NIRT: Redox and Conduction Routing in Molecular Electronics
Héctor D. Abrnba, Chemistry and Chemical Biology
$1,300,000, National Science Foundation

Immune Dysfunction in Horses with Recurrent Airway Obstruction:
The Role of Airway Epithelium
Dorothy M. Ainsworth, Clinical Sciences
$256,000, U.S. Department of Agriculture

Hybrid Estimation and Control with Bounded Probabilities
Mark Campbell, Mechanical and Aerospace Engineering
$270,000, National Science Foundation

Infant Spatial Cognition and the Early Acquisition of Spatial Language
Marianella Casasola, Human Development
$400,000, National Science Foundation

Preparing Teachers to Teach: Strengthening Early Childhood Teacher Education in New York
Moncrieff M. Cochran, Human Development
$60,000, Rauch Foundation

Phylogeny and Historical Biogeography of the Primitive Bee Family Colletidae
Bryan N. Danforth, Entomology
$286,681, National Science Foundation

Computer-Aided Food Safety Engineering
Ashim K. Datta, Biological and Environmental Engineering
$599,823, U.S. Department of Agriculture

Landscape Ecology and Management of Strawberry Sap Beetle in the Northeast
Gregory M. English-Loeb, Entomology–Geneva Campus
$106,408, U.S. Department of Agriculture

Nanohybrid Membranes for Fuel Cells
Emmanuel P. Giannelis, Materials Science and Engineering
$150,000, National Science Foundation

Mechanism of Action of a Cloned Fertility Restorer Gene
Maureen R. Hanson, Molecular Biology and Genetics
$300,326, National Science Foundation

Nonlinear Feedbacks in Coupled Element Cycles During Eutrophication of Shallow Coastal Ecosystems
Robert W. Howarth, Ecology and Evolutionary Biology
$1,699,977, National Science Foundation

Random Walks and Scaling Limits
Gregory F. Lawler, Mathematics
$678,872, National Science Foundation

Biogeochemical Cycling of Organic Carbon in Soil Ecosystems as Affected by Black Carbon
C. Johannes Lehmann, Crop and Soil Sciences
$794,213, National Science Foundation

Acquisition of Instrumentation for Establishing a Microarray Core
David Lin, Biomedical Sciences
$387,421, National Science Foundation
Bio-based Management and Microbial Mechanisms of Apple Replant Disease
Ian A. Merwin, Horticulture
$496,688, U.S. Department of Agriculture

Integrating Security and Fault Tolerance in Distributed Systems
Andrew Myers, Computer Science
$1,600,000, National Science Foundation

Natural Variation in Expression of Self-Incompatibility in A. Thaliana: Evolution of Inbreeding
Mikhail E. Nasrallah, Plant Biology
$390,000, National Science Foundation

VZV BACS: New Tools for Pathogenesis Research
Nikolaus Osterrieder, Microbiology and Immunology
$370,240, Department of Health and Human Services

The Role of the Cell Cycle in Luteal Regression
Susan M. Quirk, Animal Science
$366,000, U.S. Department of Agriculture

Improving the Ambiotic Stress Tolerance, Phytomediation Potential, and Nutritional Quality of Plants
Jocelyn Rose, Plant Biology
$575,000, U.S. Department of Agriculture

Boosting Reasoning Technology Through Randomization, Structure Discovery, and Hybrid Strategies
Bart Selman, Computer Science
$3,580,000, Department of Defense

Calcium Signaling in the Regulation of Flagella Beating in Sperm
Susan S. Suarez, Biomedical Sciences
$399,999, National Science Foundation

Control of Finger Movement and Force for Precision Pinch
Francisco Valero-Cuevas, Mechanical and Aerospace Engineering
$915,050, Department of Health and Human Services

MSPA-MCS: Automatic Geometric Simplication
Stephen A. Vavasis, Computer Science
$500,000, National Science Foundation

Cornell ZRU Project Concept—Transmission of MDR Salmonella
Lorin D. Warnick, Population Medicine and Diagnostic Sciences
$1,119,959, Department of Health and Human Services

Stephen Wicker, Electrical and Computer Engineering
1,500,000, National Science Foundation

NIRT: Nanohybrids and Nanobiohybrids: Bottom-Up Approach to Nanopatterned Surface Arrays and Application
Ulrich B. Wiesner, Materials Science and Engineering
$925,000, National Science Foundation