

Differences in awareness of open access and preprints across research disciplines

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Following on from the presentation of Dr. Ide, this presentation will show a survey on open access and preprints conducted in 2024 among members of the Astronomical Society of Japan, particularly an analysis of the contents of the free descriptive comments, and discuss the importance of formulating science and technology policies that are conscious of the research culture of each field, including open access and preprints. Surveys of researchers' attitudes toward open access and preprints have been conducted in Japan in the past, including a general survey conducted by the National Institute of Science and Technology Policy (Ikeuchi and Hayashi 2023). Among these, surveys by field were also conducted, and while more than 75% had experience with open access, the experience of publishing preprints ranged from less than 20% to 100% depending on the field, which shows a strong tendency to vary. These survey results suggest the importance of investigating attitudes toward open access and preprints individually for each research field. Although surveys focused on individual fields are beginning to be conducted, it is necessary to conduct the same survey in multiple academic societies in order to make comparisons between fields. The presenters also conducted a survey conducted by the Molecular Biology Society of Japan (Ide & Nakayama 2023) at the Astronomical Society of Japan. A call was made for one month from July 10, 2024 through the members' mailing list, and 246 responses were received from 2,474 registered members (as of July 10, excluding group and supporting member registrations). Of these, 76 responses were in the free-writing section. A qualitative synthesis (KJ) method was used to analyze the overall structure of the responses based on verbal descriptions, and the survey by the Astronomical Society showed a stronger tendency to assume the existence of preprints compared to the survey by the Molecular Biology Society. There was also strong concern about the rising costs of open access. There was also a difference in the extent of the descriptions of the sense of responsibility held by researchers across the two surveys, with differences in descriptions of both responsibilities to the research field and related parties, including how they are treated in performance evaluations (internal responsibility), and responsibilities to society, including disseminating reliable information (external responsibility). According to Ikeuchi and Hayashi (2023), the experience rate of open access in geosciences is relatively high at just over 80%, while the experience of publishing preprints is around 25%, which is lower than the roughly 75% in physics and astronomy. Considering the diversity of geosciences, there are likely to be differences even among the member societies of the Japan Geoscience Union, and it would be useful to investigate the differences in perception both as a research culture study and as an academic policy study.

Keywords: Open access, Preprint, Comparative research between fields