

Cell Research



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Single-cell COOL-seq analyses of early embryo development

Distinctions of PI3KC3-C1 and -C2 revealed by cryo-EM

PPAR δ activation promotes cardiac repair

Transport mechanism revealed by a new crystal structure of UraA

(Founded in 1990)

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SPRINGER NATURE

Coordinating Editor for this issue

Shushu Jiang

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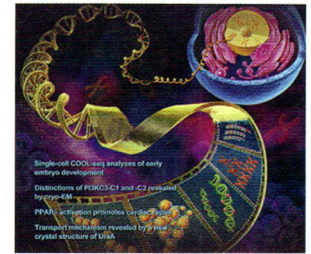
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1002 Live cell screening platform identifies PPAR δ as a regulator of cardiomyocyte proliferation and cardiac repair **Open**

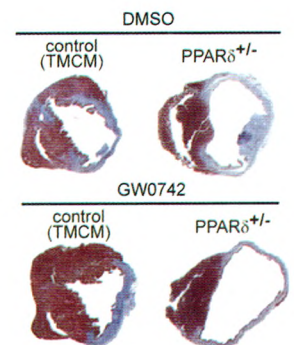
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1020 Dimeric structure of the uracil:proton symporter UraA provides mechanistic insights into the SLC4/23/26 transporters **Open**

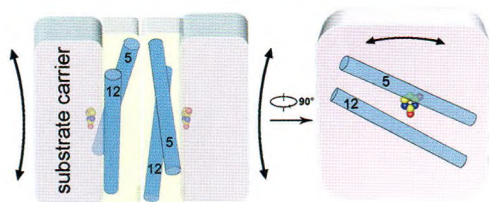
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Cover: Single-cell COOL-seq technology can analyze the open chromatin, nucleosome positioning, DNA methylation, ploidy and copy number variation simultaneously from the same individual mammalian cell. See page 967-988 by Fan Guo *et al.* for details.



PPAR δ activation by GW0742 treatment induces cardiomyocyte cell cycle progression and rescues heart function in myocardial infarction. See page 1002-1019 by Ajit Magadum *et al.* for details.



Crystal structure of uracil-bound UraA homodimer together with structural comparison reveals a working model for UraA transporter. See page 1020-1033 by Xinzhe Yu *et al.* for details.

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ADVANCE ONLINE PUBLICATION (published weekly on Tuesday and Friday)

4 AUGUST 2017

Non-canonical regulation of SPL transcription factors by a human OTUB1-like deubiquitinase defines a new plant type rice associated with higher grain yield **Open**

Shuansuo Wang, Kun Wu, Qian Qian, Qian Liu, Qi Li, Yajun Pan, Yafeng Ye, Xueying Liu, Jing Wang, Jianqing Zhang, Shan Li, Yuejin Wu and Xiangdong Fu

doi:10.1038/cr.2017.98

8 AUGUST 2017

Cardiotrophin 1 stimulates beneficial myogenic and vascular remodeling of the heart **Open**

Mohammad Abdul-Ghani, Colin Suen, Baohua Jiang, Yupu Deng, Jonathan J Weldrick, Charis Putinski, Steve Brunette, Pasan Fernando, Tom T Lee, Peter Flynn, Frans H H Leenen, Patrick G Burgon, Duncan J Stewart and Lynn A Megeney

doi:10.1038/cr.2017.87

2017



COLD SPRING HARBOR ASIA Meetings

Stem Cell Crossroads | *March 27-31*

Robin Franklin, Meritxell Huch, Duanqing Pei,
Marius Wernig, Yasuhiro Yamada

Lipid Metabolism & Metabolic Disorders | *April 10-14*

Peng Li, Peter Tontonoz, Tobias Walther,
Hongyuan Yang

Bacterial Infection & Host Défense | *April 17-21*

Kenya Honda, Samuel Miller, Craig Roy,
Feng Shao, Jörg Vogel

Cilia & Centrosomes | *April 24-28*

Mónica Bettencourt-Dias, Gert Jansen,
Guangshuo Ou, Meng-Fu Bryan Tsou

Francis Crick Symposium Transforming Neurosciences: Questions & Experiments

May 8-12

Hailan Hu, Edvard Moser, John O'Keefe,
Hee-Sup Shin, Alcino Silva

Membrane Proteins: Structure & Function | *May 15-19*

Martin Caffrey, Nancy Carrasco, Tianle Xu,
Ming Zhou

Plant Cell & Developmental Biology *May 22-26*

Niko Geldner, Tetsuya Higashiyama, Bo Liu,
Yongbiao Xue, Zhenbiao Yang

Primate Neuroscience: Perception, Cognition & Disease Models

June 26-30

Tadashi Isa, Tony Movshon, Zilong Qiu, Xiaoqin Wang

Microbiota, Metagenomics & Health *September 4-8*

Eran Elinav, Andrew Goodman, Kenya Honda,
Zhijia Liu, Andrew Macpherson

Precision Cancer Medicine

September 18-22

Fred de Sauvage, Thomas Gajewski,
Yutaka Kawakami, Zemin Zhang

Cell Signaling & Metabolism in Development & Disease

October 9-13

Michael Karin, Dianqing Wu, Chenqi Xu, Yingzi Yang

Mitochondria | *October 16-20*

Paolo Bernardi, Andrew Dillin,
Anu Suomalainen-Wartiovaara, Xiaodong Wang

Tumor Immunology & Immunotherapy | *October 22-26*

Xuetao Cao, Vincenzo Cerundolo, Olivera Finn,
Pramod Srivastava

Stem Cells, Aging & Rejuvenation *November 6-10*

Adam Antebi, Jing-dong Han, Brian Kennedy,
Seung-Jae Lee, Jan Vijg

Aging & Cancer | *November 11-13*

Zhu Chen, Ruibao Ren, Sam Waxman

RNA Modifications & Epitranscriptomics | *November 13-17*

Michaela Frye, Chuan He, Tsutomu Suzuki,
Yungui Yang

Liver Biology, Disease & Cancer *December 4-8*

Gen-Sheng Feng, Lijian Hui, Atsushi Miyajima,
Lars Zender

Inflammation – Basic Mechanisms & Related Diseases | *December 11-15*

Frank Austen, Yasmine Belkaid, Chen Dong

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