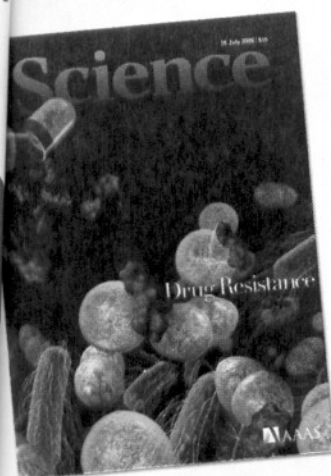




COVER

An artist's conception of the antibiotic penicillin and some of the bacteria that have developed resistance to various antibiotics. A special section beginning on page 355 explores the rise and spread of so-called bad bugs and possible interventions.

Illustration: Chris Bickel/Science

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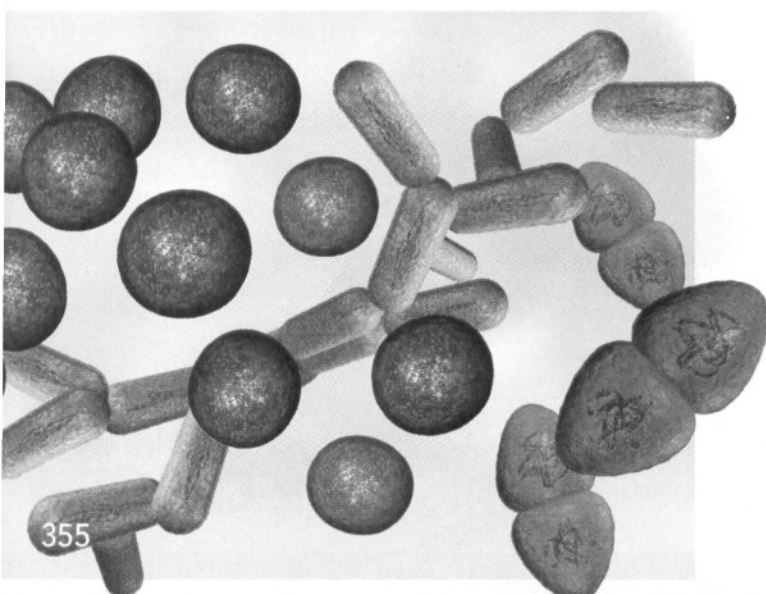
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Plant Immunity Requires Conformational Changes of NPR1 via S-Nitrosylation and Thioredoxins

Y. Tada et al.

After a pathogen invades a plant, a protein, usually kept in a multimeric state by S-nitrosylation, is dissociated by thioredoxin, freeing the monomers for defense responses.

10.1126/science.1156970

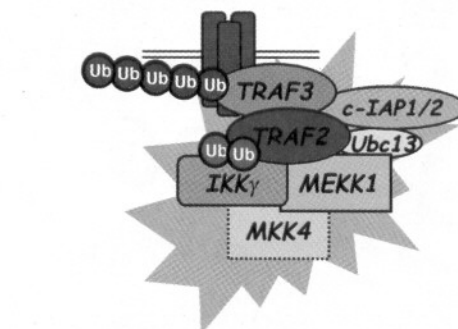
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Ferruginous Conditions Dominated Later Neoproterozoic Deep-Water Chemistry

D. E. Canfield et al.

Low sulfur input caused the deeper ocean to become anoxic and rich in ferrous iron 750 million years ago, a reversal from the more oxidizing conditions of the previous 1 billion years.

10.1126/science.1154499



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Essential Cytoplasmic Translocation of a Cytokine Receptor–Assembled Signaling Complex

A. Matsuzawa et al.

Degradation of one member of a protein complex that forms when a cytokine receptor is activated causes the complex to move to the cytoplasm, triggering the downstream pathway.

10.1126/science.1157340

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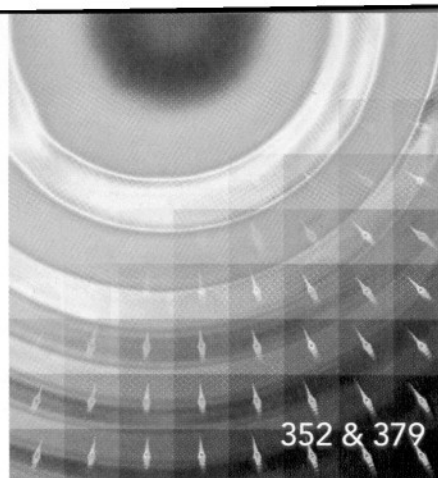
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