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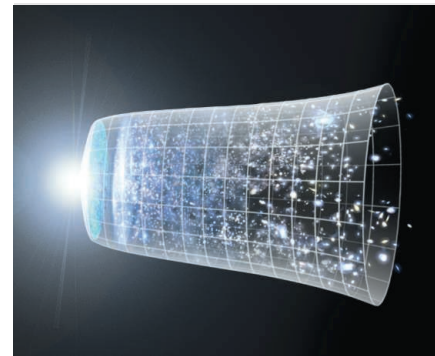
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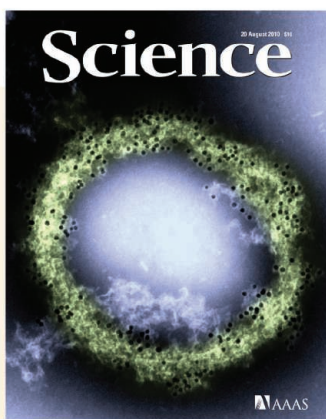


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COVER

Immuno-electron micrograph of a plastid-dividing ring (diameter ~500 nm), a structure required for chloroplast division, isolated from the unicellular alga *Cyanidioschyzon merolae*. Immunogold particles (black dots) indicate localization of the glycosyltransferase protein PDR1 (protein dividing ring 1), which forms a ring with carbohydrates that constricts to physically divide the chloroplast. See page 949.

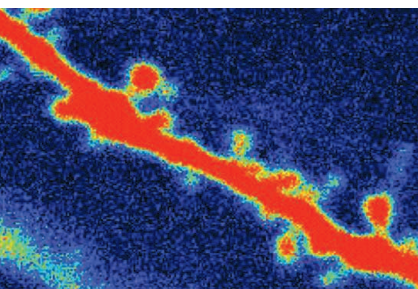
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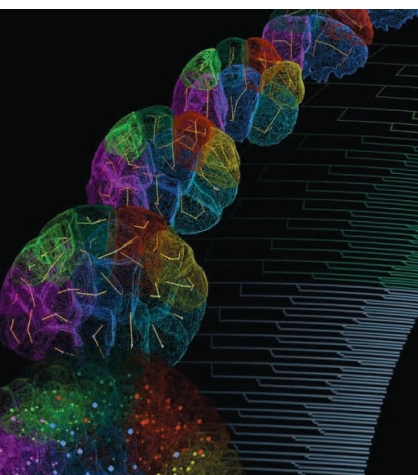
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Tracking Hydrocarbon Plume Transport and Biodegradation at *Deepwater Horizon*

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Plastic Accumulation in the North Atlantic Subtropical Gyre

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Comment on "The Silicate-Mediated Formose Reaction: Bottom-Up Synthesis of Sugar Silicates"

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Full text at www.sciencemag.org/cgi/content/full/329/5994/902-a

Response to Comment on "The Silicate-Mediated Formose Reaction: Bottom-Up Synthesis of Sugar Silicates"

J. B. Lambert et al.

Full text at www.sciencemag.org/cgi/content/full/329/5994/902-b

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RESEARCH ARTICLE: TPL-2-Mediated Activation of MAPK Downstream of TLR4 Signaling Is Coupled to Arginine Availability

V. Mieulet et al.

RESEARCH ARTICLE: Arginine Usage in Mycobacteria-Infected Macrophages Depends on Autocrine-Paracrine Cytokine Signaling

J. E. Qualls et al.

PERSPECTIVE: Arginine—Master and Commander in Innate Immune Responses

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REVIEW: Phosphoinositide 3-Kinase Signaling in Thymocytes—The Need for Stringent Control

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SCIENCE CAREERS

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Tooling Up: A Job-Search Plan for the Person Without One (Part One)

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A fruitful job search takes preparation, careful consideration, and networking.

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Sarah Bridle has carved out a successful career while resisting long hours and personal sacrifices.

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COMMENTARY: 360 Degrees of Human Subjects Protections in Community-Engaged Research

L. F. Ross

When communities are both participants and partners in research, effective human subjects protections must address both individual and group risks.

RESEARCH ARTICLE: The Four-Herb Chinese Medicine PHY906 Reduces Chemotherapy-Induced Gastrointestinal Toxicity

W. Lam et al.

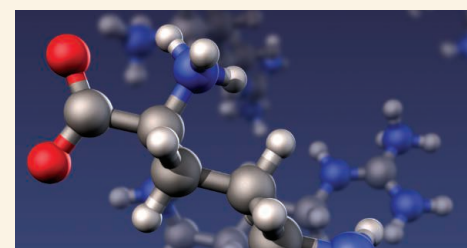
PERSPECTIVE: Are Herbal Medicines Ripe for the Cancer Clinic?

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Y.-C. Cheng and A. M. VanHook

A traditional Chinese medicine reduces the intestinal toxicity of chemotherapy by inhibiting inflammation and promoting cell proliferation.



SCIENCE SIGNALING

Arginine in the immune system.

RESEARCH ARTICLE: Multivalent Integrin-Specific Ligands Enhance Tissue Healing and Biomaterial Integration

T. A. Petrie et al.

Titanium implants coated with nanoclustered integrin are tightly integrated into bone for orthopedic applications.

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