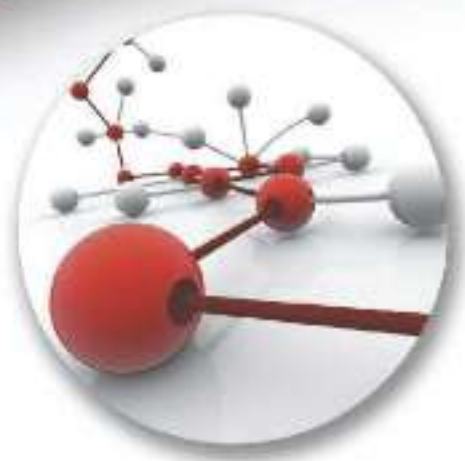


Call for Papers

*Science
Signaling*

Now accepting
original research
submissions



ISSN: 1937-9145

From the publishers of *Science*, *Science Signaling*, formerly known as *Science's* STKE, will add original research starting September 2008. Each week the journal will publish leading-edge findings in addition to the current features, including Perspectives, Reviews, Protocols, Meeting Reports, Book Reviews, Teaching Resources, and the Database of Cell Signaling.

Science Signaling showcases high-impact research in cellular regulation in such fields as molecular biology, development, immunology, neuroscience, microbiology, physiology and medicine, pharmacology, biochemistry, cell biology, bioinformatics, and systems biology. Submit your research that provides new concepts and new understanding of biological signal transduction for consideration.

Subscribing to *Science Signaling* ensures that you and your lab have the latest cell signaling resources. From basic science to design of therapeutics, from molecules to networks and systems design, read the best source – *Science Signaling*.

Announcing Chief Scientific
Editor for *Science Signaling* –

Michael B. Yaffe, M.D., Ph.D.

Associate Professor, Department of Biology
Massachusetts Institute of Technology

Submit your paper to:
stke.sciencemag.org/about/help/research.dtl

Science Signaling



A new letters journal

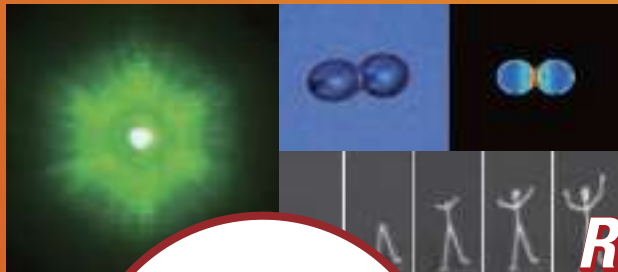
APPLIED PHYSICS EXPRESS (APEX)

launched January 2008 !

– Sister Journal of Japanese Journal of Applied Physics (JJAP) –

Submit your work to APEX !

APEX is the successor to JJAP Express Letters, not only inheriting its worldwide recognition, but also further promoting its strengths of high scientific quality and rapid publication.



***Letters journal
with high impact***



Rapid publication

On-line version:
record-shortest 25 days after submission

***Free access to the online version
for 3 months after publication***

**67% Special
Discount**

on publication charge until
the end of 2008

Subjects covered by APEX

- Semiconductors, superconductors, and spintronic, dielectric, and organic materials
- Plasmas, atomic, molecular, and chemical physics, and applied nuclear physics
- Photonics, quantum electronics, and plasmonics
- Instrumentation, measurement, and fabrication technology
- Device physics
- Cross-disciplinary areas such as bioelectronics/ photonics and environmental/energy technologies
- Nanoscale science and technology
- Thin films, surfaces, interfaces, and crystal growth



For more information, please visit <http://apex.ipap.jp>

APEX is published by the Japan Society of Applied Physics (JSAP <http://www.jsap.or.jp/>) through the Institute of Pure and Applied Physics (IPAP <http://www.ipap.jp/>).



GE Healthcare



Any scale. Anytime. Anywhere.

Proven technology for rapid vaccine production.

Pandemics can occur at any time, and the key to successful vaccine processing is to be prepared for unexpected challenges. GE Healthcare's comprehensive vaccine solution platform gives you the power to do more in less time, enabling scalable processes and ensuring security of supply should demand suddenly change. It includes our groundbreaking ReadyToProcess™ disposable products, which eliminate cleaning and validation to significantly reduce process development time.

