Cover: Chromatin spread of a mouse embryonic ovarian germ cell during pachytene stage. The SMC5/6 complex component SMC6 (red) is observed along chromosome axes (SYCP3, blue) and pericentromeric heterochromatin and is essential for formation of segregation-competent bivalent chromosomes during meiosis I in mouse oocytes. Transient SMC6 foci observed during pachynema do not overlap with MLH1 foci (crossover event, green). See Research article by Hwang et al. on p. 1648.

SPOTLIGHTS

1581  An interview with John Gurdon
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1584  Human organomics: a fresh approach to understanding human development using single-cell transcriptomics
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REVIEW

1588  Development of the hypothalamus: conservation, modification and innovation
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1607  Numb regulates somatic cell lineage commitment during early gonadogenesis in mice
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1600  FGFR2 is required for airway basal cell self-renewal and terminal differentiation
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1619  TOPLESS mediates brassinosteroid control of shoot boundaries and root meristem development in Arabidopsis thaliana
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RESEARCH REPORT

1629  Hox-mediated endodermal identity patterns pharyngeal muscle formation in the chordate pharynx
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1635  CDC42 is required for epicardial and pro-epicardial development by mediating FGF receptor trafficking to the plasma membrane

1648  SMC5/6 is required for the formation of segregation-competent bivalent chromosomes during meiosis I in mouse oocytes

1659  BRC1 expression regulates bud activation potential but is not necessary or sufficient for bud growth inhibition in Arabidopsis
Seale, M., Bennett, T. and Leyser, O.

1674  Inhibition of ectopic microtubule assembly by the kinesin-13 KLP-7 prevents chromosome segregation and cytokinesis defects in oocytes

1661  BRC1 expression regulates bud activation potential but is not necessary or sufficient for bud growth inhibition in Arabidopsis
Seale, M., Bennett, T. and Leyser, O.

1674  Inhibition of ectopic microtubule assembly by the kinesin-13 KLP-7 prevents chromosome segregation and cytokinesis defects in oocytes

1677  Glutathione peroxidase 4 inhibits Wnt/β-catenin signaling and regulates dorsal organizer formation in zebrafish embryos

1698  Regulation of Brm3b by DLX1 and DLX2 is required for retinal ganglion cell differentiation in the vertebrate retina

1712  Wnt proteins contribute to neuromuscular junction formation through distinct signaling pathways

TECHNIQUES AND RESOURCES

1725  SEGGA: a toolset for rapid automated analysis of epithelial cell polarity and dynamics
Farrell, D. L., Weitz, O., Magnasco, M. O. and Zallen, J. A.

CORRECTION

Correction: Prdm16 is crucial for progression of the multipolar phase during neural differentiation of the developing neocortex