

Developmental Biology

Kizil C, Kyritsis N, Dudczig S, Kroehne V, Freudenreich D, Kaslin J, Brand M.

Regenerative neurogenesis from neural progenitor cells requires injury-induced expression of Gata3.

Dev Cell. 2012 Dec 11;23(6)

Knopf F, Hammond C, Chekuru A, Kurth T, Hans S, Weber CW, Mahatma G, Fisher S, Brand M, Schulte-Merker S, Weidinger G.

Bone regenerates via dedifferentiation of osteoblasts in the zebrafish fin.

Dev Cell. 2011 May 17;20(5):713-24

Kagermeier-Schenk B, Wehner D, Ozhan-Kizil G, Yamamoto H, Li J, Kirchner K, Hoffmann C, Stern P, Kikuchi A, Schambony A, Weidinger G.

Wai1/5T4 inhibits Wnt/ β -catenin signaling and activates noncanonical Wnt pathways by modifying IRP6 subcellular localization.

Dev Cell. 2011 Dec 13;21(6):1129-43

Poteryaev D, Datta S, Ackema K, Zerial M, Spang A.

Identification of the switch in early-to-late endosome transition.

Cell, 141(3) 497-508 (2010)

Aigouy B, Farhadifar R, Staple DB, Sagner A, Röper JC, Jülicher F, Eaton S. Cell flow reorients the axis of planar polarity in the wing epithelium of *Drosophila*.

Cell, 142(5) 773-786 (2010)

2013

Nacu E, Glausch M, Le HQ, Damanik FF, Schuez M, Knapp D, Khattak S, Richter T, Tanaka EM.

Connective tissue cells, but not muscle cells, are involved in establishing the proximo-distal outcome of limb regeneration in the axolotl.

Development. 2013 Feb 1;140(3):513-8

Grotek B, Wehner D, Weidinger G.

Notch signaling coordinates cellular proliferation with differentiation during zebrafish fin regeneration.

Development. 2013 Mar 5

Mishra M, Knust E.

Analysis of the *Drosophila* compound eye with light and electron microscopy. Methods Mol Biol. 935:161-82 (2013)

Palm W, Swierczynska MM, Kumari V, Ehrhart-Bornstein M, Bornstein SR, Eaton S.

Secretion and Signaling Activities of Lipoprotein-Associated Hedgehog and Non-Sterol-Modified Hedgehog in Flies and Mammals

PLoS Biol 11(3): e1001505 (2013)

2012

Michel M, Kupinski AP, Raabe I, Bökel C.

Hh signalling is essential for somatic stem cell maintenance in the *Drosophila* testis niche.
Development. 2012 Aug;139(15)

Czekaj M, Haas J, Gebhardt M, Müller-Reichert T, Humphries P, Farrar J, Bartsch U, Ader M.
In vitro expanded stem cells from the developing retina fail to generate photoreceptors but differentiate into myelinating oligodendrocytes.
PLoS One. 7(7):e41798 (2012)

Wilsch-Bräuninger M, Peters J, Paridaen JT, Huttner WB.
Basolateral rather than apical primary cilia on neuroepithelial cells committed to delamination.
Development. 139(1):95-105 (2012)

Schröter C, Ares S, Morelli LG, Isakova A, Hens K, Soroldoni D, Gajewski M, Jülicher F, Maerkl SJ, Deplancke B, Oates AC.
Topology and dynamics of the zebrafish segmentation clock core circuit
PLoS Biol., 10(7) Art. No. e1001364 (2012)

Sagner A, Merkel M, Aigouy B, Gaebel J, Brankatschk M, Jülicher F, Eaton S.
Establishment of Global Patterns of Planar Polarity during Growth of the *Drosophila* Wing Epithelium.
Curr. Biol., 22(14) 1296-1301 (2012)

2011

Schnabel K, Wu CC, Kurth T, Weidinger G.
Regeneration of cryoinjury induced necrotic heart lesions in zebrafish is associated with epicardial activation and cardiomyocyte proliferation.
PLoS One. 2011 Apr 12;6(4):e18503

Kroehne V, Freudenreich D, Hans S, Kaslin J, Brand M.
Regeneration of the adult zebrafish brain from neurogenic radial glia-type progenitors.
Development. 2011 Nov;138(22):4831-41

Erkut C, Penkov S, Khesbak H, Vorkel D, Verbavatz JM, Fahmy K, Kurzchalia TV.
Trehalose renders the dauer larva of *Caenorhabditis elegans* resistant to extreme desiccation.
Curr. Biol. 21 (15) 1331-1336 (2011)

Riedel F, Vorkel D, Eaton S.
Megalin-dependent yellow endocytosis restricts melanization in the *Drosophila* cuticle.
Development, 138 (1) 149-158 (2011)

Leung L, Kloppper A, Grill SW, Harris WA, Norden C.
Apical migration of nuclei during G2 is a prerequisite for all nuclear motion in zebrafish neuroepithelia.
Development, 138(22) 5003-5013 (2011)

Muschalik N, Knust E.
Increased levels of the cytoplasmic domain of Crumbs repolarise developing *Drosophila* photoreceptors
J. Cell. Sci., 124(21) 3715-3725 (2011)

Brangwynne C, Mitchison TJ, Hyman AA
Active liquid-like behavior of nucleoli determines their size and shape in *Xenopus laevis* oocytes.
Proc. Natl. Acad. Sci. U.S.A., 108(11) 4334-4339 (2011)

