



Cover: Zebrafish zebrafish embryo 2 days post-fertilisation. 4-Hydroxytamoxifen was administered 24 hours post-fertilisation, leading to ubiquitous expression of Cre recombinase and subsequent expression of GFP (green), RFP (red) and CFP (cyan) after recombination. This image, which was taken by Brijesh Kumar (Indian Institute of Technology, Kanpur) at the 2013 Woods Hole MBL Embryology course, was chosen by readers of the Node (<http://thenode.biologists.com>).

PRIMER

- 3819** The T-box gene family: emerging roles in development, stem cells and cancer
Papaioannou, V. E.

REVIEW

- 3834** New insights into the maternal to zygotic transition
Langley, A. R., Smith, J. C., Stemple, D. L. and Harvey, S. A.

STEM CELLS AND REGENERATION

- 3842** Induction of the G2/M transition stabilizes haploid embryonic stem cells
Takahashi, S., Lee, J., Kohda, T., Matsuzawa, A., Kawasumi, M., Kanai-Azuma, M., Kaneko-Ishino, T. and Ishino, F.
- 3848** Small molecule-directed specification of sclerotome-like chondroprogenitors and induction of a somitic chondrogenesis program from embryonic stem cells
Zhao, J., Li, S., Trilok, S., Tanaka, M., Jokubaitis-Jameson, V., Wang, B., Niwa, H. and Nakayama, N.

RESEARCH ARTICLES

- 3859** Head formation: OTX2 regulates *Dkk1* and *Lhx1* activity in the anterior mesendoderm
Ip, C. K., Fossat, N., Jones, V., Lamonerie, T. and Tam, P. P. L.
- 3868** A theoretical framework for the regulation of Shh morphogen-controlled gene expression
Cohen, M., Page, K. M., Perez-Carrasco, R., Barnes, C. P. and Briscoe, J.
- 3879** Ihog and Boi elicit Hh signaling via Ptc but do not aid Ptc in sequestering the Hh ligand
Camp, D., He, B. H., Li, S., Althaus, I. W., Holtz, A. M., Allen, B. L., Charron, F. and van Meyel, D. J.
- 3889** Nodal signaling regulates specification of ascidian peripheral neurons through control of the BMP signal
Ohtsuka, Y., Matsumoto, J., Katsuyama, Y. and Okamura, Y.
- 3900** Lhx3 and Lhx4 suppress Kolmer–Agduhr interneuron characteristics within zebrafish axial motoneurons
Seredick, S., Hutchinson, S. A., Van Ryswyk, L., Talbot, J. C. and Eisen, J. S.
- 3910** Repression of Gurken translation by a meiotic checkpoint in *Drosophila* oogenesis is suppressed by a reduction in the dose of *eIF1A*
Li, W., Klovstad, M. and Schüpbach, T.
- 3922** The conserved LIM domain-containing focal adhesion protein ZYX-1 regulates synapse maintenance in *Caenorhabditis elegans*
Luo, S., Schaefer, A. M., Dour, S. and Nonet, M. L.

- 3934** Mapping the *Shh* long-range regulatory domain
Anderson, E., Devenney, P. S., Hill, R. E. and Lettice, L. A.
- 3944** Partial interchangeability of *Fz3* and *Fz6* in tissue polarity signaling for epithelial orientation and axon growth and guidance
Hua, Z. L., Chang, H., Wang, Y., Smallwood, P. M. and Nathans, J.
- 3955** Forward and feedback regulation of cyclic steroid production in *Drosophila melanogaster*
Parvy, J.-P., Wang, P., Garrido, D., Maria, A., Blais, C., Poidevin, M. and Montagne, J.
- 3966** ATMIN is a transcriptional regulator of both lung morphogenesis and ciliogenesis
Goggolidou, P., Stevens, J. L., Agueci, F., Keynton, J., Wheway, G., Grimes, D. T., Patel, S. H., Hilton, H., Morthorst, S. K., DiPaolo, A., Williams, D. J., Sanderson, J., Khoronenkova, S. V., Powles-Glover, N., Ermakov, A., Esapa, C. T., Romero, R., Dianov, G. L., Briscoe, J., Johnson, C. A., Pedersen, L. B. and Norris, D. P.
- 3978** BMP-mediated induction of GATA4/5/6 blocks somitic responsiveness to SHH
Daoud, G., Kempf, H., Kumar, D., Kozhemyakina, E., Holowacz, T., Kim, D.-W., Ionescu, A. and Lassar, A. B.

TECHNIQUES AND RESOURCES

- 3988** Translational profiling through biotinylation of tagged ribosomes in zebrafish
Housley, M. P., Reischauer, S., Dieu, M., Raes, M., Stainier, D. Y. R. and Vanhollebeke, B.
- 3994** Analysis of the expression patterns, subcellular localisations and interaction partners of *Drosophila* proteins using a *pigP* protein trap library
Lowe, N., Rees, J. S., Roote, J., Ryder, E., Armean, I. M., Johnson, G., Drummond, E., Spriggs, H., Drummond, J., Magbanua, J. P., Naylor, H., Sanson, B., Bastock, R., Huelsmann, S., Trovisco, V., Landgraf, M., Knowles-Barley, S., Armstrong, J. D., White-Cooper, H., Hansen, C., Phillips, R. G., The UK *Drosophila* Protein Trap Screening Consortium, Lilley, K. S., Russell, S. and St Johnston, D.
- 4006** Subcellular localisations of the CPTI collection of YFP-tagged proteins in *Drosophila* embryos
Lye, C. M., Naylor, H. W. and Sanson, B.
- 4018** Single-cell analyses of regulatory network perturbations using enhancer-targeting TALEs suggest novel roles for *PU.1* during haematopoietic specification
Wilkinson, A. C., Kawata, V. K. S., Schütte, J., Gao, X., Antoniou, S., Baumann, C., Woodhouse, S., Hannah, R., Tanaka, Y., Swiers, G., Moignard, V., Fisher, J., Hidetoshi, S., Tijssen, M. R., de Bruijn, M. F. T. R., Liu, P. and Göttgens, B.