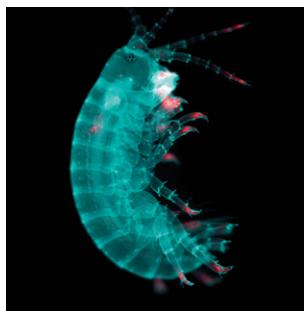
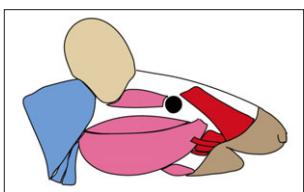


Development



Cover: Transgenic crustacean (*Parhyale hawaiensis*) carrying a gene trap that expresses DsRed at the distal tip of appendages (DsRed in red, cuticle autofluorescence in blue). Integrase-mediated trap conversion (iTRAC) allows such traps to be used as platforms for establishing a wide variety of genetic tools, both in established and emerging model organisms. See Technical research report by Kontarakis et al. on p. 2625.



Recent evidence suggests that craniofacial muscles are evolutionarily, morphologically and molecularly distinct from those of the trunk. Here, Sambasivan, Kuratani and Tajbakhsh review these studies and discuss the molecular basis of craniofacial muscle development. See Review on p. 2401.

SPOTLIGHT

- 2399** An interview with Elisabeth Knust: President of the German Society for Developmental Biology
Amsen, E.

REVIEW

- 2401** An eye on the head: the development and evolution of craniofacial muscles
Sambasivan, R., Kuratani, S. and Tajbakhsh, S.

DEVELOPMENT AND STEM CELLS

- 2417** ERK signaling controls blastema cell differentiation during planarian regeneration
Tasaki, J., Shibata, N., Nishimura, O., Itomi, K., Tabata, Y., Son, F., Suzuki, N., Araki, R., Abe, M., Agata, K. and Umesono, Y.
- 2429** Induced stem cell neoplasia in a cnidarian by ectopic expression of a POU domain transcription factor
Millane, R. C., Kanska, J., Duffy, D. J., Seoighe, C., Cunningham, S., Plickert, G. and Frank, U.
- 2441** Sequential changes at differentiation gene promoters as they become active in a stem cell lineage
Chen, X., Lu, C., Morillo Prado, J. R., Eun, S. H. and Fuller, M. T.

RESEARCH REPORT

- 2451** LEUNIG and SEUSS co-repressors regulate *miR172* expression in *Arabidopsis* flowers
Grigorova, B., Mara, C., Hollender, C., Sijacic, P., Chen, X. and Liu, Z.

RESEARCH ARTICLES

- 2457** Topoisomerase II β is required for lamina-specific targeting of retinal ganglion cell axons and dendrites
Nevin, L. M., Xiao, T., Staub, W. and Baier, H.
- 2467** Restoring eye size in *Astyanax mexicanus* blind cavefish embryos through modulation of the *Shh* and *Fgf8* forebrain organising centres
Pottin, K., Hinaux, H. and Rétaux, S.
- 2477** *Drosophila* Smt3 negatively regulates JNK signaling through sequestering Hipk in the nucleus
Huang, H., Du, G., Chen, H., Liang, X., Li, C., Zhu, N., Xue, L., Ma, J. and Jiao, R.
- 2487** The cell adhesion molecule DdCAD-1 regulates morphogenesis through differential spatiotemporal expression in *Dictyostelium discoideum*
Sriskanthadevan, S., Zhu, Y., Manoharan, K., Yang, C. and Siu, C.-H.
- 2499** Tangential migration and proliferation of intermediate progenitors of GABAergic neurons in the mouse telencephalon
Wu, S., Esumi, S., Watanabe, K., Chen, J., Nakamura, K. C., Nakamura, K., Kometani, K., Minato, N., Yanagawa, Y., Akashi, K., Sakimura, K., Kaneko, T. and Tamamaki, N.
- 2511** RanBPM is essential for mouse spermatogenesis and oogenesis
Puverel, S., Barrick, C., Dolci, S., Coppola, V. and Tessarollo, L.
- 2523** *Drosophila* Mon2 couples Oskar-induced endocytosis with actin remodeling for cortical anchorage of the germ plasm
Tanaka, T., Kato, Y., Matsuda, K., Hanyu-Nakamura, K. and Nakamura, A.

- 2533** Regulation of mammalian Gli proteins by Costal 2 and PKA in *Drosophila* reveals Hedgehog pathway conservation
Marks, S. A. and Kalderon, D.
- 2543** Transient expression of *Mnb/Dyrk1a* couples cell cycle exit and differentiation of neuronal precursors by inducing *p27^{KIP1}* expression and suppressing NOTCH signaling
Hämmerle, B., Ulin, E., Guimera, J., Becker, W., Guillemot, F. and Tejedor, F. J.
- 2555** The MADS box transcription factor MEF2C regulates melanocyte development and is a direct transcriptional target and partner of SOX10
Agarwal, P., Verzi, M. P., Nguyen, T., Hu, J., Ehlers, M. L., McCulley, D. J., Xu, S.-M., Dodou, E., Anderson, J. P., Wei, M. L. and Black, B. L.
- 2567** Notch destabilises maternal β -catenin and restricts dorsal-anterior development in *Xenopus*
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- 2581** Regulative deployment of the skeletogenic gene regulatory network during sea urchin development
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- 2591** The transcription factor FoxB mediates temporal loss of cellular competence for notochord induction in ascidian embryos
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- 2601** BMP and non-canonical Wnt signaling are required for inhibition of secondary tail formation in zebrafish
Yang, Y. and Thorpe, C.
- 2613** FGF-dependent midline-derived progenitor cells in hypothalamic infundibular development
Pearson, C. A., Ohyama, K., Manning, L., Aghamohammazadeh, S., Sang, H. and Placzek, M.
- TECHNICAL PAPER**
- 2625** A versatile strategy for gene trapping and trap conversion in emerging model organisms
Kontarakis, Z., Pavlopoulos, A., Kiupakis, A., Konstantinides, N., Douris, V. and Averof, M.
- 2631** Erratum
- 2632** Erratum