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COVER

Gray and black wolf pups howling in Wolf Park in Battle Ground, Indiana. In North American gray wolves (*Canis lupus*), a mutation that alters coat color from brownish-gray to black, which derives from past hybridization with domestic dogs, is increasing in forested habitats because of positive selection. See page 1339.

Image: Monty Sloan

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The liquid-to-glass transition of a simple mixture is controlled by parameters that drive the system away from equilibrium.
- 1313** Functional Proteomics Identify Cornichon Proteins as Auxiliary Subunits of AMPA Receptors
J. Schwenk et al.
A distinctive family of proteins involved in the assembly of the most common excitatory brain receptor has been discovered.
>> *Perspective p. 1295*

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Wrapping a molecule around individual single-walled carbon nanotubes enhances fluorescence.
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Photoelectron imaging uncovers electronic angular distributions in metallic nanoclusters.
- 1327** Implications of a VLBI Distance to the Double Pulsar J0737-3039A/B
A. T. Deller et al.
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Several specific genes in wheat confer resistance to common fungal diseases.
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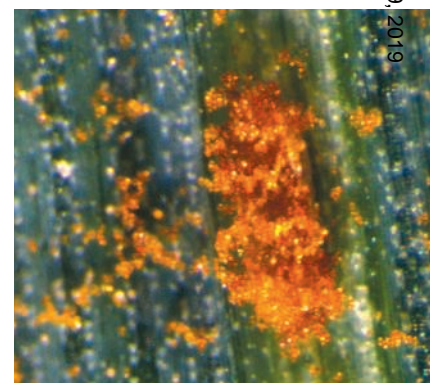
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Leucine-Rich Repeat Protein Complex Activates Mosquito Complement in Defense Against *Plasmodium* Parasites

M. Povelones et al.

A family of molecules, apparently unique to mosquitoes, binds to invading parasites and initiates innate immune responses.

10.1126/science.1171400

Rare Variants of *IFIH1*, a Gene Implicated in Antiviral Responses, Protect Against Type 1 Diabetes

S. Nejentsev et al.

Deep resequencing revealed rare alleles that were significantly associated with protection from diabetes.

10.1126/science.1167728

Exomic Sequencing Identifies *PALB2* as a Pancreatic Cancer Susceptibility Gene

S. Jones et al.

Mutations in a gene previously implicated in breast cancer are a contributing factor in hereditary pancreatic cancer.

10.1126/science.1171202

CD24 and Siglec-10 Selectively Repress Tissue Damage-Induced Immune Responses

G.-Y. Chen et al.

A signaling pathway involving an immune protein protects cells against the potentially fatal immune response induced by tissue damage.

10.1126/science.1168988

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A Better Way to Make Embryonic-Like Stem Cells

"Jumping genes" may improve efficiency and safety of creating therapeutic cells.

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RESEARCH ARTICLE: Odor Coding by a Mammalian Receptor Repertoire

H. Saito et al.

Identification of mammalian olfactory receptor agonists enables development of a predictive model of receptor activation.

PERSPECTIVE: How Perfect Can Protein Interactomes Be?

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Evolutionary noise in protein-protein interactions implies that not all interactions must be functional.

PODCAST

J. Schlessinger and A. M. VanHook

Autophosphorylation events that control the activity of the FGF receptor are kinetically controlled and disrupted by a mutation associated with glioblastoma.

GLOSSARY

Find out what DARC, SFK, and QTL mean in the world of cell signaling.

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J. Fernández

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A History of Beginnings

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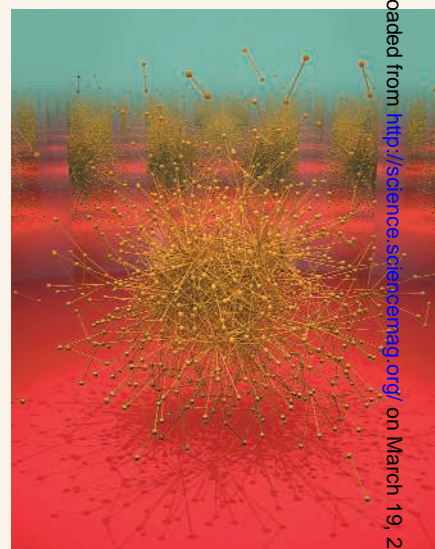
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Science

323 (5919)

Science **323** (5919), 1261-1367.

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