



Editorial

Experimental Medicine

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Tohoku J. Exp. Med., 2024 January, 262 (1), 1-3.

doi: 10.1620/tjem.2023.J096

History

The Tohoku Journal of Experimental Medicine (TJEM) was established in 1920 by three young professors, Toshihiro Fujita, Toyoziro Kato, and Yasutaro Satake, at Tohoku University to make it possible for young researchers to reach the international scientific community (Takahashi 2021). Since then, TJEM has published numerous articles on new scientific findings. The recent cite score was 3.5 in 2022, with 1,479 citations (2019-2022) divided by 421 articles (2019-2022) (Scopus preview 2023). TJEM ranks 97 within 212 Journals on general biochemistry, genetics, and molecular biology.

Since 1920, each article of TJEM was written in one of three languages: German, English, and French. In 1956 (from Volume 64), English was determined as the sole official language in TJEM. On September 1st, 1923, the Great Kanto Earthquake hit the Tokyo metropolitan area at 11:58 local time. The wooden houses collapsed, but the leading cause of death was the fire that took more than 100,000 lives. The earthquake destroyed the Tsukiji Printing Office in Tokyo, which printed TJEM issues since 1920 (Ishigaki et al. 2013). At that time, the TJEM continued the publication of Vol. 4, Issues 5-6, and Vol. 5, Issues 1-3, with generous help from the Wistar Institute in Philadelphia. After the 2011 Great East Japan Earthquake, it was possible to publish the articles in 2011 without delay.

Prof. Kazuhiro Takahashi served as the Editor-in-Chief from 2021-2023 and organized the 100-year anniversary collection (http://www.journal.med.tohoku.ac.jp/100th_anniversary.html), and the disaster-prevention science collection (http://www.journal.med.tohoku.ac.jp/Disaster-Prevention_old.html#2012). Prof. Takahashi introduced new features in TJEM to facilitate visibility and usability. Graphical abstracts were added to the online journal, and the supplementary materials are available online. After the

acceptance, the manuscript has the digital object identifier (DOI) and will be online as soon as possible.

Use of Artificial Intelligence

The TJEM, however, has been keeping a conservative attitude to the preprints and the reviewing process including the usage of artificial intelligence (AI). The Chat GPT 3.5 (<https://chat.openai.com/>) answered me the role of a successor Editor-in-Chief as follows (as of Oct. 31, 2023):

“It seems like you may be referring to the role of a “successor editor-in-chief,” which typically involves taking over the responsibilities and duties of the current editor-in-chief when they step down, retire, or leave their position. The successor editor-in-chief plays a crucial role in maintaining the continuity and quality of a publication, organization, or project. Here’s a description of their role:

1. *Transition and knowledge transfer*: The successor editor-in-chief works closely with the outgoing editor-in-chief to facilitate a smooth transition. This involves learning about the current state of the publication or organization, understanding its goals and mission, and gaining insights into the editorial process and decision-making.
2. *Leadership*: Once in the role, the successor editor-in-chief becomes the leader of the editorial team or organization. They provide guidance, direction, and vision for the publication, ensuring that it aligns with its intended audience and goals.
3. *Editorial oversight*: The successor editor-in-chief is responsible for overseeing all editorial aspects of the publication. This includes managing the editorial team, setting editorial standards, and making final decisions on content selection, quality control, and publication schedules.
4. *Content direction*: They have a significant role in shaping

Received November 9, 2023; revised and accepted November 19, 2023; J-STAGE Advance online publication November 30, 2023

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ing the content strategy of the publication. This involves deciding on the themes, topics, and types of content that will be featured. They may also be responsible for planning special issues, features, or projects.

5. *Collaboration*: The successor editor-in-chief often collaborates with other departments or teams within the organization, such as marketing, design, and business development, to ensure the publication's success. They may work closely with the sales and marketing teams to promote the publication and attract readers and advertisers.
6. *Editorial integrity*: Maintaining the publication's editorial integrity is a core responsibility. The successor editor-in-chief ensures that content is accurate, balanced, and adheres to ethical guidelines. They may also handle issues related to conflicts of interest and editorial independence.
7. *Talent management*: Managing and developing the editorial team is essential. The successor editor-in-chief hires, trains, and mentors staff members, fostering a productive and creative work environment. They may also be responsible for performance evaluations and professional development.
8. *Audience engagement*: Building and maintaining a strong readership or audience is crucial. The successor editor-in-chief may engage with readers, respond to feedback, and monitor analytics to understand audience preferences and adapt the publication's strategy accordingly.
9. *Innovation and adaptation*: The successor editor-in-chief should be open to innovation and adapt to changing media landscapes. They should stay updated on industry trends and technologies to ensure the publication remains relevant and competitive.
10. *Succession planning*: As a successor themselves, they should also be involved in identifying potential future successors and grooming them for leadership roles within the organization.

In summary, a successor editor-in-chief takes on the responsibilities of leading and managing a publication or organization's editorial efforts, ensuring its continuity, quality, and relevance while adapting to changing circumstances and fostering growth. This role requires strong leadership, communication, and editorial skills" (Chat GPT 3.5 as of Oct. 31, 2023).

