

[NIRT: Redox and Conduction Routing in Molecular Electronics](#)

Héctor D. Abruña, 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, U.S. Department of Agriculture

[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

Frank D'Amico/CU



Maureen Hanson

Bob Kaussner/CU



Marianella Casasola

Charles Harrington/CU



Francisco Valero-Cuevas

Nicola Kounoupos/CU



Ashim Datta

Charles Harrington/CU



Johannes Lehmann

Nicola Kountoupes/CU



Andrew Myers

#### 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

Nicola Kountoupes/CU



Stephen Vavasis

#### 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

Charles Harrington/CU



Susan Suarez

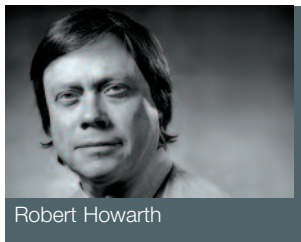
#### Boosting Reasoning Technology Through Randomization, Structure Discovery, and Hybrid Strategies

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

Charles Harrington/CU



Robert Howarth

#### Control of Finger Movement and Force for Precision Pinch

Francisco Valero-Cuevas, Mechanical and Aerospace Engineering  
\$915,050, Department of Health and Human Services

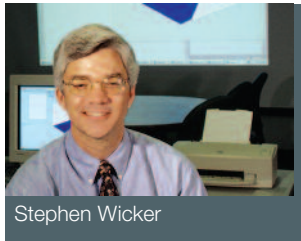
#### MSPA-MCS: Automatic Geometric Simplification

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

Frank Divoor/CU



Stephen Wicker

#### NETS-NOSS: Ultra Low-Power Self-Configuring Wireless Sensor Networks

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