

我が国における国際自然科学学術誌刊行における課題。"DNA Research"をケーススタディとして。

Underlying Issues and Problems in Publishing International Scientific Journals in Japan. "DNA Research" As A Case Study.

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In this presentation, I would like to discuss certain issues and problems in regards to publishing scientific journals in Japan. My talk is a reflection of my experience as the Editor-in-Chief of the journal "DNA Research" which was launched at the inauguration of the Kazusa DNA Research Institute in 1994.

Firstly, I would like to introduce the current status of DNA Research, an open access journal, regarding the editorial policy and processes, the scope, the publisher, the geographical distribution of the submitted and published papers, the acceptance rate, the impact factor (IF) and some other aspects.

Secondly, I would like to discuss some of the issues and problems in publishing scientific journals in Japan. One important issue is how to ensure objectivity in reviewing manuscripts; a problem often stemming from the unique cultural, social and academic environment of Japan. Another important issue is how to maintain a consistent editorial policy over the long term, ideally by the same Editor-in-Chief, Executive Editor and majority of associated editors. This may be difficult for some journals of academic societies in which editors selected from their members undergo turnover of their duties every few years. Furthermore, since any of these editorial jobs is quite demanding, few scientists active in research are willing to accept or assume these positions. Regarding the financing of scientific journals, we, DNA Research, decided not to seek financial support from outside; the reason will be presented.

Thirdly, I would like to list our efforts to improve the IF of our journal which now stands at between 5 and 6. Most researchers agree that it may not be correct to evaluate scientific journals by IF alone, but it is also true that there is no other reliable way to evaluate scientific journals objectively and quantitatively. In fact, the IF is now also being utilized for the evaluation of researchers themselves for the purposes of their promotion, job accession and others by taking into consideration the IF of the journals where their papers have appeared. These developments have prompted us to take steps to strive for a higher IF for our journal.

Fourthly, I would like to mention the challenge of dealing with online-publication (e-publication) and open access of scientific journals. Online-publication has virtually eliminated costs for the printing and delivery of journals, thus paving a way to publishing papers at lower cost which benefits scientific journals like ours without outside financial support. The open access movement, which was originally conceived as the result of the demand from the general public and research funders in US and EU countries, has become a mainstream trend in the publication of scientific journals. In an open access world, revenues come from the article processing charge (APC) rather than subscription charges, providing a new incentive for higher IF journals, since the level of APC often reflects the IF of the journal. Because of these trends, the number of journals which employ online only publication and/or open access is rapidly

increasing, thus creating more competitions among scientific journals which are vying for higher-grade (IF) rankings.

Finally, I would like to discuss the need and possibility of creating a journal such as Nature or Science in Japan which focuses specifically on emerging research in the natural sciences in Asia.