In their 1983 JEEM paper, Smith and Slack repeated in Xenopus laevis the famous newt organizer-grafting experiments of Spemann and Mangold, and showed unambiguously for the first time that the organizer is responsible for neural induction and dorsalization of the mesoderm. See JEEM classic on p. 3321.

Cover: Sections of an E18.5 mouse embryo stained with Hematoxylin and Eosin (left), and with X-gal (blue, right). The X-gal staining represents transcriptional activity of the endogenous cyclin-dependent kinase 1 (Cdk1) locus. See research article by Satyanarayana et al. on page 3389.

**JEEM CLASSIC**

3321 Induction into the Hall of Fame: tracing the lineage of Spemann’s organizer
Harland, R.

**RESEARCH REPORT**

3325 Temporal progression of hypothalamic patterning by a dual action of BMP
Ohyama, K., Das, R. and Placzek, M.

**RESEARCH ARTICLES**

3333 A functional role for semaphorin 4D/plexin B1 interactions in epithelial branching morphogenesis during organogenesis

3345 Interaction of PIN and PGP transport mechanisms in auxin distribution-dependent development
Mravec, J., Kuběš, M., Bielach, A., Gaykova, V., Petrásék, J., Skůpa, P., Chand, S., Benková, E., Zažímalová, E. and Friml, J.

3355 odd skipped related1 reveals a novel role for endoderm in regulating kidney versus vascular cell fate

3369 Rostral hindbrain patterning involves the direct activation of a Krox20 transcriptional enhancer by Hox/Pbx and Meis factors

3379 Rewiring the retinal ganglion cell gene regulatory network: Neurod1 promotes retinal ganglion cell fate in the absence of Math5
Mao, C.-A., Wang, S. W., Pan, P. and Klein, W. H.

3389 Genetic substitution of Cdk1 by Cdk2 leads to embryonic lethality and loss of meiotic function of Cdk2
Satyanarayana, A., Berthet, C., Lopez-Molina, J., Coppola, V., Tessarollo, L. and Kaldis, P.

3401 Dopaminergic neuronal cluster size is determined during early forebrain patterning

3415 Progressive restriction of otic fate: the role of FGF and Wnt in resolving inner ear potential
Freter, S., Muta, Y., Mak, S.-S., Rinkwitz, S. and Ladher, R. K.

3425 Eya4 regulation of Na+/K+-ATPase is required for sensory system development in zebrafish
Wang, L., Sewell, W. F., Kim, S. D., Shin, J. T., MacRae, C. A., Zon, L. I., Seidman, J. G. and Seidman, C. E.

3435 Antagonistic roles for Ultrabithorax and Antennapedia in regulating segment-specific apoptosis of differentiated motoneurons in the Drosophila embryonic central nervous system
Rogulja-Ortmann, A., Renner, S. and Technau, G. M.

3447 Numb mediates the interaction between Wnt and Notch to modulate primitive erythropoietic specification from the hemangioblast
Cheng, X., Huber, T. L., Chen, V. C., Gadue, P. and Keller, G. M.
Expression of pax2a in a 14-somite, wild-type zebrafish embryo from a study that reports that, in the absence of the odd skipped related 1 (osr1) gene, excess endoderm alters mesoderm differentiation, shifting the balance from kidney towards vascular development. **See research article on p. 3355.**