## SPECIAL SECTION

### Morphogenesis

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#### REVIEWS

- **Imaging Morphogenesis: Technological Advances and Biological Insights**
  - P. J. Keller
  - Review Summary; for full text: [http://dx.doi.org/10.1126/science.1234168](http://dx.doi.org/10.1126/science.1234168)

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### LETTERS

- **Rhino Poaching: Supply and Demand Uncertain**
  - A. Collins et al.
- **Rhino Poaching: Unique Challenges**
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- **Rhino Poaching: Apply Conservation Psychology**
  - C. A. Litchfield
  - Response
  - D. Biggs et al.

### BOOKS ET AL.

- **The Cambrian Explosion**
  - D. H. Erwin and J. W. Valentine, reviewed by C. J. Lowe
- **Spam**
  - F. Brunton, reviewed by J. Golbeck

### POLICY FORUM

- **Uncapping Conflict of Interest?**
  - S. F. Wood and J. K. Mador

### PERSPECTIVES

- **Illuminating the Neural Circuitry of Compulsive Behaviors**
  - S. L. Rauch and W. A. Carlezon Jr.

### NEWS OF THE WEEK

- A roundup of the week’s top stories

### NEWS & ANALYSIS

- Europe Opens Door to Global Approach on Megaprojects
- Fading Academy Stakes Future on Reforming President
- Authenticity of China’s Fabulous Fossils Gets New Scrutiny
- Accelerator Leak Halts Japanese Physics Experiments

### NEWS FOCUS

- Mysteries of Development
- How Do Organisms Know When They Have Reached the Right Size?
- Why Do So Many Neurons Commit Suicide During Brain Development?
- How Do Microbes Shape Animal Development?
- How Does Fetal Environment Influence Later Health?
- Under Development

### COVER

Intestinal organoids (red) derived in vitro from single intestinal stem cells display cryptlike structures with stem and Paneth cells (stem cells, green). Infused mini-guts fill in the ulcerated area of an inflamed colon. Reviews in this special issue on morphogenesis describe recent mini-gut technology, as well as advances in light microscopy of live organisms and mechanical analyses of cell dynamics during development. See the special section on page 1183 and at www.sciencemag.org/special/morph.

*Image: Hans Clevers, Hubrecht Institute*

### ON THE WEB THIS WEEK

- **Policy Podcast**
  - Listen to an interview with Science’s new editor-in-chief, Marcia McNutt.

- **Find More Online**
  - Check out Science Express, our podcast, videos, daily news, our research journals, and Science Careers at [www.sciencemag.org](http://www.sciencemag.org).

### DEPARTMENTS

- **This Week in Science**
- **Editors’ Choice**
- **Science Staff**
- **New Products**
- **Science Careers**
RESEARCH ARTICLE
1195 A Switch Between Topological Domains Underlies HoxD Genes Collinearity in Mouse Limbs
G. Andrey et al.
Regulation of the HoxD gene cluster switches from one side of the cluster to the other in parallel with limb development.
Research Article Summary; for full text: http://dx.doi.org/10.1126/science.1234167
>> Perspective p. 1181

REPORTS
1196 Probing the Solar Magnetic Field with a Sun-Grazing Comet
C. Downs et al.
Observations of a comet’s motion through the solar corona constrain this region’s magnetic field and plasma properties.
>> Video
1199 A Major Asymmetric Dust Trap in a Transition Disk
N. van der Marel et al.
Radio interferometry observations reveal a highly asymmetric distribution of millimeter-sized grains surrounding a young star.
>> Perspective p. 1179
1202 Coupling a Single Trapped Atom to a Nanoscale Optical Cavity
J. D. Thompson et al.
A single rubidium atom is positioned in close proximity to an optical cavity so they can interact.
>> Perspective p. 1175
1205 Entanglement Polytopes: Multiparticle Entanglement from Single-Particle Information
M. Walter et al.
An algebraic geometry approach provides insight into the nature of entanglement of many particles.
1208 From Sub-Rayleigh to Supershear Ruptures During Stick-Slip Experiments on Crustal Rocks
F. X. Passelegue et al.
Rupture fronts propagate faster than shear waves following experimental microearthquake nucleation.
1211 Stepwise Evolution of Essential Centromere Function in a Drosophila Neogene
B. D. Ross et al.
How does a recently evolved gene come to encode an essential function?
1215 Density Triggers Maternal Hormones That Increase Adaptive Offspring Growth in a Wild Mammal
B. Danzer et al.
Mothers’ stress levels in free-ranging red squirrels increase baby growth in anticipation of overcrowding.
1217 The Cross-Bridge Spring: Can Cool Muscles Store Elastic Energy?
N. T. George et al.
A temperature gradient in a locked-spring lattice in insect muscle stores energy during locomotion.
1220 Structural Systems Biology Evaluation of Metabolic Thermotolerance in Escherichia coli
R. L. Chang et al.
As summer approaches, protein structures and network analysis pinpoint heat-sensitive metabolic nodes in a bacterium.
1223 Widespread Production of Extracellular Superoxide by Heterotrophic Bacteria
J. M. Diaz et al.
A broad range of bacteria produce substantial amounts of reactive oxygen species in aquatic ecosystems.
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1227 Structural Basis for Effector Control and Redox Partner Recognition in Cytochrome P450
S. Tripathi et al.
The redox partner of P450cam stabilizes it in an open conformation to facilitate proton-coupled electron transfer.
1230 Role of Tissue Protection in Lethal Respiratory Viral-Bacterial Coinfection
A. M. Jamieson et al.
Reduced immune tolerance, rather than resistance, increases the susceptibility of mice to a secondary bacterial infection.
1234 Repeated Cortico-Striatal Stimulation Generates Persistent OCD-Like Behavior
S. E. Ahmari et al.
Hyperactivation of projections from the orbitofrontal cortex to the striatum increases repetitive grooming in mice.
>> Perspective p. 1174; Report p. 1243
1239 Genculocortical Input Drives Genetic Distinctions Between Primary and Higher-Order Visual Areas
S.-J. Chou et al.
Neural activity in the developing visual system dictates differential gene expression in the primary and higher-order areas.
1243 Optogenetic Stimulation of Lateral Orbitofronto-Striatal Pathway Suppresses Compulsive Behaviors
E. Burguière et al.
Normal behavior can be rescued in a mouse model of obsessive-compulsive disorder.
>> Perspective p. 1174; Report p. 1234

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