to safeguard women's health, rights, and resilience in a warming world.

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Planetary Health/SDGs

Chair:Cynthia Maharani(Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:15 PM - 2:30 PM JST | 5:15 AM - 5:30 AM UTC

[ctkh3Px5-02] The Power of ancestral philosophy *Alli kawsay (Buen Vivir)* in indigenous movements of Colombia - Ecuador vs. the exclusion by big mining development, rights of Mother Nature from the global south

*Vanessa-Eduardo Arteaga Bernal-Erazo Acosta¹ (1. Indigenous Independents Researchers in Ecuador-Colombia indigenous womens (Colombia))

Keywords : mother nature、 climate change、 Sumak kawsay-Buen vivir、 Mother Nature、 indigenous peoples

The purpose of this research is to present the urgency of listening to indigenous epistemologies of *Sumak Kawsay* (in *kichwa* language: *Buen vivir*-Good Living) and also to accompany the care/defense of the biodiversity-rich indigenous territories of the Andean region. As a research question: How is the anthropocene affecting the indigenous territories and with it the threats of the epistemologies of *the Sumak Kawsay/Buen vivir*? This ethnographic research has been carried in the last 7 years, in Republics of Colombia and Ecuador, in Indigenous Regional Council of Cauca CRIC, and The Indigenous Confederation of Ecuador CONAIE. Theoretical references: epistemology of indigenous communities, indigenous intellectuals. The anthropocene affects considerably the species of flora and fauna, the glaciers, water reserves, páramos understood as places where the water is born for the species. With it the territories Pan Amazonas region of native communities are strongly affected in their cosmovision to know. Due to its high impact in high mountain areas, climate change affects the melting of glaciers, strong droughts, seasonal changes for food production, water shortages and with this the displacement of animals and indigenous people and with it affects their traditions and cosmovisions due to geographical relocation and spatial - socio-cultural changes. Ethnographic work is used: interviews, participant observation, and documentary analysis. Key to comment how from the epistemologies, their spirituality's, indigenous cosmovision, the elders (grandparents and grandmothers) announce that if there is no respect for the species on earth comes catastrophe, which from modern science is already evident.

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Planetary Health/SDGs

Chair: Cynthia Maharani (Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:30 PM - 2:45 PM JST | 5:30 AM - 5:45 AM UTC

[ctkh3Px5-03] Gender difference in Greenness effect on preventable mortality among middle-aged people: evidence from 47 cities in Japan, 2001-2018

*Meng Xiaolu¹, Saori Kashima¹ (1. Hiroshima University (Japan))

Keywords : Greenness、 All-cause mortality、 Cause-specific mortality

[Purpose] The protective effect of greenness on reducing human mortality is well recognized. However, the gender difference in greenness on preventable mortality among middle-aged adults is still unclear.

[Method] To address this deficit, we conducted a study on middle-aged adults (40-64 years) across 47 cities in Japan. We measured the normalized difference vegetation index (NDVI) to reflect the greenness level from 2001 to 2018. We calculated the greenness and all-cause and cause-specific mortality associations, stratified by gender levels. Moreover, we computed the gender difference of preventable deaths attributed to greenness changes and differences in 2001-2010 and 2011-2018.

[Results] The result shows that a 0.1 increase in NDVI associated with an all-cause mortality rate ratio (MRR) of 0.96 (95% CI: 0.93-0.98) in males, compared with 0.97 (95% CI: 0.95-0.99) in females. A 0.1 increase in NDVI corresponded to a 7% decrease in respiratory mortality in males (MRR= 0.93, 95% CI: 0.89-0.97), compared to a 6% decrease in females (MRR= 0.97, 95% CI: 0.90-0.98). The changes of NDVI from 2001 to 2010 and from 2011 to 2018 could avert 79 and 7 all-cause deaths among females, respectively, compared to 174 and 13 deaths among males. If the NDVI reached the counterfactual level in 2001 and 2010, it could reduce all-cause mortality by 985 and 828 deaths among females, respectively, compared to 2,251 and 1,935 deaths among males.

