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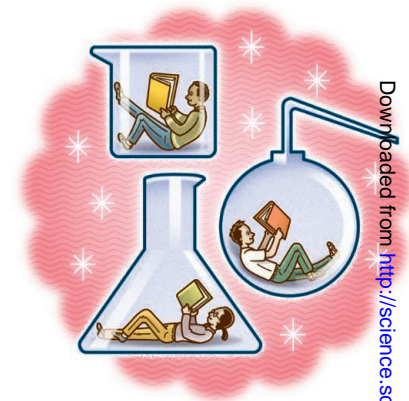
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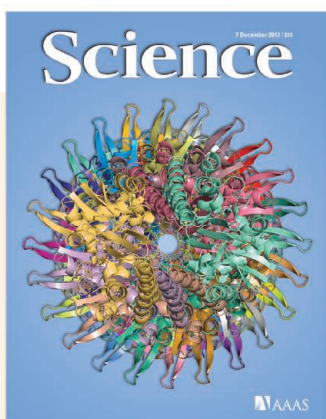


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COVER

End-on view of the atomic model of the bacterial actinlike ParM protein double-helical filament, generated from an electron microscopic reconstruction. A bipolar spindle of antiparallel ParM filaments pushes plasmids to the cell poles, constituting the simplest known apparatus for the segregation of genetic information. The loops on the outside of the 8- to 9-nanometer-thick filaments are involved in spindle formation. See page 1334.

Image: Jan Löwe

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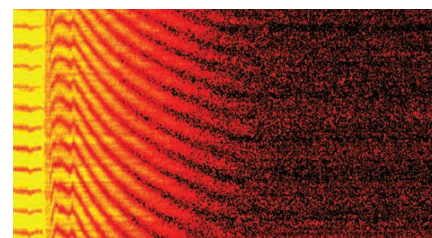
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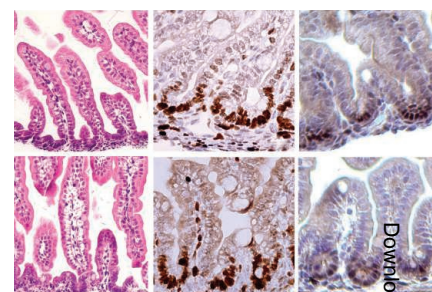
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10.1126/science.1231507

The Crust of the Moon as Seen by GRAIL

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10.1126/science.1229277

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http://scim.ag/Brain_Region

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http://scim.ag/Intense_Emotions

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4 December issue: <http://scim.ag/ss120412>

RESEARCH ARTICLE: RNF4-Dependent Hybrid SUMO-Ubiquitin Chains Are Signals for RAP80 and Thereby Mediate the Recruitment of BRCA1 to Sites of DNA Damage

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RESEARCH ARTICLE: G Protein-Coupled Receptor-Mediated Activation of p110 β by G $\beta\gamma$ Is Required for Cellular Transformation and Invasiveness

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PERSPECTIVE: Cdc42 Oscillations in Yeasts

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Integrating Medicine and Science

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FOCUS: Creating a Space for Innovative Device Development

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The FDA announces a nonprofit partnership to advance regulatory science for medical technology development.

RESEARCH ARTICLE: α -Synuclein-Induced Down-Regulation of Nurr1 Disrupts GDNF Signaling in Nigral Dopamine Neurons

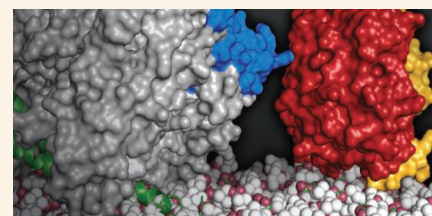
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Nurr1 mediates protection of dopamine neurons by GDNF in response to α -synuclein-mediated toxicity.

RESEARCH ARTICLE: Decreased Tonic Inhibition in Cerebellar Granule Cells Causes Motor Dysfunction in a Mouse Model of Angelman Syndrome

K. Egawa et al.

Ube3a deficiency causes decreased cerebellar tonic inhibition by preventing degradation of GAT1 in Angelman syndrome.



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