Methuselah worms

949 & 1010

973 & 1001

Peptides and pH

NEWS & COMMENT

A $1 Billion 'Tax' on R&D Funds
Does SBIR Increase the R&D Pot? House Panel Wants Bigger Bang for Buck
U.S. v. Johnson

UCSF, Stanford Hospitals to Merge
Varmus Proposes to Scrap the RAC

Unique Protein Database Imperiled
After 9 Years, a Tangled Case Lurches Toward a Close

RESEARCH NEWS

Worm Genes Imply a Master Clock
A Glow From the First Galaxies?
A New Theory of Turbulence Causes a Stir Among Experts
Photon Bubbles Put X-ray Fizz Into Neutron Stars

Flies Unmask Evolutionary Warfare Between the Sexes

Chemokines Take Center Stage in Inflammatory Ills

PERSPECTIVES

Out of Africa: Meat-Eating Dinosaurs That Challenge Tyrannosaurus rex

P. J. Currie

Stratospheric Control of Climate

A. Robock

Another Twist to MHC-Peptide Recognition

I. A. Wilson

Regulating Cell Proliferation: As Easy as APC

M. Peifer

REPORTS

A Far-Field Hydrothermal Plume from Loihi Seamount

J. E. Lupton

DEPARTMENTS

THIS WEEK IN SCIENCE

EDITORIAL

Desperately Seeking Friends

M. R. C. Greenwood

LETTERS


SCIENCESCOPE

941

926

Board of Reviewing Editors

Science • Vol. 272 • 17 May 1996
This skull of 90-million-year-old *Carcharodontosaurus saharicus*, reconstructed from fossils found in Morocco, provides new evidence of Africa's isolated dinosaurian fauna. Although it rivals in size the skull of *Tyrannosaurus rex*, the volume of its braincase (205 cubic centimeters) is only half that of *T. rex*, and the estimated volume of its brain (~100 cubic centimeters) is only about one-fifteenth that of an average human's. See page 986 and the Perspective on page 971. (Photo: H. Larsson, D. Christopher, P. Sereno, University of Chicago)

Selected Elastic Moduli of Single-Crystal Olivines from Ultrasonic Experiments to Mantle Pressures
G. Chen, B. Li, R. C. Libermann

The Impact of Solar Variability on Climate
J. D. Haigh

Universality Classes of Optimal Channel Networks
A. Maritan, F. Colaiori, A. Flammini, M. Cieplak, J. R. Banavar

Predatory Dinosaurs from the Sahara

Lead and Helium Isotope Evidence from Oceanic Basalts for a Common Deep Source of Mantle Plumes
B. B. Hanan and D. W. Graham

Pre-Main-Sequence Star Candidates in the Bar of the Large Magellanic Cloud

Spread of Synaptic Depression Mediated by Presynaptic Cytoskeletal Signaling
S. Cash, R. S. Zucker, M. -m. Poo

Structures of an MHC Class II Molecule with Covalently Bound Single Peptides
D. H. Fremont, W. A. Hendrickson, P. Marrack, J. Kappler

Specification of Pituitary Cell Lineages by the LIM Homeobox Gene Lhx3

Enhanced Degradation of EGF Receptors by a Sorting Nexin, SNX1
R. C. Kurten, D. L. Cadena, G. N. Gill

Determination of Life-Span in Caenorhabditis elegans by Four Clock Genes
B. Lakowski and S. Hekimi

The Role of Zinc in Selective Neuronal Death After Transient Global Cerebral Ischemia
J.-Y. Koh, S. W. Suh, B. J. Gwag, Y. Y. He, C. Y. Hsu, D. W. Choi

Increase in Single L-Type Calcium Channels in Hippocampal Neurons During Aging
O. Thibault and P. W. Landfield

Binding of APC to the Human Homolog of the Drosophila Discs Large Tumor Suppressor Protein

Binding of GSK3β to the APC-β-Catenin Complex and Regulation of Complex Assembly
B. Rubinfeld, I. Albert, E. Portiri, C. Fiöl, S. Munemitsu, P. Polakis

Retinal Degeneration in Mice Lacking the γ Subunit of the Rod cGMP Phosphodiesterase

DNA Replication Fork Pause Sites
Dependent on Transcription
A. M. Deshpande and C. S. Newlon

AAAS Board of Directors

Rita R. Colwell
Retiring President, Chairman
Jane Lubchenco
President
Mildred S. Dresselhaus
President-elect
Sheila Jasparoff
William A. Lester Jr.
Simon A. Levin

Marcia C. Linn
Michael J. Novacek
Anna C. Roosevelt
Jean E. Taylor
Nancy S. Waxler

William T. Golden
Richard S. Nicholson

EXECUTIVE OFFICER

SCIENCE (ISSN 0036-8075) is published weekly on Friday by the American Association for the Advancement of Science, 1200 New York Avenue, NW, Washington, DC 20005. Second-class postage (publication No. 484460) paid at Washington, DC, and additional mailing offices. Copyright © 1996 by the American Association for the Advancement of Science. The title SCIENCE is a registered trademark of the AAAS. Domestic individual membership and subscription (5 issues): $102 ($55 allocated to subscription). Domestic institutional subscription (5 issues): $250. Foreign postage extra: Mexico, Caribbean (surface mail) $55; other countries (air mail, surface mail, and airmail delivery) $90. First class, airmail, student, and emeritus rates on request. Canadian rates with GST available upon request, GST #125488122.

Change of address: allow 4 weeks, giving old and new addresses and 8-digit account number. Postmaster: Send change of address to Science, P.O. Box 1811, Danbury, CT 06813-1811. Single copy sales: $7.00 per issue prepaid includes surface postage; bulk rates on request. Authorization to photocopy material for internal or personal use or for internal use by permusers registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the $4.00 per article is paid directly to CCC, 222 Rosewood Drive, Danvers, MA 01923. The identification code for Science is 0036-8075/96. PubMed is indexed in the Reader's Guide to Periodical Literature and in several specialized indexes.

Cover: This skull of 90-million-year-old Carcharodontosaurus saharicus, reconstructed from fossils found in Morocco, provides new evidence of Africa's isolated dinosaurian fauna. Although it rivals in size the skull of Tyrannosaurus rex, the volume of its braincase (205 cubic centimeters) is only half that of T. rex, and the estimated volume of its brain (~100 cubic centimeters) is only about one-fifteenth that of an average human's. See page 986 and the Perspective on page 971. (Photo: H. Larsson, D. Christopher, P. Sereno, University of Chicago)