

EDITORIAL

New Year Plans

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Scientific publishing has come under scrutiny in the last few years. There has been justifiable dissatisfaction with how some journals operate and this, together with changes such as online publishing, the Open Access movement and the increasing use of preprints, is leading to a transformation in how research is published. The pace of change and the resulting uncertainty has only heightened in recent months with the announcement of ‘Plan S’ by an international consortium of research funders. The aim of this initiative, also referred to as ‘cOAlition S’, is to mandate that ‘scientific publications on the results from research funded by public grants provided by national and European research councils and funding bodies, must be published in compliant Open Access Journals’. The laudable ambition is to make research findings immediately accessible for all to read. At the same time, the plan calls for an end to ‘hybrid’ journals, which publish both open access and subscription content. As Development is one such journal, we are paying close attention to this initiative.

At the moment we are still awaiting further details: it is unclear precisely when and how the plan will be implemented. There will likely be financial constraints, although it appears that a cap on Article Processing Charges (APCs) will no longer be set. We do not yet know how scientists who do not comply will be punished, nor is it clear how the many funders who are not part of cOAlition S will view this initiative (in particular, will they make additional APC funds available to authors?). Nevertheless, it is clear that this initiative presents both challenges and opportunities to academic journals. At Development, our mission is to publish the highest quality research in developmental biology, whether in our traditional areas or in new and emerging areas of the field. In our experience, the best way of doing this is through editorial assessment and prepublication peer review, overseen by research-active academic editors supported by experienced professional staff. We are pleased that Plan S promises to improve access to research, but we are adamant that this should not be at the expense of quality. There are unavoidable costs associated with maintaining quality and it is important that the financial aspects of Plan S do not place this in jeopardy. We believe that the role Development plays in assessing, improving and assembling the best research in developmental biology is valuable to the field.

But, Development is not just a repository for research papers. We provide a place for the developmental biology community to meet, discuss and exchange news. Alongside our research papers, we commission and publish reviews and commentaries that summarise and synthesise developments in the field. These include Hypothesis articles that explore new ideas, Primers that introduce concepts to those new to the field, and opinion pieces

from leaders in the field. To recognise and promote the medical and societal impact of developmental biology, in 2018 we started a series of articles advocating for the importance of our research beyond its immediate field (Maartens et al., 2018). This is most obvious in areas such as regenerative and reproductive medicine, in which technologies, including genome engineering and *in vitro* culture methods, are beginning to raise new and significant issues. Development provides a forum to discuss the history, ethics and practicalities of these approaches. As with our research papers, a review or commentary published in Development can be relied on to be trusted, responsible and insightful.

Development is also more than the papers we publish. As a not-for-profit organisation, we act as a charity to support and foster the community. We fund developmental biology societies, conferences and workshops that allow developmental biologists, in all corners of the world, to come together to discuss their latest research and exchange ideas. Moreover, we run the Travelling Fellowships scheme, which funds visits by graduate students and post-doctoral researchers to other laboratories, for periods of a few weeks to a few months, to pursue collaborative projects. This scheme is open to scientists worldwide and the application process is very simple; the next deadline is March 15th 2019. In addition, we support and run both the Node and preLights. The Node goes from strength to strength, typically receiving more than 10,000 visitors a month. Although preLights is a much newer initiative, early indications are that it is proving popular, helping readers to navigate the large number of preprints and it is beginning to stimulate scientific discussion of new results.

All these endeavours cost money, of course, but we believe that they are worthwhile as they offer unique and indispensable contributions to the field that other organisations, whether commercial publishers or funding agencies, do not support. We hope that whatever the eventual details, Plan S will allow us to continue supporting and promoting our field as well as publishing great developmental biology research. Consultations about cOAlition S by the European Commission and various funding agencies are currently ongoing. We will be making our views clear and we would also encourage readers of Development to engage with the consultations and make their feelings known. Scientific publishing and the role of journals is integral to our field and it is important that changes are to the benefit of all science and scientists. It would be a shame if the consequences of Plan S are to unintentionally disadvantage groups of scientists or to undermine confidence in science.

The start of the year is a time for renewal and you will notice a few changes to Development from this month. As well as the changes to the editorial team announced in the previous editorial, we have overhauled our Editorial Advisory Board to bring in some fresh names and to ensure we have expertise that covers the increasing breadth of developmental biology. The board provides invaluable support to Development – not only in providing advice about the suitability of papers for the journal, but also in giving input on important strategic decisions. I would like to thank the continuing,

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as well as the outgoing, members for their enduring help and support, and welcome the new members of the board.

A couple of years ago we introduced cross-referee commenting to the peer review process. This allows reviewers to see and comment on each other's reviews to provide extra feedback to help the editor decide on the appropriate course of action. This is now working well and, although referees only avail themselves of the opportunity in about a quarter of all cases, it helps to generate more consensual outcomes and clarify uncertainties. We encourage reviewers to use this facility if they feel that it will be useful for the editor. This year, in the next step to improve the transparency and quality of peer review, we will begin to publish reviewers' comments alongside the accepted papers. One thing that stands out about *Development* is the high standard of the refereeing; this ensures confidence in the work we publish and is appreciated by authors. Now readers will also be able to read referees' and the editor's comments as a companion to the final paper. You will find these as a PDF in the 'Info & Metrics' tab on a paper. Those of you who review for the journal, please note that – by agreeing to review – you are agreeing to have your comments published (anonymously); authors wishing to opt out of having the peer review history published will be able to do so.

Scientifically, 2019 is already shaping up to be a bumper year for *Development*. We have a Special Issue on 'Development at the single cell level', guest edited by Barbara Treutlein and Allon Klein. The full content will be available in June, but you will begin to see research papers for this issue come online as they are accepted – with the first one being published this month. Our next Special Issue will focus on Chromatin and Epigenetics. Recent years have seen huge advances in our understanding of how DNA and histone modifications, chromatin architecture and nuclear organisation impact on gene expression to

drive developmental processes. Moreover, we now have a much greater appreciation for the complex layer of RNA-based regulation that can exert epigenetic effects on cellular and organismal phenotypes. This understanding, combined with technological advances – from genome-scale assays of transcription factor activity and 3D chromatin structure, to dynamic imaging of transcription at individual loci – now provide unprecedented opportunities to examine how chromatin-based and epigenetic mechanisms regulate development across the plant and animal kingdoms. Several of our editors – Benoit Bruneau, Haruhiko Koseki, Susan Strome and Maria-Elena Torres-Padilla – are experts in this field and they will be coordinating this Special Issue. The deadline for article submission is March 31st 2019 and the issue will be finalised in late 2019, although as with all our content, continuous publication means that we will publish articles as soon as they are accepted. For more information, please visit dev.biologists.org/content/chromatin.

Finally let us close by thanking you: our readers, authors and referees. All those who reviewed for the journal in the past 12 months are listed in the supplementary information. We are enormously grateful for your time and dedication. Similarly, thank you to all our authors. We look forward to receiving further studies from you. On that note, let's make a collective New Year's resolution: that we each submit a paper to *Development* in 2019.

Supplementary information

Supplementary information available online at
<http://dev.biologists.org/lookup/doi/10.1242/dev.174664.supplemental>

Reference

Maartens, A., Prokop, A., Brown, K. and Pourquié, O. (2018). Advocating developmental biology. *Development* **145**, dev167932.