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COVER

Substances deposited by a mother bird into her eggs influence how intensely her offspring beg for food after hatching. In canaries, these substances are effectively a prenatal signal of parental generosity. In contrast to the common assumption, they function primarily to serve the evolutionary interests of the offspring rather than the mother. See page 1373.

Photo: *Fernando Trabanco*

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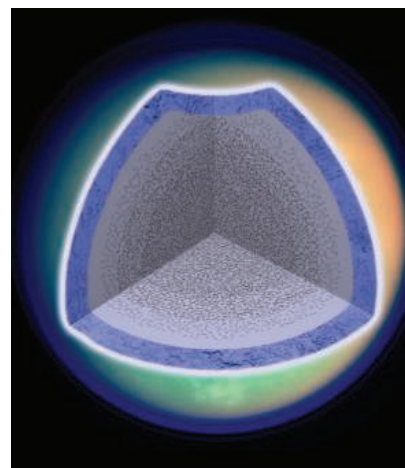
- 1345 Identification of a Primary Target of Thalidomide Teratogenicity
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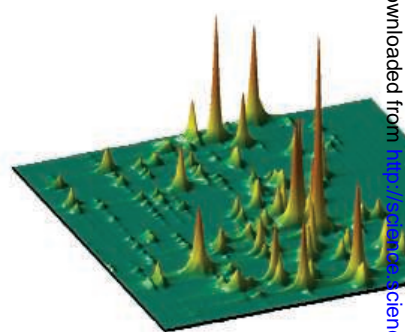
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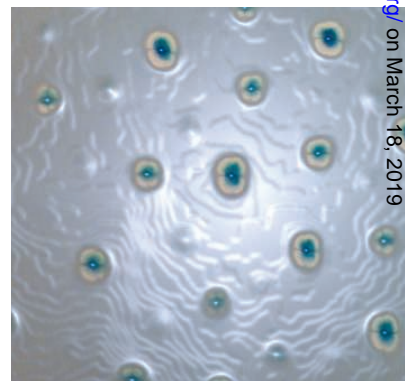
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Caspase-Dependent Conversion of Dicer Ribonuclease into a Death-Promoting Deoxyribonuclease

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An enzyme that chops up RNA can be switched to DNA fragmentation and can trigger programmed cell death in worms.
10.1126/science.1182374

Analysis of Genetic Inheritance in a Family Quartet by Whole-Genome Sequencing

J. C. Roach et al.

Genomic sequencing of an entire family reveals the rate of spontaneous mutations in humans and identifies disease genes.
10.1126/science.1186802

A Peroxidase/Dual Oxidase System Modulates Midgut Epithelial Immunity in *Anopheles gambiae*

S. Kumar et al.

Bonding between cell-surface proteins forms a physical barrier in mosquito guts to prevent microbe invasion.
10.1126/science.1184008

Detection of a Large-Scale Structure of Intracluster Globular Clusters in the Virgo Cluster

M. G. Lee et al.

Extensive regions of mass have been located between the galaxies of the Virgo cluster.
10.1126/science.1186496

A Fast Soluble Carbon-Free Molecular Water Oxidation Catalyst Based on Abundant Metals

Q. Yin et al.

Bulky polytungstate ligands stabilize a cobalt-based catalyst highly active for splitting water.
10.1126/science.1185372

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Expectant moms' bad eating habits may hurt boys more than girls.

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A subtle genetic variant seems to dictate how much pain people feel.

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RESEARCH ARTICLE: Pin1 and PKM ζ Sequentially Control Dendritic Protein Synthesis

P. R. Westmark et al.

PERSPECTIVE: PINing for Things Past

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Memory storage requires the inhibition of a peptidyl-prolyl isomerase to enable synthesis of the kinase PKM ζ .

REVIEW: Stress-Activated Cap'n'Collar Transcription Factors in Aging and Human Disease

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NETWATCH: PhosphoSitePlus

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NETWATCH: The CASpase Substrate dataBASE Homepage (CASBAH)

Search and browse a collection of caspase substrates; in Protein Databases.

SCIENCE CAREERS

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Free Career Resources for Scientists

Audacity, Part 4: Taking Liberties With Research Grants?

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Should you propose safe research and then use the money for riskier work?

New Opportunities and Jobs Coming in Comparative Effectiveness Research

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Recovery Act funding will boost a field focused on health care costs and quality.

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COMMENTARY: The Road We Must Take—Multidisciplinary Team Science

M. L. Disis and J. T. Slattery

Solutions to today's complex health problems will require multidisciplinary innovative thinking and collaboration.

PERSPECTIVE: Bladder Cancer—Optimal Application of Preclinical Models to Suitable Translational Questions

D. Raghavan

New reagents tested in bladder cancer xenografts allow for better economy and focus in clinical cancer trials.



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Monkeys reveal genetics advantage against HIV.

RESEARCH ARTICLE: MHC Heterozygote Advantage in Simian Immunodeficiency Virus-Infected Mauritian Cynomolgus Macaques

S. L. O'Connor et al.

Heterozygote advantage in macaque monkeys reveals that HIV vaccine should elicit broad CD8⁺ T cell responses.

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SCIENCE (ISSN 0036-8075) is published weekly on Friday, except the last week in December, by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Periodicals Mail postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 2010 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (51 issues): \$146 (\$74 allocated to subscription). Domestic institutional subscription (51 issues): \$910; Foreign postage extra: Mexico, Caribbean (surface mail) \$55; other countries (air assist delivery) \$85. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #1254 88122. Publications Mail Agreement Number 1069624. **Printed in the U.S.A.**

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Science

327 (5971)

Science **327** (5971), 1297-1395.

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