A depiction of the interaction of an excess electron with the hydrogen-bonded complex \( \text{NH}_3\cdots\text{HCl} \), which induces formation of the ionic pair \( \text{NH}_4^+\text{Cl}^- \) solvated by the excess electron. The image shows the structures of three possible systems and highlights the areas that correspond to 10%, 30%, and 50% of the excess electron. See page 936.

Illustration: Maciej Haranczyk

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10.1126/science.1153341

A Cholesterol Biosynthesis Inhibitor Blocks *Staphylococcus aureus* Virulence
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A drug for controlling cholesterol may be useful as an antibiotic for multi–drug-resistant *Staphylococcus* because of unexpected structural similarities among critical proteins.
10.1126/science.1153018

A drug that inhibits a neural signaling pathway linked to behavioral stress may be a useful therapy in preventing relapse in alcoholics.
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10.1126/science.1154884

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Experiments with a stabilized bubble chamber, consisting of a buried superheated liquid, limit the abundance of weakly interacting massive particles, a dark-matter candidate.

CHEMISTRY
Electron-Driven Acid-Base Chemistry: Proton Transfer from Hydrogen Chloride to Ammonia S. N. Eustis et al.
Spectroscopy and simulations show that binding an excess electron to HCl helps it fully transfer its proton to ammonia, facilitating this type of acid-base reaction in a vacuum.

CHEMISTRY
High-Throughput Synthesis of Zeolitic Imidazolate Frameworks and Application to CO₂ Capture R. Banerjee et al.
Microporous metallic-organic frameworks with two types of linkers between the metal atoms in a tetrahedral lattice can take up large amounts of CO₂ at ambient conditions.

GEOCHEMISTRY
Rogue Mantle Helium and Neon F. Albarède
Anomalously high ratios of ⁴He to ³²He in the recycled basalts under ocean islands may result from helium diffusing in from more pristine, primitive mantle.

EVOLUTION
The Premetazoan Ancestry of Cadherins M. Abedin and N. King
A close unicellular relative of metazoans unexpectedly contains 23 genes for a cell adhesion protein, suggesting a role for the protein in the evolution of multicellularity.

ECOLOGY
A Global Map of Human Impact on Marine Ecosystems B. S. Halpern et al.
A meta-analysis shows that human activities have altered virtually all ocean ecosystems, at least to some extent, documenting those areas needing the most protection.

ECOLOGY
Effects of Predator Hunting Mode on Grassland Ecosystem Function O. J. Schmitz
An ecosystem containing actively hunting spiders shows lower plant diversity but higher primary production than one with spiders that sit and wait to ambush their prey.

BIOCHEMISTRY
Axle-Less F₆-O₄-ATPase Rotates in the Correct Direction S. Furuike et al.
A molecular rotary motor continues to rotate in the correct direction even when its shaft is deleted, leaving only the rotor head sitting on top of the shaft housing.

GENETICS
A Mouse Model of Mitochondrial Disease Reveals Germline Selection Against Severe mtDNA Mutations W. Fan et al.
Developing mouse oocytes that harbor highly deleterious mitochondrial DNA mutations are eliminated, minimizing negative impact on population fitness.

MEDICINE
Metal Chelation and Inhibition of Bacterial Growth in Tissue Abscesses B. D. Corbin et al.
An immune cell–derived protein binds metal ions in infected abscesses, depriving the bacteria of the essential nutrients magnesium and zinc and reducing their growth.

PSYCHOLOGY
The Critical Importance of Retrieval for Learning J. D. Karpicke and H. L. Roediger III
Students recalled words they had learned the previous week more effectively if they were tested repeatedly in the interim than if they spent the time studying.

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The Tiredness of the Long-Distance Runner
Leaky calcium channels may cause muscle fatigue, and a new drug could boost performance.

I Hear You, My Monkey Brother
A region of the monkey brain responds preferentially to the voices of other monkeys.

Taking the Heat Off Coral
A natural ocean “thermostat” is counteracting the effects of climate warming.

Stopping cell death.

TEACHING RESOURCE: Preparing a graduate-level class covering mathematical modeling of mammalian signaling pathways.

In Person: Finding Opportunities in a Dysfunctional Job Market
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To find hidden value in the job market, you have to cast a wide net.

No, You’re Not an Impostor
L. Laursen
Getting over the feeling that you’re a phony takes an accurate self-appraisal.

Tooling Up: Put Some Muscle Into Your Marketing Materials
D. Jensen
Powerful writing can move your job application to the top of the pile.

From the Archives: How to Get a Job in Academia
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