These suggestions are relevant with the given tasks, especially for non-native English users to refine the expressions. Then, the value of a manuscript can be defined as the value of contents and not by the usage of AI in creation or reviewing. It should be the sole responsibility of authors to confirm the validity and relevance of the aim of study, hypothesis, methods, results, discussions and the notion. Many journals are now facing the paucity of reviewers and the usage of AI in reviewing seems to be an inevitable trend as follows:

"I don't have personal opinions or thoughts. However, the statement "Using AI for peer review is an inevitable trend" suggests that the use of AI in the peer review process is likely to become more widespread and prevalent in the future. It implies that AI has the potential to play a significant role in improving and streamlining the peer review process for research papers and articles. This opinion may be based on the increasing capabilities and applications of AI in various fields, including natural language processing and data analysis, which can contribute to more efficient and accurate peer reviews" (Chat GPT 3.5 as of Oct. 31, 2023).

TJEM, as well as other peer-reviewed journals, is taking every possible tool to detect plagiarism and enhancing the quality assured peer-reviews. On the other hand, the diverse scope of TJEM with more transdisciplinary contents are making it more difficult to find the experts to review the manuscript. The endeavor to incorporating the new technologies and protecting the traditional beauty of TJEM is continuing.

The Scope of TJEM

TEJM covers the vast area in medical and public health science under the name of experimental medicine. Experiments started with the history of human being to understand the mechanisms of life and cope with threats to the health.

"Experiments are a fundamental and necessary aspect of medical science for several reasons:

1. *Advancing medical knowledge*: Experiments allow researchers and scientists to test hypotheses and gather empirical evidence. This process leads to a better understanding of the human body, diseases, treatments, and medical processes. It helps build the foundation of medical knowledge and allows for progress in the field.
2. *Treatment development*: Medical experiments are crucial for developing new treatments, drugs, and therapies. Researchers need to test the safety and efficacy of new medical interventions through controlled experiments before they can be used on patients.
3. *Validation of findings*: Experiments provide a means to validate or refute existing theories or findings in medicine. They help ensure that medical practices are evidence-based and reliable.
4. *Improving patient care*: Experiments can lead to the discovery of better diagnostic tools, treatment methods, and preventive measures. This, in turn, improves the overall quality of patient care and outcomes.
5. *Personalized medicine*: Experiments are instrumental in the development of personalized medicine approaches, tailoring treatments to individual patients' genetic and physiological characteristics.

Regarding the ethics of medical science, it is crucial to conduct experiments and research in a manner that upholds

the highest ethical standards. This includes:

1. *Informed consent*: Researchers must obtain informed consent from participants in experiments. Participants should fully understand the risks and benefits of participating and have the autonomy to decide whether to take part.
2. *Beneficence and non-maleficence*: Researchers must ensure that the potential benefits of an experiment outweigh the potential harm to participants. This principle emphasizes both doing good (beneficence) and avoiding harm (non-maleficence).
3. *Privacy and confidentiality*: Protecting the privacy and confidentiality of participants is essential. Researchers should use de-identified data whenever possible and ensure that participants' personal information remains confidential.
4. *Transparency and honesty*: Researchers should be transparent about their methods, results, and any potential conflicts of interest. Honesty in reporting findings is critical to maintaining trust in medical research.
5. *Fair participant selection*: Researchers should select participants fairly, avoiding any form of discrimination or bias.
6. *Respect for vulnerable populations*: Special care should be taken when conducting experiments involving vulnerable populations, such as children, prisoners, or individuals with impaired decision-making capacity. Additional safeguards may be necessary to protect their rights and well-being.
7. *Peer review and reproducibility*: The scientific community relies on peer review to ensure research quality and integrity. Findings should be replicable by independent researchers to validate their credibility.

Ethical considerations in medical science are designed to safeguard the rights and well-being of research participants, maintain the integrity of scientific research, and uphold public trust in the field. Researchers and institutions must adhere to these ethical principles to conduct responsible and ethical medical research" (Chat GPT 3.5 as of Oct. 31, 2023).

Beside the improved integrity and technology in experiments in genetic, molecular and cellular biology, and clinical medicine, the imposing of experimental results to the real world is still debatable. There are even medical and public health science fields that are not suitable for experiments. The importance of quasi-experimental study and/or natural experiments are becoming more familiar especially in public health science, health emergency and disaster risk management (Sasaki et al. 2020; World Health Organization 2022). Qualitative studies and manuscripts on medical and public health education are also welcome.

The new Editorial Board including the executive editors in clinical medicine, basic/translational medicine, clinical medicine, medical science, and disaster medicine, and board members are cooperating to cover the diversity of experimental medicine. To facilitate these processes, the publisher of TJEM, Tohoku University Medical Press, became a general incorporated association from November 1st, 2023.

Founded with an eye to the world, TJEM is moving forward.

Conflict of Interest

The author declares no conflict of interest.

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