Through flexible solutions backed by our expert support and worldwide presence we're helping you transform healthcare. We call it BioProcess Re-imagined.

www.gelifesciences.com/bioprocess



GE Healthcare Bio-Sciences AB, a General Electric Company.
Björkgatan 30, 751 84 Uppsala, Sweden
© 2008 General Electric Company - All rights reserved.
GE31-07

RNAi assay technologies by QIAGEN

Knock down reliably

Rely on QIAGEN RNAi assay technologies for:

- Custom siRNA design and synthesis
- Predesigned and validated siRNA
- Flexible, user-defined siRNA plates and sets
- siRNA transfection reagents
- Matching siRNA and RT-PCR assays
- miRNA assays

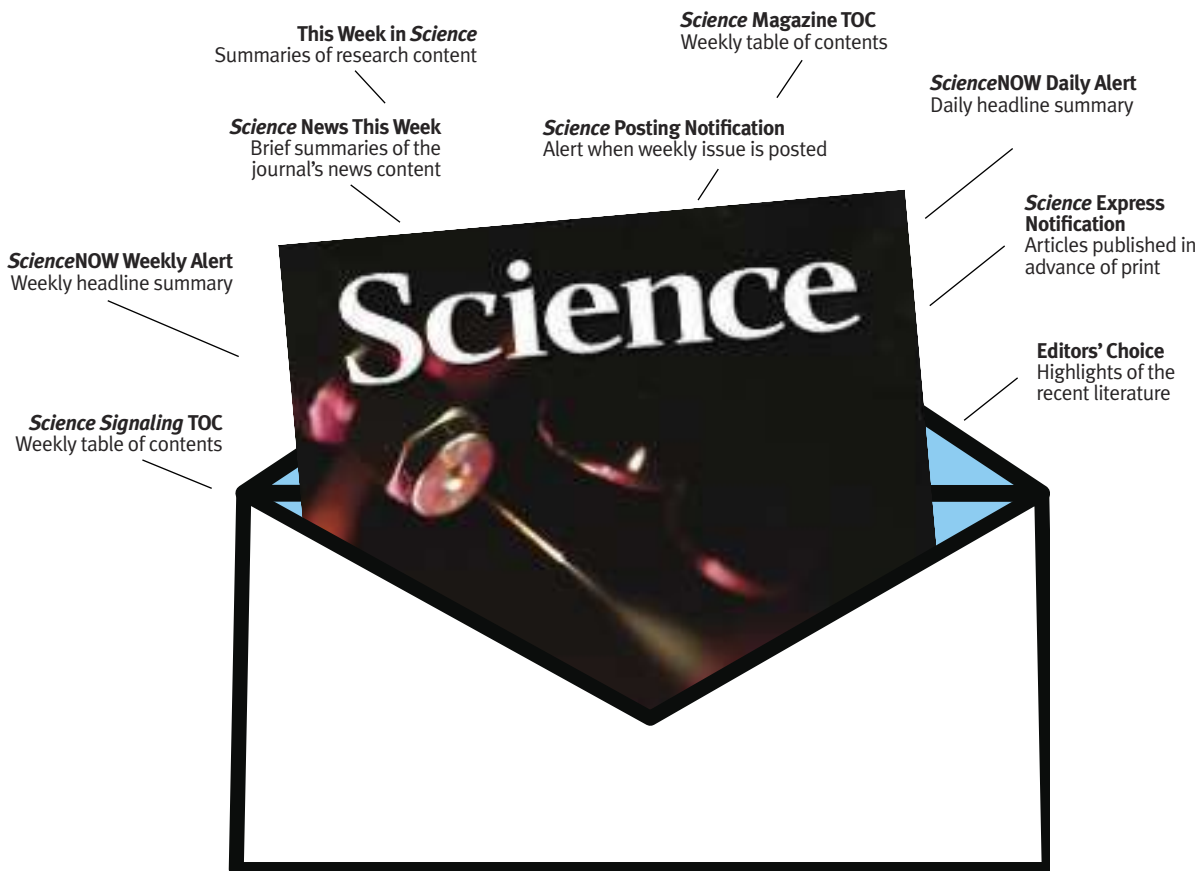
Contact QIAGEN today or visit www.qiagen.com/goto/RNAi.



FREE
with registration

Science Alerts in Your Inbox

Get daily and weekly E-alerts on the latest breaking news and research!



Get the latest news and research from *Science* as soon as it is published. Sign up for our e-alert services and you can know when the latest issue of *Science* or *Science Express* has been posted, peruse the latest table of contents for *Science* or *Science Signaling*, and read summaries of the journal's research, news content, or Editors' Choice column, all from your e-mail inbox. To start receiving e-mail updates, go to:

sciencemag.org/ema

Science

AAAS

Q What's the quickest link to advances in the world of science?

AAAS

AAAS Advances—the free monthly e-newsletter especially for AAAS members.

