



Cover: The sea anemone *Aiptasia* (sensu *Exaiptasia pallida*) is gaining momentum as a model system to study the coral-Symbiodinium symbiosis that provides the foundation of coral reef ecosystems. The easy maintenance, rapid proliferation, inexpensive rearing, and genetic tractability of *Aiptasia* makes it popular with laboratories globally. The picture shows a so-called aposymbiotic *Aiptasia*, i.e. an anemone without any symbionts. The bright orange color comes from the feeding of brine shrimp, which provides a source of energy for aposymbiotic anemones. Having the option of rearing aposymbiotic anemones and the possibility to (re-)infect them with different symbiont types promises leaps in our understanding of the intricacies of the cnidarian host-symbiont relationship. In this issue, Gegner et al. (p. 1943), show that high salinity can convey thermotolerance in symbiotic *Aiptasia*, potentially providing an important piece to our understanding of what contributes to coral thermal resilience. Image provided by Hagen M. Gegner and licensed under a Creative Commons Attribution 4.0 International licence.

RESEARCH ARTICLES

- 1771** Testing a key assumption in animal communication: between-individual variation in female visual systems alters perception of male signals
Ronald, K. L., Ensminger, A. L., Shawkey, M. D., Lucas, J. R. and Fernández-Juricic, E.
- 1784** A computational study on the influence of insect wing geometry on bee flight mechanics
Feaster, J., Battaglia, F. and Bayandor, J.
- 1796** The addition of a developmental factor, *unc-62*, to already long-lived worms increases lifespan and healthspan
Sagi, D.
- 1802** Cohesin mediates Esco2-dependent transcriptional regulation in a zebrafish regenerating fin model of Roberts Syndrome
Banerji, R., Skibbens, R. V. and Iovine, M. K.
- 1814** Cell membrane disruption stimulates cAMP and Ca²⁺ signaling to potentiate cell membrane resealing in neighboring cells
Togo, T.
- 1820** Optogenetic activation of EphB2 receptor in dendrites induced actin polymerization by activating Arg kinase
Locke, C., Machida, K., Wu, Y. and Yu, J.
- 1831** Mitochondrial dynamics and respiration within cells with increased open pore cytoskeletal meshes
Jang, D. H., Seeger, S. C., Grady, M. E., Shofer, F. S. and Eckmann, D. M.
- 1840** The kinase domain residue serine 173 of *Schizosaccharomyces pombe* Chk1 kinase is critical for the response to DNA replication stress
Coulton, N. and Caspari, T.
- 1851** Regulation of cortical stability by RhoGEF3 in mitotic Sensory Organ Precursor cells in *Drosophila*
Couturier, L., Mazouni, K., Bernard, F., Besson, C., Reynaud, E. and Schweisguth, F.
- 1861** Frizzled-7 is required for *Xenopus* heart development
Abu-Elmagd, M., Mulvaney, J. and Wheeler, G. N.
- 1869** Bax-inhibiting peptide attenuates bleomycin-induced lung injury in mice
Suzuki, K., Yanagihara, T., Yokoyama, T., Maeyama, T., Ogata-Suetsugu, S., Arimura-Omori, M., Mikumo, H., Hamada, N., Harada, E., Kuwano, K., Harada, T. and Nakanishi, Y.
- 1876** Myotube migration to cover and shape the testis of *Drosophila* depends on Heartless, Cadherin/Catenin, and myosin II
Rothenbusch-Fender, S., Fritzen, K., Bischoff, M. C., Buttgerit, D., Oenel, S. F. and Renkawitz-Pohl, R.
- 1889** How does the canine paw pad attenuate ground impacts? A multi-layer cushion system
Miao, H., Fu, J., Qian, Z., Ren, L. and Ren, L.
- 1897** Elimination of classically-activated macrophages in tumor-conditioned medium by alternatively-activated macrophages
Lolo, F.-N., Rius, C. and Casas-Tintó, S.
- 1904** Transcriptome sequencing of the naked mole rat (*Heterocephalus glaber*) and identification of hypoxia tolerance genes
Xiao, B., Li, L., Xu, C., Zhao, S., Lin, L., Cheng, J., Yang, W., Cong, W., Kan, G. and Cui, S.
- 1913** Competitive pressures affect sexual signal complexity in *Kurixalus odontotarsus*: insights into the evolution of compound calls
Zhu, B., Wang, J., Sun, Z., Yang, Y., Wang, T., Brauth, S. E., Tang, Y. and Cui, J.
- 1919** Contextual interference during adaptation to asymmetric split-belt treadmill walking results in transfer of unique gait mechanics
Hinkel-Lipsker, J. W. and Hahn, M. E.
- 1933** FGF8 morphogen gradients are differentially regulated by heparan sulphotransferases Hs2st and Hs6st1 in the developing brain
Chan, W.-K., Price, D. J. and Pratt, T.
- 1943** High salinity conveys thermotolerance in the coral model *Aiptasia*
Gegner, H. M., Ziegler, M., Rädcker, N., Buitrago-López, C., Aranda, M. and Voolstra, C. R.
- 1949** Directional vibration sensing in the leafcutter ant *Atta sexdens*
Hager, F. A., Kirchner, L. and Kirchner, W. H.
- 1953** Investigating trehalose synthesis genes after cold acclimation in the Antarctic nematode *Panagrolaimus* sp. DAW1
Seybold, A. C., Wharton, D. A., Thorne, M. A. S. and Marshall, C. J.
- ## METHODS & TECHNIQUES
- 1960** Quantitative control of mitochondria transfer between live single cells using a microfluidic device
Wada, K.-I., Hosokawa, K., Ito, Y. and Maeda, M.