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COVER
Dendritic cells of the immune system recognize and bind bacteria and other microbes by means of receptors expressed on the dendritic cell membrane and within the cell, thus triggering an immune response. Microbial sensing is associated with the innate arm of the immune system, and recent developments in this area are described in the special section starting on page 283.

Image: Chris Bickel

www.sciencemag.org SCIENCE VOL 327 15 JANUARY 2010
Published by AAAS

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During translation of mitochondrial genes, shifting the ribosome reading frame avoids unconventional arginine codons.

Adaptive Evolution of Pelvic Reduction in Sticklebacks by Recurrent Deletion of a Pitx1 Enhancer

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Loss of a tissue-specific enhancer explains multiple parallel losses of the pelvic girdle in stickleback populations.

Direct Imaging of Bridged Twin Protoplanetary Disks in a Young Multiple Star

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An infrared image taken with the Subaru Telescope reveals young binary stars and their circumstellar environments.

How the Shape of an H-Bonded Network Controls Proton-Coupled Water Activation in HONO Formation

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Vibrational spectroscopy uncovers the role of a surrounding water network in the mediating reaction of a solvated ion.

Electrocatalytic CO₂ Conversion to Oxalate by a Copper Complex

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A copper complex can reductively couple carbon dioxide, even in the presence of oxygen.

Ligand-Enabled Reactivity and Selectivity in a Synthetically Versatile Aryl C–H Olefination

D. H. Wang et al.

A palladium-based catalyst eliminates the need for halogenated compounds for the formation of carbon-carbon bonds.

Functional and Evolutionary Insights from the Genomes of Three Parasitoid Nasonia Species

The Nasonia Genome Working Group

The genomes of three parasitoid wasp species offer insights into speciation, insect evolution, and parasitoid biology.
RESEARCH ARTICLE: Extensive Crosstalk Between O-GlcNAcylation and Phosphorylation Regulates Cytokinesis
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Protein O-GlcNAcylation regulates cell division.
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