

## EDITORIAL

# New year, new developments: a look back and a look ahead

James Briscoe<sup>\*,§</sup> and Katherine Brown<sup>†,§</sup>

As we look ahead to the new year, we are pleased to see the developmental biology and stem cell field going from strength to strength. For many of us, 2022 was the year that we began to see a return to (a new) normality after the challenges and difficulties of the last couple of years. For those of us who have been able to, it has been great to meet again at conferences and workshops, and to renew long-standing friendships and establish new ones. Hearing about the latest work and the progress made in the field has been inspiring; being able to discuss the science face to face has reminded us of the excitement that science can bring. It is with this restored sense of optimism that we enter 2023.

Development is a not-for-profit journal and our mission is not only to publish the best science in the field but also to support the developmental biology and stem cell community. We are particularly committed to supporting early-career researchers and fostering the next generation of scientific leaders in the field. We understand the unique challenges that early career researchers face. Our ‘Transitions in development’ interview series (<https://journals.biologists.com/dev/collection/8029/Transitions-in-development>) features researchers who have recently established their own research group. The interviewees discuss both the joys and difficulties they’ve encountered along the way and each article illustrates the individual career paths taken by investigators. Everyone’s story is unique and it’s clear that there is not a ‘one-size-fits-all’ when it comes to securing an independent position and establishing a research programme. We hope these articles offer encouragement to others going through the same transition.

We all know that the step from postdoc to principal investigator is one of the most difficult career stages in academia. In recognition of this, we are excited to launch our ‘Pathway to Independence’ programme ([journals.biologists.com/dev/article/149/23/dev201456/285866](https://journals.biologists.com/dev/article/149/23/dev201456/285866)). This new scheme offers mentorship and networking opportunities to postdocs about to apply for their first independent academic position. We will also help to raise the profile of the individuals selected to be part of the programme by showcasing their work on the Node and including a feature about them in Development. The scheme is competitive but any researcher active in a field relevant to Development (animal and plant developmental biology, stem cells or regeneration) who is planning to go on the job market in 2023 is welcome to apply by the closing date of 31 January 2023. Please spread the word.

Another new initiative in 2022 was the launch of ‘In preprints’ (<https://journals.biologists.com/dev/collection/7815/In-preprints>). We’ve all seen the increase in preprints over the last few years and it’s clear that they are becoming an important feature of how we

communicate our science. At Development, we’ve been long-standing preprint enthusiasts, and this year more than a third of our published articles were preprinted prior to formal publication. However, the growth in preprints means that it can be difficult to keep up with the latest results in the field and to assess the importance and relevance of studies outside our expertise. We introduced ‘In preprints’ to help address this. Each article provides a succinct commentary of one preprint or a small number of related preprints. We hope this will encourage further reading of the preprint and that these articles provide a useful guide to stay on top of the latest research in the field. We have been encouraging writing partnerships between more established investigators and early career researchers that haven’t previously worked together. If you are interested in writing an ‘In preprints’ article, even if you don’t yet have a preprint or writing partner in mind, do get in touch and we’ll consider your proposal.

In 2022, we held the fifth conference in our biennial series ‘From Stem Cells to Human Development’, and we were delighted to have been able to hold this meeting in-person after 2 years of virtual journal meetings. The organisers were myself (J.B.), Prisca Liberali, Samantha Morris and Wei Xie. The meeting provided a forum for researchers in this burgeoning field to come together and, as always, the science was very strong. Our experience from the pandemic also allowed us to include an online session with talks and a discussion on the technical, ethical and legal challenges of studying early human development. A recording of this session is available (<https://thenode.biologists.com/development-presents-from-stem-cells-to-human-development-videos/development-presents/>).

This year, our meeting will be on ‘Unconventional and Emerging Experimental Organisms in Cell and Developmental Biology’, at Wotton House, Surrey, UK, on 17-20 September 2023 (<https://www.biologists.com/meetings/unconventional-organisms-23/>). Organised by myself (J.B.), Swathi Arur, Gautam Dey and Cassandra Extavour, the aim is to bring together researchers with expertise in unconventional experimental organisms to share their knowledge and exchange technical approaches. It has an exciting line-up of invited speakers covering all three kingdoms of life that should provide a stimulating survey of the diversity of life as well as catalysing the dissemination of ideas and methods to new organisms. Registration will open shortly and we hope to see you there.

We published two Special Issues in 2022. ‘The Immune System in Development and Regeneration’, led by two outstanding Guest Editors, Florent Ginhoux and Paul Martin, contains a collection of primary research papers, reviews and commentaries that explore the involvement of the immune system in development and regeneration. We hope it offers a fresh perspective and new insight and encourages more submissions in this area of increasing interest and importance to the field. Our other Special Issue ‘Modelling Development *In Vitro*’, assembled by our Academic Editors Jim Wells and Matthias Lutolf, featured innovative *in vitro* models of development that covered multiple organ systems, developmental mechanisms and disease pathologies. These

\*Editor-in-Chief, Development  
†Executive Editor, Development

§Authors for correspondence ([james.briscoe@crick.ac.uk](mailto:james.briscoe@crick.ac.uk);  
[katherine.brown@biologists.com](mailto:katherine.brown@biologists.com))

 J.B., 0000-0002-1020-5240; K.B., 0000-0001-9110-8276

highlighted the opportunities *in vitro* approaches provide for exploring fundamental questions in both developmental biology and disease processes.

