

Development after Chris Wylie

I became a member of the Board of The Company of Biologists (CoB) in 1986, just before Chris Wylie renamed, redesigned and relaunched the *Journal of Embryology and Experimental Morphology (JEEM)* as *Development*. Despite a slight wobble on my part about the new name, I quickly became a staunch supporter of Chris's efforts. In retrospect, I'm not sure why I wobbled. Perhaps it was because by this time I had already published some 11 papers in *JEEM* and I didn't want them to disappear into obscurity. Perhaps I'm just conservative. But in the end I accepted that one-word titles were the way to go, and I was pleased that the new name did remove the bizarre concept of 'experimental morphology', something I had always struggled with. And in the fullness of time the CoB did, of course, make all the old *JEEMs* freely available online, so my fears, if such they were, were unfounded. Indeed, so confident did I become about the future of *Development* that, when I was offered the choice of having a paper published in the last issue of *JEEM* or the first issue of *Development*, I went for the latter!

Chris served as Editor in Chief of *Development* for some 16 years. He describes well the anarchy that was scientific publishing in the days before online submission: the manuscripts full of typos, black-and-white figures mounted on pieces of card and lettered with Letraset or Rotring pen; the phone calls, the missing papers, and the rolls and rolls of fax paper: it looked like such fun. I sometimes regret that I was spared this excitement, but I did work in the background at the CoB to try to keep the subscription price down and to increase Chris's annual page limit (not that he paid much attention to it anyway!).

In 2000, I became chair of the CoB's *Development* Advisory Group, ably assisted by Martin Raff and Daniel St Johnston. It was not long after this that Chris decided to stand down as Editor in Chief, and it fell to us to find a replacement. It happens quite frequently that nomination committees nominate one of their own for the job at hand, and this is exactly what happened. I hope Martin's and Daniel's memories agree with mine in that it was their idea that I should stand and that I did, initially, demur. But the truth is that I found the idea very exciting: *Development* was a terrific journal, developmental biology was in a very exciting phase, and I thought I could make a decent job of it.

So I recruited some new editors, including Ruth Lehmann as Deputy Editor in Chief, and I worked with Mark Patterson, then the CoB's Publisher, to hire Jane Alfred from *Nature Reviews Genetics* to become the journal's Executive Editor. This was probably the smartest thing I did while I was Editor in Chief. Jane and I worked really well together (at least, I think we did): we discussed areas of developmental biology that were important and where we needed new editors, we worked on the front end of the journal, Jane commissioned some wonderful reviews, and we undertook a subtle yet effective redesign. Not long after we started at *Development* we moved from a string-and-sealing-wax online submission process to a bells-and-whistles version hosted by HighWire and called Bench>Press. We worked quite hard to customise this for the needs of *Development*, and I think it works pretty well. Certainly, it makes it easy for author, referee or editor to submit, review or adjudicate any time, any place, anywhere. Although, judging from Chris's recollections, the reviewing times

haven't sped up very much, the process is certainly a lot simpler and less error prone, and the rate-limiting step is not, if it ever was, the means by which the participants in the review process communicate.

What my colleagues and I tried to do as editors was to be editors: to look at papers as they came in, to decide whether they should be sent out to review, to choose the reviewers, and then to make a decision based on the reviewers' comments. I was keen that as practicing scientists we should come to a view immediately as to whether a paper should be sent for review. There is no point in wasting the time of author and reviewer if the paper stands no chance of being published. Rejecting without review was often unpopular, and we would occasionally relent if an author made a persuasive case, but it was undoubtedly the right thing to do. Similarly, I was keen that we should make a clear decision based on the referees' comments and not go back and forth from author to reviewer until every one of the reviewers' points was addressed. To do this would have been intellectually tedious for the editor and highly demoralising for all concerned, and I don't think it would have improved the papers very much. I also worked hard on instilling a culture of editorial consistency and team spirit among the academic editors, so that each of us had the same idea about what 'makes' a *Development* paper.

Another task that fell to editors and to the production team was to identify instances of plagiarism and figure manipulation, both of which, thanks to Google and Photoshop, have increased in scientific publishing. This did not happen as often as one might have feared, but it did happen and it was always disappointing to experience. *Development* took a strong line here. We became a member of COPE – the Committee on Publication Ethics – and we did not hesitate to report miscreants to their Head of Department, who we expected to investigate the case carefully.

Most of us would agree that a journal's impact factor carries too much weight these days, but I was nevertheless keen to increase *Development's*, which had soared under Chris to double figures at one point, but then begun to decline. But my reasons for doing this were scientific and not economic. First, I wanted to make sure that the papers we were publishing were really interesting and novel – a side effect of which would be to increase the number of citations they gathered (and hence the numerator in the impact factor calculation). To put it bluntly, there were too many papers being submitted with titles like 'The role of gene X in the development of organ Y in species Z' and I was getting rather fed up with these. Rather, I wanted papers that introduced new and multidisciplinary approaches to developmental biology that would take us to a new level of understanding. And second, I wanted to reduce the denominator (the number of papers published). This was not because I was trying to save the CoB money, but because I wanted a journal that was manageable and where people would find virtually every paper to be of interest. And as a side effect the reduced page numbers would save money for the CoB and allow more to be ploughed into supporting science (in the form of meetings and travelling fellowships).

Did we succeed in these aims? Although the impact factor hasn't really climbed, I do think the journal has benefited. I'm sure there are now fewer papers with the generic X, Y, Z title, and the journal

definitely got slimmer while its scope has probably broadened. Could I have done more? Perhaps the most obvious thing is that we could have been faster to claim the area of stem cells, and we could even have trumpeted the arrival of Austin Smith and Ken Zaret as stem cell editors by renaming the journal *Development and Stem Cells*. But I am conservative where names are concerned (see above) and such a move seemed too naked an attempt to attract certain papers at the expense of others. Olivier Pourquié has now, rightly, introduced a special section for stem cells and recruited more editors with expertise in the field, so we'll see how it goes.

In his piece, Chris enumerates the advances that were being made in developmental biology while he was Editor in Chief of *Development*. I don't think there were quite the same advances during my shorter tenure of seven years – how could there have been? But the period from 2003 to 2009 was more than just a period of consolidation for the journal and for its field. It began to see the emergence of a systems biology of development, the area in which I myself now work. In the future, developmental biology will generate

new levels of understanding through the mathematical integration of the physics of cell biology, large-scale analyses of gene expression (proteins as well as RNAs), and high-resolution rapid 4D imaging. This work will realise the potential of developmental biology as an important and fascinating subject in itself, and also as a means to improve the human condition, to allow us to understand the developmental basis of birth defects and by creating more rational approaches to regenerative medicine. Perhaps in the future the journal will be called *Pure and Applied Development*.

I should end by thanking everyone involved in *Development* while I was Editor in Chief. These include John Gurdon and the Board of the CoB, the *Development* Advisory Group under Daniel St Johnston, the terrific production team (and especially Tom Galliers), and my fellow editors and editorial board members. Most of all I thank Jane Alfred for her wisdom, hard work, support and friendship.

Jim Smith
Editor in Chief 2003-2009, *Development*