

EDITORIAL

And one last thing

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As this is my last year as Editor in Chief of *Development* (I will be stepping down in September 2018), it is time to take stock of the achievements of these exciting past 9 years. The face of our field has changed quite dramatically during this period with the rise of stem cell biology and the beginnings of a new era for human developmental biology. Boosting *Development*'s visibility in these two areas has been a priority of my mandate, which has seen the inception of the new 'Stem Cells and Regeneration' and 'Human Development' sections of the journal. As part of these efforts, we recruited a dedicated Reviews Editor focusing on the stem cell field (Caroline Hendry) and we have produced several special issues dedicated to stem cell biology (Pourquié et al., 2013), organoids (Little, 2017) and human development (Pourquié, 2015). A call for papers for a new special issue on Human Development to be published in 2018 is currently open (<http://dev.biologists.org/content/special-issue-human-development>) and I would like to take this opportunity to encourage you to submit any interesting work you might have in this area. Overall, feedback and surveys indicate that these changes have been well received by the developmental biology community and we have seen that papers in these sections tend to be highly cited.

To further support this growing community, we have also initiated a biennial meeting sponsored by The Company of Biologists and *Development* entitled 'From stem cells to human development', which aims to showcase the latest research in human developmental biology. This year's meeting, the third in the series, is organised by Paola Arlotta, Jason Spence, Ali Brivanlou and myself. It will take place in Wotton House in the UK and lines up a spectacular list of speakers (<http://www.biologists.com/meetings/from-stem-cells-to-human-development-september-2018/>). Previous meetings have been extremely well received and we are confident that this one will also be terrific.

Of course, we have continued to promote more traditional areas of developmental biology by maintaining an expert team of editors covering the major themes of our field. We have re-emphasised the commitment of our journal to plant developmental biology, through the publication of a special issue (Leyser, 2016) and the recruitment of world leaders – Ben Scheres, Ottoline Leyser and Ykä Helariutta during my tenure – as editors for plant papers. With the advent of advanced genomic technologies, the evo-devo field is growing, and one of my main priorities when I took up the position was to recognise this through the appointment of a dedicated evo-devo editor – Nipam Patel. Developmental biology is becoming increasingly quantitative and we have encouraged this move with the publication of papers at the interface between our discipline and physics and computing sciences. We recently published a special issue celebrating the 100th anniversary of the publication of

On Growth and Form by D'Arcy Thompson (Thompson, 1917), coordinated by our editor Thomas Lecuit and guest editor L. Mahadevan (Lecuit and Mahadevan, 2017). A quick look at the table of contents of this issue clearly shows how much understanding the physical principles underlying morphogenesis has become a major area of modern developmental biology.

The development of single-cell technologies for sequencing and sophisticated lineage analysis has recently exploded, allowing the exploration of uncharted territories. As a group of editors, we are excited about the potential of this field to provide new insights into the degree of heterogeneity and flexibility in cell fate and lineage. We are therefore planning a special issue on this theme and would like to encourage you to consider submission of your relevant work – keep an eye on our website for further details in the near future.

More broadly, techniques in developmental biology are becoming increasingly sophisticated, as can be seen by looking through the archive of our 'Techniques and Resources' section, which has proven to be a real success. Also, *Development*'s front section has been considerably reinforced during my time as Editor in Chief, with outstanding review articles, posters, interviews and so on. This was made possible thanks to the recruitment of Seema Grewal and Caroline Hendry, who form a superb team of Review Editors. Last, but not least, we have created a community website called the Node (<http://thenode.biologists.com>) where anyone can post news of interest for developmental biologists. Under the helm of Eva Amsen, Catarina Vicente and now Aidan Maartens, the Node has become an increasingly popular hub for our community with posts about papers, meetings, teaching initiatives as well as job offers and a wide diversity of other content.

