Interactions between microbes and plants can vary widely, depending upon the context and the partners of the interaction. An Editorial on page 691 and a collection of Perspectives starting on page 742 discuss recent advances in our understanding of the biochemistry, signaling, and ecosystem dynamics that reflect how microbes and plants interact.

Illustration: Chris Bickel
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736 Elemental Composition of the Martian Crust
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781 UV Absorption Cross Sections of ClOOCI Are Consistent with Ozone Degradation Models
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Measurements of how well ClOOCI molecules absorb ultraviolet light support standard models of chlorine-induced ozone degradation.

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758 A Gene Necessary for Reproductive Suppression in Termites
J. Korb et al.
Knocking out the Neofem2 gene in queen termites illicit pre-reproductive behavior in workers.

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759 Representation of Confidence Associated with a Decision by Neurons in the Parietal Cortex
R. Kiani and M. N. Shadlen
Neurons in the primate parietal cortex encode information required to make a decision and also the certainty of that choice.

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764 Characterization of Multipartite Entanglement for One Photon Shared Among Four Optical Modes
S. B. Papp et al.
Sharing a single photon between four optical modes creates entangled states that could be used in quantum information processing.

768 N-Doping of Graphene Through Electrothermal Reactions with Ammonia
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The edges of graphene nanoribbons incorporate nitrogen atoms after heating in an atmosphere of ammonia.

774 Apicomplexan Parasites Co-Opt Host Calpains to Facilitate Their Escape from Infected Cells
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A host protease helps newly replicated microbial parasites escape from incubator cells.

801 Benzothiazinones Kill Mycobacterium tuberculosis by Blocking Arabinan Synthesis
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An isomerase required for cell-wall synthesis is a target for an alternative drug lead for tuberculosis treatment.

807 Movement Intention After Parietal Cortex Stimulation in Humans
M. Desmurget et al.
Stimulation of the parietal cortex causes subjects to report having moved, even in the absence of actual motor responses.

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T cells control viral infection in a mouse model.

Narcolepsy: A Case of the Body Attacking Itself?

Addition and subtraction are encoded in the same part of the brain that is responsible for eye movements and spatial attention.

A pharmacogenetics database integrates genetic, neurologic and neurodevelopmental disorders; but not developmental, axon outgrowth.

Viral Infection

Interleukin-21 produced by CD4+ T cells helps CD8+ T cells control viral infection in a mouse model.

Recruitment of an Area Involved in Eye Movements During Mental Arithmetic

Addition and subtraction are encoded in the same part of the brain that is responsible for eye movements and spatial attention.

A pharmacogenetics database integrates genetic, neurologic and neurodevelopmental disorders; but not developmental, axon outgrowth.

Regulates Axon Regeneration

In Caenorhabditis elegans, a mitogen-activated protein kinase pathway is required for regenerative, but not developmental, axon outgrowth.

Optical tracking of neurotransmitter release in the brain reveals multiple synaptic populations that depend on brain activity.

A pharmacogenetics database integrates genetic, phenotypic, and pharmacological data; in Bioinformatics Resources.

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Interleukin-21 produced by CD4+ T cells helps CD8+ T cells control viral infection in a mouse model.

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