[Consideration] Although men have slightly higher preventable effects compared with women, we observed evidence that increased greenness reduces the mortality both genders.

[Conclusion] These findings indicate the potential of a population-level intervention for reducing mortality in Japan, which has important public health and social equality at the city level to achieve SDG5.

Planetary Health/SDGs

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Planetary Health/SDGs

Chair: Cynthia Maharani (Graduate School of Biomedical and Health Sciences, Hiroshima University)

2:45 PM - 3:00 PM JST | 5:45 AM - 6:00 AM UTC

[ctkh3Px5-04] Spatiotemporal analysis for Evaluating the Impact of Climate Change on Malaria among Under-5 Children in Nigeria

*Kelechi Genevieve Ukeoma¹, Saori KASHIMA¹ (1. Environmental Health Science Laboratory, Graduate School of Advanced Sciences and Engineering, Hiroshima University. (Japan))

Keywords : Climate change、Childhood malaria、Bayesian spatiotemporal modeling、Nigeria、INLA-SPDE

Climate change is expected to influence malaria transmission through temperature, rainfall, and humidity, yet few studies apply rigorous spatiotemporal methods that account for socioeconomic factors and spatial dependence. This study quantified the associations between climate variables and malaria prevalence among children under five years in Nigeria, while identifying spatiotemporal trends and high-risk areas.

We analyzed three waves of Nigeria Demographic and Health Surveys (2010, 2015, 2021), including 1,114 cluster-years and approximately 45,000 children tested for malaria by rapid diagnostic test. Climate data were gotten from CHIRPS (rainfall) and ERA5 (temperature, humidity) for the May–October season, and from DHS spatial data for each survey year. Bayesian hierarchical models were fitted using the INLA-SPDE framework, incorporating spatial random effects, AR(1) temporal correlation, and second-order random walk (RW2) smooths for non-linear climate effects.

Models were adjusted for socioeconomic covariates including household wealth, maternal education, insecticide-treated net (ITN) use, and urban/rural residence. LISA was used to identify malaria hotspots. Malaria prevalence declined from 42.3% (2010) to 38.9% (2015) to 31.8% (2021). Spatial hotspots intensified 5.6-fold (13 to 73 clusters), concentrating in North-West and North-Central zones. In the fully adjusted model, Vegetation Index showed the strongest association with malaria (OR = 1.59, 95% CrI: 1.37–1.83), followed by temperature (OR = 1.33, 95% CrI: 1.00–1.78). Humidity showed a threshold effect, with protective effects below 65% and increased risk above. Household wealth was the strongest protective factor (OR = 0.55, 95% CrI: 0.47–0.64), followed by maternal education (OR = 0.68, 95% CrI: 0.58–0.80). The spatial correlation range was approximately 214 km, with moderate temporal persistence (AR(1) ρ = 0.58).

While malaria prevalence in Nigeria has declined over the past decade, it is increasingly concentrated geographically. Climate variables remain significant drivers after socioeconomic adjustment, underscoring the need for climate-responsive, geographically targeted control strategies.

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Chair: Cynthia Maharani (Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:00 PM - 3:15 PM JST | 6:00 AM - 6:15 AM UTC

[ctkh3Px5-05] Practical Project-Based Learning Education toward Co-Creative Branding across Coffee-Producing and Coffee-Consuming Countries

*Maiku Abe¹, Hyunjung Lim¹ (1. Department of Intercultural Studies, Yamaguchi Prefectural University (Japan))

Keywords : Specialty Coffee、 Project-Based Learning Education、 Transformational Leadership

Background

Coffee has become an essential beverage in everyday life. Market coffee is broadly classified into three categories: commercial coffee traded as commodity futures, premium coffee distinguished by brand name, and specialty coffee certified through cupping tests. Specialty coffee accounts for approximately 5% of total distribution and commands high prices, with the flavor-rich Arabica variety predominating. Through direct trade, specialty coffee has contributed to improving livelihoods of primary producers in developing countries. However, Western-led grading systems and disparities between producing and consuming countries persist, and specialty coffee support has remained largely a form of servant leadership. A further critical challenge is the "2050 Problem," whereby climate change is projected to render approximately 50% of current Arabica-growing regions unsuitable for cultivation. Under the existing business model, crop transitions and development of new production areas risk being hastily pursued without adequate consideration for local producers, potentially rendering accumulated expertise obsolete.

