**RESEARCH ARTICLE**

1421 Pliocene Warmth, Polar Amplification, and Stepped Pleistocene Cooling Recorded in NE Arctic Russia
J. Brigham-Grette et al.
A sediment core from Lake El’gygytgyn, in northeast Russia, provides a high-latitude climate record of the late Pliocene.

1451 Structure of Parkin Reveals Mechanisms for Ubiquitin Ligase Activation
J. F. Trempe et al.
The complete structure of a protein linked to Parkinson’s disease suggests how to activate it.

1456 GPR15-Mediated Homing Controls Immune Homeostasis in the Large Intestine Mucosa
S. V. Kim et al.
A G protein–coupled receptor helps to localize regulatory T cells in the large intestine.

**REPORTS**

1427 Massive Dirac Fermions and Hofstadter Butterfly in a van der Waals Heterostructure
B. Hunt et al.
A band gap is observed in a monolayer graphene–hexagonal boron nitride heterostructure.

1459 H5N1 Hybrid Viruses Bearing 2009/H1N1 Virus Genes Transmit in Guinea Pigs by Respiratory Droplet
Y. Zhang et al.
Some reassortants between H5N1 and H1N1 influenza viruses are transmissible by respiratory droplet among mammals.

1438 The Origins of Scaling in Cities
L. M. A. Bettencourt
Cities of all sizes can be modeled as interdependent networks of interactions and infrastructure.

1457 GWAS of 126,559 Individuals Identifies Genetic Variants Associated with Educational Attainment
C. A. Rietveld et al.
Three genetic loci are found to explain variation associated with educational achievement.

1442 Topology of Feather Melanocyte Progenitor Niche Allows Complex Pigment Patterns to Emerge
S. J. Lin et al.
The patterns of colors in feathers are produced via temporal and spatial regulation of melanocyte stem cells.

1451 The Structure of Parkin Reveals Mechanisms for Ubiquitin Ligase Activation
J. F. Trempe et al.
The complete structure of a protein linked to Parkinson’s disease suggests how to activate it.

1445 Protein Equilibration Through Somatic Ring Canals in Drosophila
P. F. McLean and L. Cooley
Ring canals ensure that the haves share with their have-not neighbors.

1448 Quantum Coherent Energy Transfer over Varying Pathways in Single Light-Harvesting Complexes
R. Hildner et al.
A phase relation observed in ensemble measurements of photosynthetic proteins is borne out at the single-molecule level.