

The work of Sieiro et al. shows that the initiation of myogenesis in chick embryos is closely related to a change in cell adhesion, and may reveal a general principle for coupling cell fate changes to the epithelial-mesenchymal transition in many developmental and pathological processes.

Daniel Sieiro, Anne C Rios, Claire E Hirst, Christophe Marcelle. 2016. Cytoplasmic NOTCH and membrane-derived β-catenin link cell fate choice to epithelialmesenchymal transition during myogenesis. eLife 5:e14847. doi: 10.7554/eLife.14847

The eLife paper by Sieiro et al. is not included in this collection, but is freely available at our website: https://elifesciences.org/content/5/e14847

ON THE COVER

PUBLISHING

Priority of discovery in the life sciences See Vale and Hyman

GLOBAL HEALTH

Mapping environmental suitability for Zika See Messina et al.

STRUCTURAL BIOLOGY

The regulation of a DNA recombination reaction See Laxmikanthan et al.

Contents

A selection of recent highlights from eLife

INTRODUCTION

Scientific publishing: A further flavour of eLife Randy Schekman

FEATURE ARTICLES

Living science: Owning your mistakes

Eve Marder

eLife 4:e11628. doi: 10.7554/eLife.11628

Point of view: Priority of discovery in the life sciences

Ronald D Vale and Anthony A Hyman eLife 5:e16931. doi: 10.7554/eLife.16931

INSIGHTS

GENOMICS AND EVOLUTIONARY BIOLOGY

Human evolution: The many mysteries of Homo naledi

Chris Stringer

eLife 4:e10627. doi: 10.7554/eLife.10627

ECOLOGY PLANT BIOLOGY

Pollination: How to get the best deal Kelsey JRP Byers and Florian P Schiestl eLife 4:e09919. doi: 10.7554/eLife.09919

COMPUTATIONAL AND SYSTEMS BIOLOGY | DEVELOPMENTAL BIOLOGY AND STEM CELLS

Angiogenesis: To branch or expand? Esther M Bridges and Adrian L Harris eLife 5:e17079. doi: 10.7554/eLife.17079

DEVELOPMENTAL BIOLOGY AND STEM CELLS | NEUROSCIENCE

Development: Neurogenesis reunited

Matthias Landgraf

eLife 4:e14955. doi: 10.7554/eLife.14955

HUMAN BIOLOGY AND MEDICINE | IMMUNOLOGY

Lung disease: The soot of all evil Derek W Russell and J Edwin Blalock eLife 4:e11709. doi: 10.7554/eLife.11709

BIOCHEMISTRY | COMPUTATIONAL AND SYSTEMS BIOLOGY

Synthetic biology: How to make an oscillator Bas JHM Rosier and Tom FA de Greef

eLife **4**:e12260. doi: 10.7554/eLife.12260



SHORT REPORT

NEUROSCIENCE

Midbrain dopamine neurons compute inferred and cached value prediction errors in a common framework

Brian F Sadacca, Joshua L Jones, Geoffrey Schoenbaum eLife 5:e13665. doi: 10.7554/eLife.13665

RESEARCH ARTICLES

CANCER BIOLOGY GENOMICS AND EVOLUTIONARY BIOLOGY

Mitochondrial genetic diversity, selection and recombination in a canine transmissible cancer

Andrea Strakova, Máire Ní Leathlobhair, Guo-Dong Wang, Ting-Ting Yin, Ilona Airikkala-Otter, Janice L Allen, Karen M Allum, Leontine Bansse-Issa, Jocelyn L Bisson, Artemio Castillo Domracheva, Karina F de Castro, Anne M Corrigan, Hugh R Cran, Jane T Crawford, Stephen M Cutter, Laura Delgadillo Keenan, Edward M Donelan, Ibikunle A Faramade, Erika Flores Reynoso, Eleni Fotopoulou, Skye N Fruean, Fanny Gallardo-Arrieta, Olga Glebova, Rodrigo F Häfelin Manrique, Joaquim JGP Henriques, Natalia Ignatenko, Debbie Koenig, Marta Lanza-Perea, Remo Lobetti, Adriana M Lopez Quintana, Thibault Losfelt, Gabriele Marino, Inigo Martincorena, Simón Martínez Castañeda, Mayra F Martínez-López, Michael Meyer, Berna Nakanwagi, Andrigo B De Nardi, Winifred Neunzig, Sally J Nixon, Marsden M Onsare, Antonio Ortega-Pacheco, Maria C Peleteiro, Ruth J Pye, John F Reece, Jose Rojas Gutierrez, Haleema Sadia, Sheila K Schmeling, Olga Shamanova, Richard K. Ssuna, Audrey E Steenland-Smit, Alla Svitich, Ismail Thoya Ngoka, Bogdan A Viţălaru, Anna P de Vos, Johan P de Vos, Oliver Walkinton, David C. Wedge, Alvaro S Wehrle-Martinez, Mirjam G van der Wel, Sophie AE Widdowson, Elizabeth P Murchison eLife 5:e14552. doi: 10.7554/eLife.14552

EPIDEMIOLOGY AND GLOBAL HEALTH MICROBIOLOGY AND INFECTIOUS DISEASES

Mapping global environmental suitability for Zika virus

Jane P Messina, Moritz UG Kraemer, Oliver J Brady, David M Pigott, Freya M Shearer, Daniel J Weiss, Nick Golding, Corrine W Ruktanonchai, Peter W Gething, Emily Cohn, John S Brownstein, Kamran Khan, Andrew J Tatem, Thomas Jaenisch, Christopher JL Murray, Fatima, Marinho, Thomas W Scott, Simon I Hay eLife 5:e15272. doi: 10.7554/eLife.15272

BIOPHYSICS AND STRUCTURAL BIOLOGY | GENES AND CHROMOSOMES

Structure of a Holliday junction complex reveals mechanisms governing a highly regulated DNA transaction

Gurunathan Laxmikanthan, Chen Xu, Axel F Brilot, David Warren, Lindsay Steele, Nicole Seah, Wenjun Tong, Nikolaus Grigorieff, Arthur Landy, Gregory D Van Duyne eLife 5:e14313. doi: 10.7554/eLife.14313

CELL BIOLOGY

Selective sorting and destruction of mitochondrial membrane proteins in aged yeastAdam L Hughes, Casey E Hughes, Kiersten A Henderson, Nina Yazvenko, Daniel E
Gottschling

eLife 5:e13943. doi: 10.7554/eLife.13943