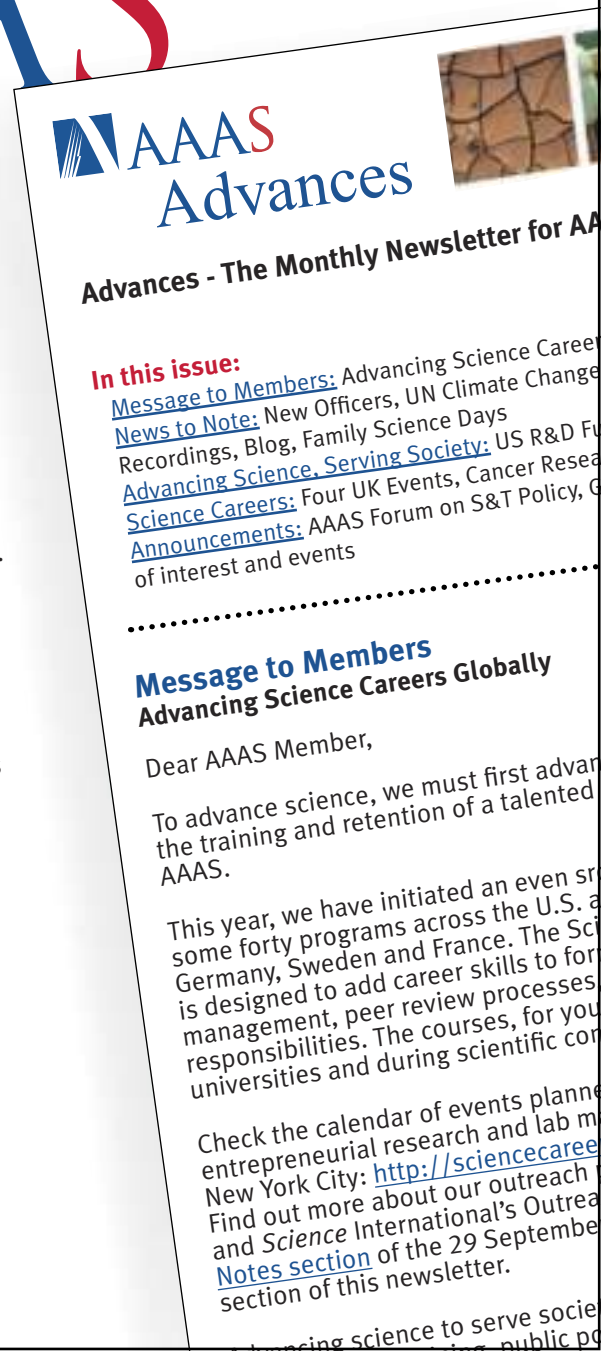
Each month, AAAS members keep up with the speed of science via a quick click on the newsletter Advances.

Look for the next issue of Advances delivered to your inbox midmonth. Look up archived issues at aaas.org/advances.

Features include:

- A special message to members from Alan Leshner, AAAS CEO
- Timely news on US and international AAAS initiatives
- Just-released reports and publications
- Future workshops and meetings
- Career-advancing information
- AAAS members-only benefits

aaas.org/advances



Science

**You're
Holding
Sustainable
Science**



The pages of this journal are made of recycled fiber.

The staff of *Science* is doing its share to reduce, reuse, and recycle. The paper used in printing the pages of this journal contains reused materials. The additional wood used to create this paper comes from a paper mill participating in the PEFC Council (Programme for the Endorsement of Forest Certification) — ensuring the paper is made from a sustainable managed forest. **And in the future *Science* and AAAS will look to do more to advance science and conserve the environment.**



Sustainable *Science*, now printed on recycled paper with 30% postconsumer content.



IS YOUR ARTICLE REACHING
MILLIONS OF READERS?
PUBLISH WITH BENTHAM OPEN!



Introducing **OPEN ACCESS** Research Journals

- FREE online journals for all to view
- Rapidly published peer-reviewed articles
- Lowest open access fees for authors
- All articles indexed by Google

Eminent Scientists Endorse Bentham Open

“Bentham’s open access journals offer a creative avenue towards the goal of rapid publication and dissemination of relevant science results.”

*Richard R. Ernst
Nobel Laureate*

“The advantage of the Open Journal series is that it is just that: open and accessible to anyone with a PC at no charge. I appeal to scholars across the disciplines to consider the Open Journal series as a forum for their work.”

*J.C. Jones
University of Aberdeen, Scotland*

View details and access journals at:
www.bentham.org/open


BENTHAM OPEN



employers post jobs on
Science Careers.

We’ve got **Careers** down to a **Science**.

With thousands of job postings from the industry’s top employers, *Science Careers* connects you to the very best career opportunities across the world in industry, academia, and government. It’s no wonder why top employers look to us to find the perfect candidate. Log on to www.ScienceCareers.org today and watch your career flourish and grow.

Science Careers

From the journal *Science*



www.ScienceCareers.org

New Products Focus: Microarrays

Wash System

The Maui Wash System automates posthybridization wash protocols to provide clean, dry microarray slides. The system is suitable for mid throughput to high throughput laboratories that demand high-quality microarray data. The system accommodates many wash protocols, with user control of cycle times, reagent usage, temperature, slide agitation, and drying.