2010

Kupinski AP, Müller-Reichert T, Eckmann CR.
The *Caenorhabditis elegans* Ste20 kinase, GCK-3, is essential for postembryonic developmental timing and regulates meiotic chromosome segregation.
Dev. Biol. 344 (2) 758-771 (2010)

Mottola G, Classen AK, González-Gaitán M, Eaton S, Zerial M.
A novel function for the Rab5 effector Rabenosyn-5 in planar cell polarity.
Development, 137(14) 2353-2364 (2010)

Quesada-Hernández E, Caneparo L, Schneider S, Winkler S, Liebling M, Fraser SE, Heisenberg C.
Stereotypical cell division orientation controls neural rod midline formation in zebrafish.
Curr. Biol. 20, no. 21, 1966-1972 (2010)

Pulvers JN, Bryk J, Fish JL, Wilsch-Bräuninger M, Arai Y, Schreier D, Naumann R, Helppi J, Habermann B, Vogt J, Nitsch R, Toth A, Enard W, Pääbo S, Huttner WB.
Mutations in mouse *Aspm* (abnormal spindle-like microcephaly associated) cause not only microcephaly but also major defects in the germline.
Proc. Natl. Acad. Sci. U.S.A., 107(38) 16595-16600 (2010)

Herrgen L, Ares S, Morelli LG, Schröter C, Jülicher F, Oates AC
Intercellular coupling regulates the period of the segmentation clock.
Curr. Biol., 20(14) 1244-1253 (2010)

Schröter C, Oates AC
Segment number and axial identity in a segmentation clock period mutant.
Curr. Biol., 20(14) 1254-1258 (2010)

Strzelecka M, Trowitzsch S, Weber G, Lührmann R, Oates AC, Neugebauer KM.
Coilin-dependent snRNP assembly is essential for zebrafish embryogenesis.
Nat. Struct. Mol. Biol., 17(4) 403-409 (2010)

Strzelecka M, Oates AC, Neugebauer KM.
Dynamic control of Cajal body number during zebrafish embryogenesis
Nucleus, 1(1) 96-108 (2010)

Schenk C, Bringmann H, Hyman AA, Cowan CR.
Cortical domain correction repositions the polarity boundary to match the cytokinesis furrow in *C. elegans* embryos.
Development, 137(10) 1743-1753 (2010)

Greenan G, Brangwynne C, Jaensch S, Gharakhani J, Jülicher F, Hyman AA
Centrosome size sets mitotic spindle length in *Caenorhabditis elegans* embryos.
Curr. Biol., 20(4) 353-358 (2010)

2009

Picker A, Cavodeassi F, Machate A, Bernauer S, Hans S, Abe G, Kawakami K, Wilson SW, Brand M.

Dynamic coupling of pattern formation and morphogenesis in the developing vertebrate retina.

PLoS Biol. 2009 Oct;7(10)

Benenati G, Penkov S, Müller-Reichert T, Entchev EV, Kurzchalia TV.

Two cytochrome P450s in *Caenorhabditis elegans* are essential for the organization of eggshell, correct execution of meiosis and the polarization of embryo.

Mech. Dev. 126, 382-393 (2009)

Richard M, Muschalik N, Grawe F, Ozüyan S, Knust E.

A role for the extracellular domain of Crumbs in morphogenesis of *Drosophila* photoreceptor cells.

Eur. J. Cell Biol., 88(12) 765-777 (2009)

Hannich JT, Entchev EV, Mende F, Boytchev H, Martin R, Zagoriy V, GTheumer G, Riezman I, Riezman H, Knölker HJ, Kurzchalia TV.

Methylation of the sterol nucleus by STRM-1 regulates dauer larva formation in *Caenorhabditis elegans*.

Dev. Cell, 16(6) 833-843 (2009)

Cardona A, Saalfeld S, Tomancák P, Hartenstein V

Drosophila Brain Development: Closing the Gap between a Macroarchitectural and Microarchitectural Approach.

Cold Spring Harb. Symp. Quant. Biol., 74 235-248 (2009)

2008

Müller-Reichert T, Mäntler J, Srayko M, O'Toole E.

Electron microscopy of the early *Caenorhabditis elegans* embryo.

J. Microsc. 230, 297-307 (2008)

Schenck A, Goto-Silva L, Collinet C, Rhinn M, Giner A, Habermann B, Brand M, Zerial M.

The endosomal protein Appl1 mediates Akt substrate specificity and cell survival in vertebrate development.

Cell, 133(3) 486-497 (2008)

Bulgakova N, Kempkens O, Knust E.

Multiple domains of Stardust differentially mediate localisation of the Crumbs-Stardust complex during photoreceptor development in *Drosophila*.

J. Cell. Sci., 121(Pt 12) 2018-2026 (2008)

Entchev EV, Schwudke D, VZagoriy V, Matyash V, Bogdanova A, Habermann B, Zhu L, Shevchenko A, Kurzchalia TV.

LET-767 is required for the production of branched chain and long chain fatty acids in *Caenorhabditis elegans*.

J. Biol. Chem., 283(25) 17550-17560 (2008)

Schröter C, Leah Herrgen, Cardona A, Gary J. Brouhard, Benjamin Feldman, Oates AC.

Dynamics of zebrafish somitogenesis.

Dev. Dyn., 237(3) 545-553 (2008)