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## COVER

Victoria Harbor in Hong Kong. Gordon Research Conferences has established a venue in Hong Kong where investigators from around the globe can discuss their work and challenges in an informal, interactive format; improve collaborations between the East and West; and advance the frontiers of science. See page 834 for the 2013 conference schedule and preliminary programs.

Photo: Hong Kong Tourism Board

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- 780 Unique Meteorite from Early Amazonian Mars: Water-Rich Basaltic Breccia Northwest Africa 7034

C. B. Agee et al.

Detailed analysis of a meteorite shows that it matches the surface of Mars yet is unlike any other martian meteorite.

>> *Perspective p. 771*

- 786 Cyclic GMP-AMP Synthase Is a Cytosolic DNA Sensor That Activates the Type I Interferon Pathway

L. Sun et al.

Cyclic guanosine monophosphate–adenosine monophosphate synthase is identified and shown to be activated by DNA, but not RNA, in mammalian cells.

>> *Perspective p. 763; Report p. 826*

## REPORTS

- 791 Universal Computation by Multiparticle Quantum Walk

A. M. Childs et al.

A scalable quantum computer architecture based on multiple interacting quantum walkers is proposed.

- 794 Photonic Boson Sampling in a Tunable Circuit

M. A. Broome et al.

- 798 Boson Sampling on a Photonic Chip

J. B. Spring et al.

Optical circuits are used to demonstrate a quantum-enhanced calculation.

>> *Perspective p. 767*

- 801 Observation of Radiation Pressure Shot Noise on a Macroscopic Object

T. P. Purdy et al.

A light, visible-to-the-naked-eye membrane is observed to fluctuate in step with the photons used to measure its position.

>> *Perspective p. 770; Science Podcast*

- 804 Similarity of Scattering Rates in Metals Showing *T*-Linear Resistivity

J. A. N. Bruin et al.

Transport measurements show little variation across metals with resistivity that scales linearly with temperature.

- 807 Detection of the Characteristic Pion-Decay Signature in Supernova Remnants

M. Ackermann et al.

The gamma-ray spectra of two supernova remnants in our Galaxy show the signature of proton acceleration.

>> *Science Podcast*

- 811 Crystalline Inorganic Frameworks with 56-Ring, 64-Ring, and 72-Ring Channels

H.-Y. Lin et al.

Gallium zincophosphate materials with nanometer-scale channels were made using amine templates bearing long alkyl chains.

- 814 Dilute Concentrations of a Psychiatric Drug Alter Behavior of Fish from Natural Populations

T. Brodin et al.

Anxiolytic drugs, at concentrations found in natural waterways, alter the behavior and foraging rate of wild European perch.

- 816 Probing Allostery Through DNA

S. Kim et al.

Proteins bound to the same, but not overlapping, stretch of DNA modulate each other's DNA binding affinity.

>> *Perspective p. 766*

- 819 Multiplex Genome Engineering Using CRISPR/Cas Systems

L. Cong et al.

- 823 RNA-Guided Human Genome Engineering via Cas9

P. Mali et al.

A bacterial genome defense system is adapted to function as a genome-editing tool in mammalian cells.

>> *Perspective p. 768*

- 826 Cyclic GMP-AMP Is an Endogenous Second Messenger in Innate Immune Signaling by Cytosolic DNA

J. Wu et al.

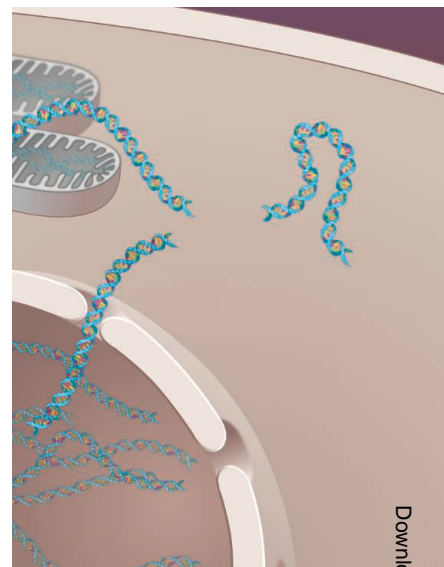
Cyclic guanosine monophosphate–adenosine monophosphate acts as a second messenger that turns on antiviral immunity in response to cytoplasmic DNA.

>> *Perspective p. 763; Research Article p. 786*

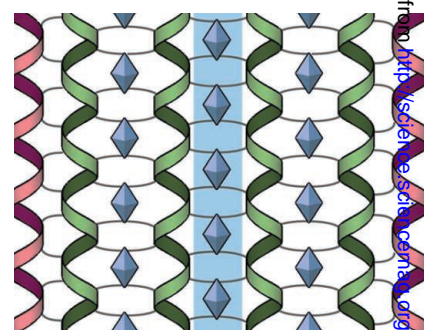
- 830 Prediction Error Governs Pharmacologically Induced Amnesia for Learned Fear

D. Sevenster et al.

Human fear memory labilization can be assessed noninvasively, independent of whether reconsolidation occurs.



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