During the last 9 years, *Development*'s publication process has drastically changed. When I started, the journal was still printed on a traditional press located in the company's Cambridge office, which was closed down soon after and replaced by digital printing, with the online version becoming our primary format. We have made a number of changes to streamline the submission, reviewing and publication process. For instance, last year we introduced the referee cross-commenting system (Pourquié and Brown, 2016), which has proved to be a real success. This year, beginning with this current issue, we are moving to a continuous publication model. This means that we will publish each paper as soon as it is ready – building an issue gradually over a two-week period, rather than waiting for a full issue to be compiled before publishing. For more information on continuous publication, please see our FAQs page (<http://dev.biologists.org/content/continuous-publication>). We hope that this will result in faster publication times for authors, and earlier access to the latest research for our readers. As part of these changes, readers will now have even more flexibility in the alerts they receive, and can sign up to daily or weekly updates, or just an update when each issue closes. Alert preferences can be updated at <http://dev.biologists.org/alerts>. Given the introduction of the General Data Protection Regulation (GDPR) by the European Union (see <http://www.biologists.com/what-is-gdpr/> for more details), we would also

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urge members of the community to sign up for news alerts at <http://www.biologists.com/subscribe/> to ensure they are kept up to date on other journal news, such as calls for papers, upcoming special issues and journal meetings.

We have also decided to launch an ‘Outstanding paper prize’, which will be awarded yearly to the first author (or authors) of the paper selected by the editors of the journal as the best published in that year. For further details on this new award, please visit <http://dev.biologists.org/content/development-outstanding-paper-prize>.

One of the major recent developments in scientific publication is the rise of preprint servers. Until recently, these were mostly used by physicists and mathematicians, but they are now being embraced by an exponentially increasing fraction of biologists, including developmental biologists. For those not familiar with this system, preprints are manuscripts that are deposited on a public server such as bioRxiv, making them freely accessible to the scientific community prior to peer-review, thus accelerating the dissemination of research results. Preprints are now widely accepted and can be cited in grant and job applications. Development has been highly supportive of this initiative, implementing an automatic submission pipeline to and from bioRxiv. The Node posts a hugely popular monthly recap of all the developmental biology (and related) preprints published on the different servers (<http://thenode.biologists.com/tag/preprints/>) and The Company of Biologists is also investigating other ways of supporting the community’s use of preprint servers – look out for more news in the near future. It is hard to imagine that the rise of preprint servers will not profoundly change the face of scientific publication.

While I still have several months left of my tenure as Editor in Chief, I would like to take this opportunity to thank all the editors I have had the privilege to work with. These include past editors Magdalena Götz, Alexandra Joyner, Ottoline Leyser, Rong Li, Shinichi Nishikawa, Ben Scheres, Geraldine Seydoux and Ken Zaret, our guest editors Melissa Little and L. Mahadevan, and our current team of Deputy Editor Steve Wilson and editors Paola Arlotta, Benoit Bruneau, François Guillemot, Ykä Helariutta, Gordon Keller, Haruhiko Koseki, Thomas Lecuit, Nipam Patel, Liz Robertson, Austin Smith, Susan Strome and Patrick Tam. I want also to address my very special thanks to Katherine Brown, our Executive Editor, without whom this would not have been possible. It has been a real pleasure to work with her and the team and I will certainly miss this excellent group of colleagues. I am also grateful

to our Publisher Claire Moulton and to the Development production team in Cambridge as well as to the board of The Company of Biologists and particularly the directors in charge of Development: Sarah Bray, James Briscoe, Kate Storey and, previously, Cheryll Tickle. Finally, the journal would not function without its dedicated referees; I and all the other editors are hugely grateful for the amount of time you put in to reviewing for the journal and helping us to ensure we publish the best papers we can. A full list of referees from the past 12 months is included as supplementary information to this article, and we thank each and every one of you.

And one last thing... I see a very bright future for developmental biology. As noted above, our discipline is becoming more quantitative, genomic technologies are opening up a new world of possibilities for analysis in non-traditional model systems, and we finally have the potential to unravel human development, largely thanks to the progress made by stem cell biology. Richard Feynman is often quoted for having said that ‘What I cannot create, I do not understand’. Deconstructing the embryo *in vitro* to understand the fundamental principles of morphogenesis is becoming an increasingly popular strategy. Recent spectacular developments have shown that *in vitro* cultures of pluripotent stem cells can be coaxed to generate various embryonic structures. Such approaches will certainly guide the development of regenerative medicine, which in the future could help recreate lost or damaged anatomical structures. I am confident my successor will have a great time trying to steer Development through a rapidly evolving field in a quickly changing publication world. I wish them all the best.

Supplementary information

Supplementary information available online at <http://dev.biologists.org/lookup/doi/10.1242/dev.162446.supplemental>

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