We are now accepting submissions for our next Special Issue: 'Metabolic and Nutritional Control of Development and Regeneration'. This issue will be coordinated by our Associate Editor Irene Miguel-Aliaga (Imperial College London and MRC-LMS, UK) and three Guest Editors: Lydia Finley (Memorial Sloan Kettering Cancer Center, USA), Joshua Gendron (Yale University, USA) and Jared Rutter (University of Utah, USA). We are keen to see submissions that demonstrate the diversity of metabolic programmes operating in developing plants and animals, that showcase the role of metabolism in development, stem cell biology and regeneration, and that explore how nutritional inputs modulate cell and tissue behaviours. The deadline for paper submissions is 15 May 2023.

This year also sees changes in our editorial team. Ykä Helariutta, who has served as an Academic Editor for 5 years is stepping down. As a replacement, we have recruited Dominique Bergmann. Dominique is a plant developmental biologist using multidisciplinary approaches to study cell fate, stem cell self-renewal and cell polarity in leaves and we are delighted to welcome her to the team. We have also said goodbye to our long-serving Senior Editor, Seema Grewal. Seema was with us for 12 years and has been responsible for commissioning and editing many of the reviews and commentaries that appear in the front section of the journal. Fortunately, she hasn't gone far as she has taken over as the Executive Editor of our sister publication, *Journal of Cell Science*. Although Seema leaves big boots to fill, we are pleased to welcome Laura Hankins as our new Reviews Editor. Laura did her PhD with Jordan Raff working on centriole biogenesis in *Drosophila* embryos before joining The Company of Biologists as our Science Communications Officer in 2021. Please say hello to Laura if you see her out and about at meetings this year.

Development remains committed to innovation in scientific publishing; 40% of the research papers we published in 2022 were Open Access. Authors now have three options for publishing in Development. A traditional route allows authors to pay nothing to publish and makes the article available to Development subscribers for 6 months before it becomes freely available to everyone. Alternatively, authors can publish using Gold Open Access with an article processing charge of £3300. This means the article is immediately available to everyone upon publication. Finally, an increasing number institutions now have a 'Read and Publish Deal', providing unlimited access to all our content, and corresponding authors from these institutions have unlimited free Open Access publication for research papers. To check if your institution has such a deal, see <https://www.biologists.com/library-hub/read-publish/participating-institutions/>.

Development also continues to collaborate with Review Commons (<https://www.reviewcommons.org/>), the journal-independent peer review platform that allows authors to have their

manuscript peer reviewed in a journal agnostic manner. Review Commons sends submitted papers to referees without an associated journal name. Once reviews are received, authors can respond to the referee comments before deciding to submit the work to one of the affiliated journals. The manuscript, reviews and response will then also be posted on bioRxiv as a 'Refereed Preprint'. If you choose to submit your study to Development, we use the peer review comments, author response, and our editorial assessment to decide whether the paper is appropriate for the journal. We have been pleased with our experience of this process and authors have also expressed their satisfaction with the initiative. We will continue to support Review Commons in 2023.

Promoting diversity and inclusion in our field and in scientific publishing continues to be a priority for us. We established the Node Network – a global directory of developmental and stem cell biologists – several years ago. This inclusive list, now with over 1000 members, is designed to help you find conference speakers, referees, panel members and potential collaborators. Please consider using the Node Network ([thenode.biologists.com/network/](https://thenode.biologists.com/network/)) next time you're looking for a developmental or stem cell biologist, and if you haven't already, please join: you can choose to list your gender, race/ethnicity and sexual orientation, alongside your scientific interests. Development is also a signatory to the 'Joint commitment for action on inclusion and diversity in publishing' (<https://www.rsc.org/new-perspectives/talent/joint-commitment-for-action-inclusion-and-diversity-in-publishing/>), which comprises a group of publishers working to improve our understanding of the diversity in our community and to improve representation and inclusivity of diverse groups. We recently began collecting self-reported data on the gender of our corresponding authors and reviewers. Over the past year, 34% of corresponding authors and 33% of referees self-identified as women – we believe these numbers are reflective of the proportion of women Principal Investigators (who make up the majority of our corresponding author and reviewer pool). In line with the Joint Commitment's recommendations, we are now looking at implementing data collection on race and ethnicity (although we will of course allow people to opt out of providing this information, as we currently do for gender) so that we can better understand our community, identify any disparities and work towards addressing them. We realise there is still a long way to go and we are committed to making further progress in 2023.

Finally, we would like to thank the editorial team for their hard work and we would like to thank you, our readers, authors and referees. A list of referees who have completed reviews for the journal in 2022 – without whom the journal could not function – is provided in the supplementary information. Development is here for the developmental and stem cell biology community and we are very grateful for your support. We wish everyone a productive and successful 2023 and we hope to see you or hear from you in the coming year. If you have feedback, suggestions or just want to say hello, please get in touch.