Objectives

This study focuses on Indonesia and aims to transition from consumer-country-led servant leadership to transformational leadership based on shared vision and collaboration between consuming and producing countries. Specifically, it seeks to sustain small-lot specialty coffee production with smallholder farms while strengthening Japan-Indonesia partnerships through PBL education to maintain and enhance brand value.

Methods

The PBL program operates along two tracks: a coffee distribution education program for Japanese students and a Japanese language program for local agricultural workers, fostering bidirectional exchange. Quality assessment of the coffee beans will be conducted with domestic specialty coffee businesses, with Japan designated as the primary export destination to enhance the global standing of both countries. A network with local smallholder farms is already established, and an MoU with the local counterpart was signed last year. This presentation reports on the progress of these initiatives.

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Planetary Health/SDGs

Chair: Cynthia Maharani (Graduate School of Biomedical and Health Sciences, Hiroshima University)

3:15 PM - 3:30 PM JST | 6:15 AM - 6:30 AM UTC

[ctkh3Px5-06] (Withdrawn) Navigating Silence and Barriers: Experience of Sexual and Reproductive Health Among Married Adolescent Girls Living in an Urban Informal Settlement in Dhaka, Bangladesh

*Farhana Islam¹, Sk Shareyar², Asaduzzaman Hridoy³, Md. Rabbi Tarikujjaman⁴, Nadira Islam Nitu⁵, Dr. Md. Shahriar Mahbub⁶, Dr. Nasreen Nahar⁷ (1. Student, Department of Reproductive and Child Health, Bangladesh University of Health Sciences (BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh. (Bangladesh), 2. Student, Department of Public Health, Independent University, Bangladesh (IUB), Plot 16, Block B, Aftabuddin Ahmed Road, Bashundhara Residential Area, Dhaka-1245, Bangladesh. (Bangladesh), 3. Student, Department of Anthropology, Comilla University; Road, Kotbari-3506, Cumilla, Bangladesh. (Bangladesh), 4. Student, BRAC James P Grant School of Public Health, BRAC University, 65, BRAC Tower, Floor 10-13, Bir Uttam AK Khandakar Rd, Dhaka 1212, Bangladesh, (Bangladesh), 5. Student, Department of Public Health & Informatics, Bangladesh University of Professionals (BUP), Mirpur Cantonment, Dhaka-1216, Bangladesh. (Bangladesh), 6. Lecturer, Department of Reproductive and Child Health, Bangladesh University of Health Sciences (BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh (Bangladesh), 7. Associate Professor & Head, Department of Reproductive and Child Health, Bangladesh University of Health Sciences (BUHS), 125/1, Darus Salam, Mirpur, Dhaka-1216, Bangladesh. (Bangladesh))

Keywords : Sexual and Reproductive Health, SRHR, Married Adolescent Girls, Stigma, Moral Justice, Urban Informal Settlements, Bangladesh

Purpose: In this study, we present findings from an interpretive phenomenological investigation that explores how married adolescent girls in a Dhaka urban informal settlement navigate silence, stigma, and barriers related to sexual and reproductive health (SRH) matters.

Methods: A qualitative phenomenological approach was employed in this study to conduct 18 in-depth interviews (IDIs) and two focus group discussions with urban slum married adolescent girls in Dhaka aged between 15-19 years, selected through purposive sampling to capture diverse experiences. Data collection continued until thematic saturation was achieved. All interviews and FGDs were conducted face-to-face using a semi-structured interview guideline, digitally recorded, transcribed verbatim, and subsequently analyzed using thematic analysis.

