EVELOPMENT

Stem cells in *Development*: new editor, renewed commitment

With this issue of *Development*, we are delighted to announce that Austin Smith is joining *Development*'s team of editors. Austin will need little introduction to the readers of *Development*; his work on the regulation of pluripotency in embryonic stem (ES) cells has been of enormous importance to the field, and in particular he has characterised the role of LIF in supporting ES cell self-renewal, and has identified Oct4 and Nanog as key transcription factors that regulate ES cell pluripotency. Austin's work has also pointed to roles for Fgf and Notch signalling in the induction of neural cell types from ES cells.

Austin's arrival as an editor emphasises the commitment of *Development* to the field of stem cell biology. Indeed, the two areas are inextricably linked. The analysis of normal development will teach us about stem cell biology: how stem cells are formed, how they divide, how they maintain themselves as stem cells and how they embark on particular developmental pathways. And studying stem cell biology will teach us about nuclear reprogramming and

about the fundamental molecular properties of stem cells, thus helping us understand how they are generated and maintained. Such work will also illuminate the developmental events that occur during tissue renewal and regeneration. Combining stem cell and developmental biology is undoubtedly the surest way to fulfil the therapeutic potential of stem cells.

Stem cell biology can, of course, be analysed in systems ranging from mammalian ES cells to planarian neoblasts, and in tissues from limb to lung. As an example of the latter, we are delighted that this issue of the journal includes a review by Brigid Hogan and Emma Rawlins on epithelial stem cells in the lung. These are exciting times for developmental biologists interested in stem cells, and *Development* is the place to read about the latest discoveries.

Jim Smith, Editor in Chief Jane Alfred, Executive Editor