

## EDITORIAL

# Handing over the reins

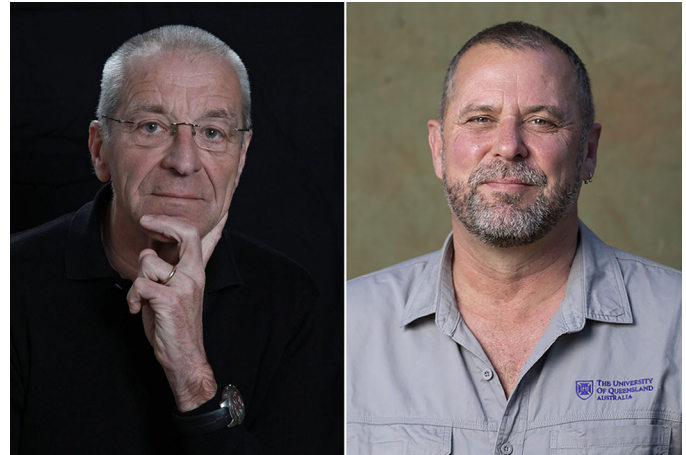
Hans H. Hoppeler<sup>1</sup> and Craig E. Franklin<sup>2,\*</sup>

## 'Auf Wiedersehen' from Hans Hoppeler

My first personal contact with Journal of Experimental Biology dates back to a conference on comparative physiology in June 1984 – held in Crans-sur-Sierre, Switzerland – entitled The Design and Performance of Muscular Systems. As with all JEB Symposia, the proceedings of the conference were published as a review volume of the journal the following year (<https://jeb.biologists.org/content/115/1>): a state-of-the-art account by the very best muscle physiologists of the time. I was then what we now call an 'early-career researcher'. With C. R. Taylor and E. R. Weibel, I went on to publish three series of papers on the structure–function relationship of the mammalian respiratory system using allometry and adaptive variations as experimental tools. My guess is that it was this interdisciplinary, comparative approach encompassing no less than 40 species weighing between 3 g and 500 kg that led Bob Boutilier, then Editor-in-Chief, to ask me in 1995 to join JEB as an Editor.

JEB was a very different journal at the time – not so much with regard to quality and scope of content but the way in which it was run. Back in 1995, there were only three editors to organize peer review and make editorial decisions on manuscripts; the acceptance rate was about 60%, with fewer than 300 manuscripts published across 12 issues per year. The journal was only available as a print copy and was produced on the premises on a printing press proudly owned by The Company of Biologists. The Editorial Office of the time consisted of two rooms in the Department of Zoology at the University of Cambridge, UK, next to the laboratory of the Editor-in-Chief, and was run by one long-serving administrator, Margaret Clements, also known as Mxx. Manuscripts had to be submitted in triplicate, of which two copies were sent to the reviewers by courier. I still saw the occasional manuscript that was hand-typed and submitted with two veritable carbon copies. Fast-forward 25 years, and 11 Monitoring Editors now select some 450 manuscripts for publication out of more than 1400 submitted research papers. The Company of Biologists now employs >50 staff across its five journals in an airy open-plan office on the outskirts of Cambridge, and the JEB Editorial team alone comprises three Editorial Administrators (handling submissions and peer review), three Production Editors (transforming accepted manuscripts into the final copyedited 'version of record' online), three News/Reviews Editors (writing and commissioning non-research content) and a Managing Editor. Although still split into 24 annual issues, JEB articles are now published online using a continuous publication model and it is only a matter of time before the last issue of JEB appears in print.

But some things haven't changed. In 1995, JEB was the leading comparative journal, and it still is in 2020. During that time, its impact factor has risen from 2 to just above 3, and the Eigenfactor



Hans Hoppeler (left; photo credit, Barbara Krieger) and Craig Franklin (right; photo credit: Russell Shakespeare).

score, measuring the perceived importance of a journal, helps rank it among the Top 100 Most Influential Journals in Biology and Medicine. This is an achievement, considering the fact that comparative physiology has become an underfunded niche science. Over my tenure as Editor-in-Chief, I have tried to give JEB a clear profile and, in collaboration with my team of Editors, I have refined the scope of the journal. As detailed on our website, JEB stands for hypothesis-driven experimental physiology, biochemistry and biomechanics. We see the biomechanics of locomotion – be it running, flying, swimming or digging – as an essential part of physiology, in particular for understanding the course of evolution. We do not publish descriptive work unless of broader scientific relevance and abstain from considering manuscripts that have a biomedical or strongly applied focus.

Joining the Board of Editors of JEB turned into the most enjoyable event of my scientific career. The scope of the journal was a perfect match for my eclectic appetite for curiosity-driven research into physiological phenomena. JEB essentially covers the evolution-driven exploitation of the complete set of potentialities on all levels of structural organization allowing animals to propagate in a particular ecological niche on our planet. This encompasses anything from the biomechanical properties of spider silks to the diving capabilities of birds. Research driven by the urge to understand and not by the potential usefulness of the gain in understanding. Unfortunately, in a world in which success is measured by the monetary value of innovation, comparative research has been dealt a bad hand.

Academic publishing is rapidly evolving. The technical advances of the digital revolution have made scientific information immediately searchable and accessible to everybody and have made print issues of journals an unnecessary oddity. More important still is the change from a subscription-dependent publishing model to author-paid publication based on an Open Access model. This has changed the publishing landscape

<sup>1</sup>Editor-in-Chief, Journal of Experimental Biology (September 2004 to July 2020).