Results: Findings reveal that the married adolescent girls living in an urban informal settlement face profound challenges in accessing SRH information and services. Three central themes emerged concerning their lived experiences of sexual and reproductive health (SRH). Knowledge of overall SRH was limited, with information often sought only after a health complication occurred. Formal healthcare facilities were largely avoided, as seeking hospital care for SRH concerns was widely perceived as unnecessary and shameful. Gender norms and patriarchal control strongly influenced decision-making, with most husbands refusing barrier methods of contraception and leaving girls solely responsible for contraception. Genital health problems and STI symptoms were commonly managed through local pharmacies or traditional healers. Despite spousal transmission, STI-related stigma predominantly targeted women. These findings highlighted how deeply rooted cultural and religious norms perpetuate misinformation and restrict young women's SRHR, creating an intergenerational cycle of silence and control.

Conclusions: Addressing challenges among these married adolescent girls living in urban informal settlements requires community-level, rights-based interventions that engage

families, community religious leaders, and health systems, which are essential to challenge harmful norms and improve equitable access to relevant SRH information services.

Science Technology Diplomacy/SDGs

📅 Mon. Jul 20, 2026 9:00 AM - 11:30 AM JST | Mon. Jul 20, 2026 12:00 AM - 2:30 AM UTC | 🏢 Main Hall(Main Conference Hall in Kojin Kaikan)

Communicating science for policy

Chair:Shaheen Motala Timol(Head Academic and Quality Enhancement, Middlesex University Mauritius/Chair, INGS-Africa, Mauritius)

Background / Context

The increasing complexity of contemporary societal challenges, including climate change, public health emergencies, digital transformation, and sustainable development, has highlighted the need for evidence-informed policymaking (think for instance Covid). Scientific research provides critical knowledge that can support decision makers into effective decision-making; however, evidence does not automatically translate into policy action. Policymakers often operate in fast-moving environments shaped by political, social, economic, and institutional considerations, while researchers typically communicate within academic contexts. As a result, the science-policy interface has emerged as an important area of practice, requiring researchers to develop skills that enable them to communicate evidence clearly, engage with diverse stakeholders, and contribute meaningfully to policy discussions.

Key Issues or Challenges

Explain the key issues, gaps, or challenges that the presentation will address.

One of the key challenges facing researchers is understanding how evidence is used within policymaking processes. Scientific information is only one of many factors influencing decisions, and research findings must compete with political priorities, resource constraints, public opinion, and competing forms of knowledge. Researchers often struggle to communicate complex or uncertain findings in ways that are relevant and accessible to decision-makers. Additional challenges include identifying the right audiences, selecting appropriate engagement strategies, building trust, and navigating differences in language, expectations, and timelines between scientific and policy communities.

Approach / Perspective

Describe the perspective, research findings, experiences, or initiatives that will be introduced in the presentation.

The session draws on the **Communicating Science for Policy** book project, which brings together international perspectives, practical experiences, and evidence-based approaches to strengthening engagement between researchers and policymakers. The session synthesises key concepts and frameworks from the book.

Key Messages

Summarize the main insights or lessons that the audience will gain from the presentation.

Completing the session will equip participant with a clearer understanding of their potential role in science-policy communication, practical tools to communicate effectively, and valuable insights from research and practice.

Implications for Science and Society

Explain how the discussion contributes to advancing science, leadership, diversity, or international collaboration.

By supporting researchers' capacity to communicate and engage effectively with policymakers, this session contributes to more inclusive and evidence-informed decision-making. It promotes leadership in science-policy engagement, supports the participation of diverse voices and knowledge systems in policy processes, and highlights the importance of collaboration across disciplines and sectors. Ultimately, stronger communication between science and policy enhances the contribution of research to addressing societal challenges.

9:00 AM - 10:30 AM JST | 12:00 AM - 1:30 AM UTC

Time Adjustment

10:30 AM - 11:30 AM JST | 1:30 AM - 2:30 AM UTC

Time Adjustment