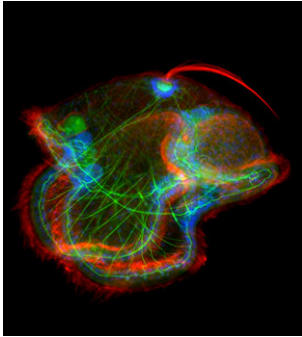


Development



Cover: A pilidium larva of the nemertean ribbon worm *Cerebratulus lacteus* stained for F-actin (green, phalloidin), acetylated tubulin (red) and with DAPI (blue, nuclei). This image, taken by Joseph Campanale, Aracely Lutes and Stephanie Majkut at the 2011 Woods Hole MBL Embryology Course, was chosen by readers of the Node (<http://thenode.biologists.com/>).

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- 3071** A computational image analysis glossary for biologists
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- 3081** Developmental and evolutionary diversity of plant MADS-domain factors: insights from recent studies
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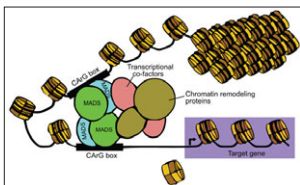
- 3099** Canonical Wnt signaling regulates smooth muscle precursor development in the mouse ureter
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- 3109** One cut transcription factors act upstream of *Isl1* to regulate spinal motoneuron diversification
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- 3120** AP2-type transcription factors determine stem cell identity in the moss *Physcomitrella patens*
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- 3136** Dopaminergic neurons modulate GABA neuron migration in the embryonic midbrain
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- 3142** Electrosensory ampullary organs are derived from lateral line placodes in cartilaginous fishes
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- 3157** Anterior-posterior differences in HoxD chromatin topology in limb development
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- 3168** Dally and Notum regulate the switch between low and high level Hedgehog pathway signalling
Ayers, K. L., Mteirek, R., Cervantes, A., Lavenant-Staccini, L., Théron, P. P. and Gallet, A.



MADS-box transcription factors play essential roles in almost every developmental process in plants. Kaufmann and colleagues review recent findings on MADS-box gene functions in *Arabidopsis* and discuss the evolutionary history and functional diversification of this gene family in plants. **See Review on p. 3081.**

- 3180 Hox genes regulate the onset of *Tbx5* expression in the forelimb
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- 3189 Ectodysplasin regulates activator-inhibitor balance in murine tooth development through Fgf20 signaling
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- 3211 Eukaryotic initiation factor 4E-3 is essential for meiotic chromosome segregation, cytokinesis and male fertility in *Drosophila*
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- 3221 Integrating force-sensing and signaling pathways in a model for the regulation of wing imaginal disc size
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- 3232 Ribosomal biogenesis genes play an essential and p53-independent role in zebrafish pancreas development
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- TECHNICAL PAPERS**
- 3242 Multilayer mounting enables long-term imaging of zebrafish development in a light sheet microscope
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