<sup>2</sup>Editor-in-Chief, Journal of Experimental Biology.

\*Author for correspondence (c.franklin@uq.edu.au)

 C.E.F., 0000-0003-1315-3797

dramatically and not only for the good. The ‘market’ has been flooded with Open Access journals, many of which cater for low-impact research, and predatory journals have become a serious issue. For the JEB community, Open Access has remained a low priority so far, with less than 1% of authors in 2019 choosing to publish their research articles under a CC-BY license. However, with the political support of Open Access by initiatives such as Plan S, it is clear that funding mandates will require changes to access policies for all journals; I will be interested to see how high-quality reviewing, editing and outreach will be financed in the long run.

Another area in which academic publishing is changing concerns the perceived transparency and openness of the peer review process, and many journals are introducing new initiatives in this area. Although JEB recently added cross-referee commenting to its peer review workflow, we felt it was important to consult our community before we considered implementing bigger changes such as the publication of peer review history files. A survey completed by more than 600 JEB authors and reviewers earlier this year showed strong opinions both for and against posting peer review reports and author/editor correspondence alongside published manuscripts. However, the majority view from the community was that publishing review reports had the potential to markedly increase reviewer workload and negatively influence reviewer behavior. As such, we made the decision not to progress with implementation at the current time. I happily leave further discussion on this thorny issue to the new team leading the journal.

Craig Franklin, the new Editor-in-Chief, is a well-connected, internationally reputed scientist. He is supported by a crew of equally qualified comparative physiologists and biomechanists, who expertly cover many aspects of the vast subject area that lies within JEB’s broad scope. Between them, they will guarantee that the journal stays in touch with the needs of its loyal audience. With the backing of The Company of Biologists and a dedicated team of professional editors and staff in Cambridge, I see a bright future for JEB. The journal will continue to publish the very best of the fascinating research that comes from a value-free query of all facets of the physiology of animal life. I will continue to follow JEB, fortunate that I had the privilege to help steer its course for a quarter of a century.

#### **‘G’day’ from Craig Franklin**

Thank you, Hans, for your advocacy and leadership of JEB over the past 25 years. It has been a remarkable tenure.

Hans departs having put JEB in a strong position, easily recognized as the place to publish high-quality papers in comparative physiology and biomechanics. Hans has also left an indelible mark on our community in his support of our discipline. He has fostered early-career researchers and embraced the core scientific values of objectivity, integrity and fairness. I personally have greatly appreciated and valued Hans’ mentorship and friendship since he first approached me to become a Monitoring Editor in 2010.

I am both excited and humbled to become JEB’s next Editor-in-Chief and I look forward to serving our community over the coming

years and continuing Hans’ legacy. A large part of my future focus will be finding ways to enhance JEB’s reputation for publishing high-quality, innovative papers and to support our community, especially early-career researchers. I will continue the editorial policy of welcoming papers from a wide breadth of disciplines within comparative physiology and ensuring that the journal maintains its strong biomechanics profile. One of the great strengths of JEB is the diversity of its content, and this in part ensures that we are well positioned to respond to new developments and evolve if necessary. For example, in a recent Editorial (<https://jeb.biologists.org/content/223/10/jeb229294>), we promoted and encouraged the submission of comparative studies that incorporate meta-analyses. Meta-analytic approaches, especially those that integrate phylogenetic analyses, are being used to illuminate phenomena in comparative physiology and biomechanics. We felt that encouraging such contributions would be a positive initiative for JEB. More generally, keeping abreast of new approaches and emerging areas that broadly fit within our remit is essential and will be an on-going objective for us. We have run two community surveys in the past year where we received lots of feedback and ideas from members of the community. Reflecting upon these and seeking additional feedback will help to shape my thoughts on future strategies for JEB, our authors, reviewers and readers.

In stepping into the role of Editor-in-Chief, I am particularly fortunate to be supported by an outstanding team of enthusiastic editors and a dedicated editorial staff, who take such care in communicating with our many authors and reviewers. The composition of our editorial team is crucial in terms of scientific coverage, but also in representing and reflecting the diversity of our community. With this in mind, I am pleased to announce that Sheila Patek and Patricia Wright (both existing JEB Editors) have agreed to become Deputy Editors-in-Chief, and together we will form the JEB leadership team. In addition to providing strategic input, Sheila will have a key role as a voice for the biomechanics community while Pat will provide advocacy and enhance support for early-career researchers. With the departure of Hans, Stuart Egginton from the University of Leeds, UK, has joined the team of Editors. Stuart’s areas of expertise include cardiorespiratory, exercise and muscle physiology and he works across diverse taxa, including humans. Sadly, after 20 years of loyal service as a Monitoring Editor (including 15 years as Deputy Editor-in-Chief), Andy Biewener will be stepping down in 2021. I am delighted to announce that Monica Daley (University of California, Irvine, USA) has agreed to bring her expertise in comparative neuromechanics to the team when Andy departs.

I look forward to responding to emerging trends and directions in science and publication in the coming years and make a commitment to ensure that all authors, irrespective of their funding situation, are able to submit their best research to JEB so that we can carry on delivering a strong and successful Journal of Experimental Biology and continue to publish papers of outstanding merit that are of interest to our community.