

EDITORIAL

JEB is 90!

Every anniversary is a milestone, but some are more significant than others, and 90 years is certainly an achievement, especially when you consider how shaky this particular 90-year-old's start was. Within 2 years of its launch in October 1923, the fledgling *British Journal of Experimental Biology* was on the verge of bankruptcy, despite its success in championing the emerging field of 'experimental biology'. The future was far from bright until the Cambridge zoologist and entrepreneur George Parker Bidder III founded The Company of Biologists in a bid to purchase and rescue the ailing journal. Since Bidder's intervention, and its subsequent rebirth as *The Journal of Experimental Biology* in 1925, JEB has gone from strength to strength, and few eras have seen the accelerating pace of progress – both in scientific publishing and in the journal itself – that the journal experienced in its ninth decade.

In the same way that technology has revolutionised how people communicate with each other across the world, the way that journals interact with their communities (authors, readers, reviewers, editors) has also been transformed. It is easily forgotten that, only 10 years ago, most manuscripts were submitted as hard copies, with electronic files being mailed to the Editorial Office on 5.25-inch floppy disks, Zip disks and CD-ROMs. Most communication with the Office was by mail, fax and telephone, and it was not unusual for the submission and peer review of manuscripts to be delayed for weeks or months because authors were working in the field with no means of communication. The widespread use of email and the introduction of an online submission and manuscript trafficking system now allow authors, reviewers and editors to perform their roles in the publication process and communicate with journal staff wherever they are in the world.

The way that researchers use and access information has also changed considerably over the past decade. Ten years ago, most researchers still relied on hard copies of journal articles, either as paper reprints requested from the author or as personal print subscriptions or archived volumes in institute libraries; Research

Articles could only be accessed from the journal website as part of an issue. However, now, instead of having to wait for a journal issue to be edited, compiled and distributed, PDFs of unedited author manuscripts are available as Advance Online Articles soon after they have been accepted for publication. These early versions of the article are then replaced by a final, fully linked and searchable full-text article, enhanced by in-house scientific copyediting of text and figures, proofreading and journal layout, and complete with online-only supplementary material.

In 2010, we relaunched the journal website with a new-look XML-based Web 2.0 site. The major advantage of this technology change was to improve navigation and searchability both within and between journal articles and to provide a stable platform for future technology developments. At the same time, we acknowledged the fact that many researchers are now accessing the journal when they are not at their desks, introducing a 'mobile web' version of the journal that is optimised for searching and browsing content on a smaller hand-held device such as a smart phone.

The business model that underpins academic publishing has changed dramatically in recent years as 'open access' ('author-pays') models of publishing have become more prevalent and many institutes and funding bodies require researchers to make their research more publicly accessible. JEB has embraced this revolution. In 2006, the entire JEB archive back to 1923 was digitised and made freely available on the journal website. As part of our commitment to maximising the free availability of articles online, authors now have the option to publish their articles under either a traditional subscription model (in which there are no author charges, articles become freely available on the journal website 6 months after publication and the journal deposits articles in PubMed Central for release after 6 or 12 months, as mandated by the funding body; 'green' open access) or a 'gold' open access model [in which authors pay a subsidised fee to publish under a creative commons (CC-BY) licence, and the article is immediately accessible both on the journal website and in PubMed Central at the point of publication].

One of the key aims of JEB has always been to adapt to the changing requirements of the integrative biology community. We very much consider ourselves to be a 'community' journal and, over the past decade, have tried to listen to your feedback and expand the content within the journal to allow researchers to keep abreast of developments in the field.

The Inside JEB section, summarising and highlighting key articles published within the journal, was launched in 2001 and is now a well-established and popular section of the journal. It was subsequently joined by Outside JEB, written by a team of active researchers, ranging from postdocs to senior faculty, and providing short summaries of papers published in other journals in the field. A year later, JEB Classics – revisiting historic JEB papers from a modern perspective – was added to the expanding magazine section. This feature proved remarkably popular as a teaching aid and, having compiled two booklets of JEB Classics articles, featuring research published from 1923–1953 and 1955–1968, we



are currently compiling a third, taking us through the 1970s to 1985. JEB Classics concluded naturally at the end of 2012, when we had reached the historic articles published in the mid 1980s, and has been replaced by a new section detailing historic papers published in other comparative physiology journals, called simply 'Classics'. The most recent addition to the magazine section – News – reports on information of interest to the community, announces awards and celebrates the achievements of JEB contributors.

In response to direct feedback from the community, two additional article types have recently been added to our research content: Methods & Techniques and Short Communications. The Methods & Techniques section offers researchers the opportunity to publish novel and innovative advances in methods of data collection and analysis, ideally applying the new technique to physiological data. Similarly, the aim of Short Communications, launched earlier this year, is to provide the community with a venue for publishing high-quality, self-contained pieces of original hypothesis-driven research in a shorter format and more informal style than the standard Research Article; it also allows the presentation and debate of novel hypotheses based on existing research. Both of these new article types are subjected to the journal's usual rigorous peer review procedures and have been greeted with enthusiasm by the community.

In the late 2000s, when social networking was taking the internet by storm, JEB joined the trend, signing up to Twitter and Facebook. Tweeting regularly from conferences and making daily posts promoting the journal and related activities on Facebook, we now have a strong presence in the world of social networking and provide a forum for community discussion. The Company of Biologists has also recently launched a YouTube channel

(<http://www.youtube.com/user/CompanyofBiologists>), featuring supplementary movies from some of the articles published in JEB and The Company's four other journals, together with videos about the history and ethics of The Company and reports from the JEB Symposia and COB Workshops that The Company organises and funds.

We continue expanding our commitment to publicise the research published in JEB, building strong connections with the media, ranging from science reporters at *The Economist* and BBC to presenters on the CBC's Quirks and Quarks show and NPR's Science Friday team. Recent articles that captured the media's attention include research on the male traits that catch the eye of female peahens, an explanation for why homing pigeons get lost around Cornell's 'Birdmuda' triangle and evidence that crocodile's faces are even more touchy-feely than human finger tips.

Given the pace of change encountered over the past 10 years, we are looking forward to the decade ahead, as we get ready to celebrate the journal's first centenary in 2023; whatever happens between now and then, our commitment is to serve our community by continuing to publish the most exciting developments in the field of comparative physiology.

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