BioMicro Systems
For information 650-328-2580
www.biomicro.com



Cytogenetic Solution

Cytogenetic Solution, which combines the high-density SNP Array 6.0 with a simple assay and intuitive software, is designed to enable researchers to detect more copy-number abnormalities associated with congenital diseases. The microarray-based system provides cytogenetic researchers with an accurate method of detecting chromosomal abnormalities associated with congenital diseases such as autism and mental retardation. The copy number and loss of heterozygosity information it delivers enables scientists to identify uniparental disomies—genetic abnormalities that are frequent in many congenital diseases.

Affymetrix

For information 408-731-5791
www.affymetrix.com

Gene Expression BeadChip

The HumanHT-12 BeadChip is a 12-sample product designed to accelerate whole genome expression and expression-based quantitative trait loci (eQTL) studies. It includes more than 48,000 probes per sample. Along with the HumanWG-6, which offers high-quality, whole-genome expression data, the HumanHT-12 BeadChip provides gene expression researchers with a flexible and cost-effective screening tool.

Illumina

For information 858-332-4055
www.illumina.com

Chicken Microarray

The Oligonucleotide Array CGH (comparative genomic hybridization) chicken microarray contains 244,000 features. The 244K chicken CGH array enables users to analyze to what extent copy number variation contributes to phenotypic variation in chickens, a species of significant economic importance and an important developmental biology model. The product started as a custom array, but the manufacturer received enough demand to put it in its catalog.

Agilent Technologies

For information 408-553-7191
www.agilent.com

Microarray Scanners

Two new microarray scanners, the Axon GenePix 4300A and the Axon GenePix 4400A, improve the efficiency of research experiments,

reduce the cost per data point, and offer broad applicability. The scanners provide customers with the ability to run the most advanced microarray applications, according to the manufacturer.

MDS Analytical Technologies

For information 888-637-7222
www.mdssciex.com

Silverquant Microarray Detection

The Silverquant microarray detection and scanning system provides four times higher sensitivity than fluorescence as well as signal stability. A new application note (No. 148) from Eppendorf Biochip Systems describes its features in detail and compares it with fluorescence in terms of sensitivity, dynamic range, reproducibility, and stability. According to the application note, the Silverquant detection technology offers higher resolution at low analyte concentrations, higher dynamic range, high reproducibility, and high signal stability with no photobleaching and no sensitivity to ozone. The Silverquant detection technology is reliable and robust with no moving optical parts. It features a 16-bit charge-coupled-device sensor, an integrated barcode reader, high resolution (up to 6 μm), fast scanning times (1 minute per slide at 12 μm). It scans standard microarray slides.

Eppendorf

For information +49-40-53801-1
www.eppendorf-biochip.com

Life Science Search Engine

A free version of the NextBio life science search engine is available. Using NextBio, a researcher or clinician can search the world's public life sciences data and literature, including more than 10,000 experiments, 16 million articles, and billions of data points. In addition, users can import their own experimental data into the NextBio search engine, share it with the community, and collaborate with others. With NextBio, researchers can find topics of interest quickly with an intelligent semantic auto-complete feature, make correlations across six species, perform searches to validate or generate novel hypotheses before investing in new experiments, and understand their own results by correlating them with the world's collective experimental data.

NextBio

For information 408-861-3610
www.nextbio.com

Electronically submit your new product description or product literature information! Go to www.sciencemag.org/products/newproducts.dtl for more information.

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and governmental organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS of any products or materials mentioned is not implied. Additional information may be obtained from the manufacturer or supplier.



Give Knowledge

Advance the Science of Gift Giving. Give *Science* Each Week.

Special Gift Subscription Rate*
Professional \$99 Postdoc/Student \$50

Give 51 issues of *Science* along with the same yearlong benefits of AAAS membership that you enjoy.

You'll give colleagues a career boost and students an academic leg-up. You'll intrigue and enlighten friends; educate and entertain family members. And you'll add new supporters for the AAAS international, public policy, education, and career programs that advance science and serve society.

Order online—Go to:

promo.aaas.org/giftmay2
or call 1-866-434-AAAS (2227)



When you give *Science*,
you receive our popular AAAS shirt.



*New members only. International orders will receive *Science* Digital edition — to place an order outside the U.S., go to promo.aaas.org/giftmay2



SYBR® Safe minimizes the danger from DNA staining.

Why put yourself, the environment, and your DNA sample at risk? You don't have to with SYBR® Safe. Fact is, it's just as effective as ethidium bromide, yet it's not a hazardous agent. So it's not only better for the environment, but better for you. And since SYBR® Safe uses blue light for visualization, your DNA sample won't be damaged by UV waves. Next time you're staining DNA, you won't need those warning signs. You're SYBR® Safe. www.invitrogen.com

 **invitrogen™**