RESEARCH ARTICLES

84 Integrative Annotation of Variants from 1092 Humans: Application to Cancer Genomics
E. Khurana et al.
Regions under strong selection in the human genome identify noncoding regulatory elements with possible roles in disease. Research Article Summary; for full text: http://dx.doi.org/10.1126/science.1235587

85 Mice Genetically Deficient in Vasopressin V1a and V1b Receptors Are Resistant to Jet Lag
Y. Yamaguchi et al.
In mice, the pace of recovery from jet lag is partly determined by vasopressin signaling in a certain region of the brain.

98 Specific Chemical Reactivities of Spatially Ultrathin, Molecular-Sieving Graphene Oxide Membranes
H. W. Kim et al.
Stacked graphene and graphene oxide membranes prepared with gas flow channels exhibit tunable gas separation performance.

95 Ultrathin, Molecular-Sieving Graphene Oxide Membranes for Selective Hydrogen Separation
H. Li et al.
Ultrathin graphene oxide membranes show enhanced separation selectivity for hydrogen gas.

98 Separating 3-Aminophenol Conformers with Cold Ca\(^+\) Ions
Y.-P. Chang et al.
A molecular beam technique measures the different reactivities of a compound’s distinct rotational conformations.

104 Following Gene Duplication, Paralog Interference Constrains Transcriptional Circuit Evolution
C. R. Baker et al.
Interactions between recent gene duplicates may create functional interference, selecting for regulatory complexity.

103 Surviving in a Marine Desert: The Sponge Loop Retains Resources Within Coral Reefs
J. M. de Goeri et al.
Sponges take up dissolved organic matter and convert it into consumable cellular material.

111 Allele-Specific Silencing of Mutant Myh6 Transcripts in Mice Suppresses Hypertrophic Cardiomyopathy
J. Jiang et al.
In a mouse model, heart disease can be delayed by a therapy that prevents expression of the disease-causing mutation.

114 A Thylakoid-Located Two-Pore K\(^+\) Channel Controls Photosynthetic Light Utilization in Plants
L. Carraretto et al.
The electrochemical gradient used to make adenosine triphosphate in photosynthesis is modulated by potassium counterflow.

REPORTS

91 Selective Gas Transport Through Few-Layered Graphene and Graphene Oxide Membranes
H. W. Kim et al.
Stacked graphene and graphene oxide membranes prepared with gas flow channels exhibit tunable gas separation performance.

95 Ultrathin, Molecular-Sieving Graphene Oxide Membranes for Selective Hydrogen Separation
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Editor's Summary

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