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### >> Science Podcast

On this week's show: avoiding big data traps and a roundup of shorts from our daily news site.

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## COVER

Surface tension supports a water strider. At small scales, the influence of surface tension can exceed that of gravity, affecting everything from how small animals urinate to how water ferns stay buoyant and how pathogens spread from a sneeze or cough. *Science* explores the small world of surface tension in a News Focus on page 1194.

*Photo: © Hideta Nagai/National Geographic Society/Corbis*

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Binding of a guide RNA triggers structural changes in a set of DNA-cleaving enzymes.  
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- 1216 Ligand-Controlled C(sp<sup>3</sup>)-H Arylation and Olefination in Synthesis of Unnatural Chiral  $\alpha$ -Amino Acids  
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- 1221 Specific and Nonhepatotoxic Degradation of Nuclear Hepatitis B Virus cccDNA  
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- 1240 Lethal Interactions Between Parasites and Prey Increase Niche Diversity in a Tropical Community  
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- 1249 Selective Methylation of Histone H3 Variant H3.1 Regulates Heterochromatin Replication  
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- 1253 Vertebrate Limb Bud Formation Is Initiated by Localized Epithelial-to-Mesenchymal Transition  
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Cell state change, rather than differential proliferation, initiates limb formation during development.

- 1256 The *stum* Gene Is Essential for Mechanical Sensing in Proprioceptive Neurons  
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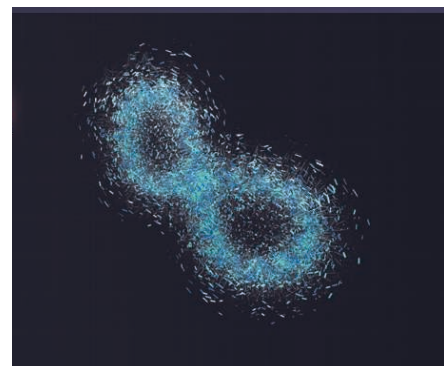
The *stumble* gene in flies is required in neurons that sense joint angles.

- 1260 Complement Is Activated by IgG Hexamers Assembled at the Cell Surface  
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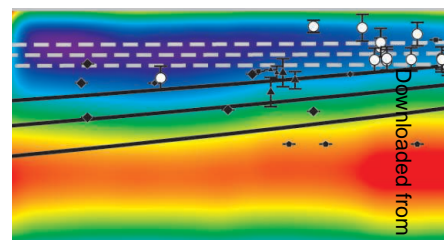
Hexameric platforms of antibodies on the cell surface trigger the complement cascade.

- 1264 Dlk1 Promotes a Fast Motor Neuron Biophysical Signature Required for Peak Force Execution  
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The fast versus slow profile of motor neurons is controlled by expression of a membrane protein.



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