

**Developing Canine Models of ADRP, AR, RP, and XLRP**  
Gustavo D. Aguirre, Baker Institute for Animal Health  
\$100,000, The Foundation Fighting Blindness

**Encoding of Vocal Signals in the Auditory System**  
Andrew H. Bass, Neurobiology and Behavior  
\$1,071,525, Department of Health and Human Services

**MRI: Development of Ultra-High Speed Detectors to Study the Physics of Turbulence**  
Eberhard Bodenschatz, Laboratory of Atomic and Solid State Physics  
\$1,411,136, National Science Foundation

**Control of Air Vehicle Swarms**  
Raffaello D'Andrea, Mechanical and Aerospace Engineering  
\$1,000,000, Department of Defense

**Bioavailability and Geographic Distribution of Nutritionally Important Elements in Crops and Soils**  
Stephen D. DeGloria, Crop and Soil Sciences  
\$596,525, U.S. Department of Agriculture

**Higher-Order and Exact Methods for Statistical Inference**  
Thomas J. DiCiccio, Social Statistics  
\$152,488, National Science Foundation

**NIRT: Nanoscale Engineering of Inorganic-Organic Interfaces: Applications to Molecular-Scale Electronics**  
James R. Engstrom, Chemical and Biomolecular Engineering  
\$1,300,001, National Science Foundation

**Evolution and Development of Retinal Organization in Primates**  
Barbara L. Finlay, Psychology  
\$551,756, National Science Foundation

**Towards Improved Logics for Reasoning about Security**  
Joseph Halpern, Computer Science  
\$300,000, National Science Foundation

**Genetic Regulation of Phospholipid Synthesis in Yeast**  
Susan A. Henry, Molecular Biology and Genetics  
\$1,932,372, Department of Health and Human Services

**Acoustic Behavior—Neural and Comparative Bases**  
Ronald R. Hoy, Neurobiology and Behavior  
\$1,795,056, Department of Health and Human Services

**Food Security in Freetown: The Role of Urban-Peri Urban Agriculture**  
Margaret Kroma, Education  
\$174,252, International Development Research Center

**Center for the Study of High Energy Density Plasmas**  
Bruce R. Kusse, Laboratory of Plasma Studies  
\$2,000,000, Department of Energy

**Achieving Public Understanding of Research in Developing Countries**  
Bruce V. Lewenstein, Communication  
\$84,000, National Science Foundation

**Managing Portfolios of Projects under Uncertainty with Application to Construction Activities**  
Linda K. Nozick, Civil and Environmental Engineering  
\$360,700, National Science Foundation

**Homeostasis and Degradation in Fragile Tropical Agroecosystems**  
Alice N. Pell, Cornell International Institute for Food, Agriculture, and Development (CIIFAD)  
\$1,668,132, National Science Foundation

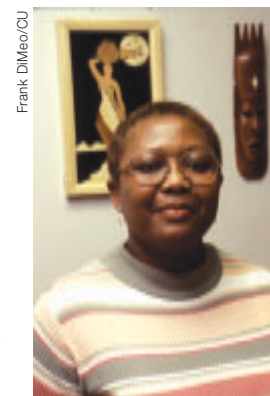
**Mutual Influences across Language and Visual Processing**  
Michael J. Spivey, Psychology  
\$222,103, Department of Health and Human Services

**Army Community Services Program Accountability**  
Margaret Thomas, Family Life Development Center  
\$231,483, U.S. Department of Agriculture

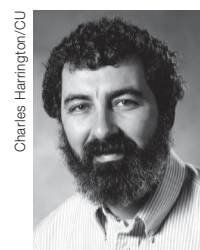
**Emotional Knowledge and Memory across Preschool Years**  
Qi Wang, Human Development  
\$558,530, Department of Health and Human Services

**Linking Economic Development and Child Care**  
Mildred E. Warner, Applied Economics and Management  
\$755,400, Department of Health and Human Services

**Enhanced Ultrafast Lasers by Use of Nonlinearity Management**  
Frank W. Wise, Applied and Engineering Physics  
\$225,000, National Science Foundation



Margaret Kroma, Education



Bruce Lewenstein, Communication



## For more information:

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David Baharvar

“baharvar interned at the federal mediation and conciliation service in the department of international dispute resolution services. ...The internship was baharvar’s first exposure to mediation and prompted him to begin thinking about peacemaking in a practical way.”

“My research at cornell, and the wonderful mentors I worked with, encouraged me to connect—in creative, nontraditional ways—my coursework with independent, focused, and personally fulfilling intellectual pursuits.

## David Baharvar '01, An Example of Cornell Influence, Cornell Knowledge Transfer in the Social Sciences

In the spring of 2000, Cornell Presidential Research Scholar David Baharvar '01 participated in the School of Industrial and Labor Relations's (ILR) credit internship program in Washington, DC. While studying in the nation's capital, Baharvar interned at the Federal Mediation and Conciliation Service in the Department of International Dispute Resolution Services. This department is involved in different kinds of alternative dispute resolution. The internship was Baharvar's first exposure to mediation and prompted him to begin thinking about peacemaking in a practical way.

From Washington, Baharvar went to Geneva, Switzerland, to intern at the International Labor Organization, where he researched the evolving dispute resolution mechanisms of South Africa. In 1995, South Africa passed new labor laws, and Baharvar evaluated how the institutions created by those laws have contributed to industrial peace in the country today. This internship was Baharvar's introduction to South Africa and in the process of his research, he found that laws and public policy did not address the issue of ethnic conflict.

Upon his return to Cornell in the fall, Baharvar formulated a senior thesis that combined his interests and experience in both peacemaking and South Africa. He chose to examine the local and regional peace committees in South Africa in the post-apartheid period. His research involved a series of in-depth interviews with experienced practitioners from NGOs (nongovernmental organizations) and other agencies involved in community-level peacemaking. Baharvar studied what actors were most appropriate as mediators or participants, and what strategies were most effective. “The actors included the actual practitioners who mitigate the general feelings of resentment and hatred which is the legacy of apartheid that they are trying to resolve,” he explains. Baharvar also analyzed primary and secondary source literature on social conflict resolution in South Africa and conflict resolution in general.

As a Presidential Research Scholar, Baharvar had been an undergraduate researcher since his arrival at Cornell. “Research totally changed my undergraduate experience from what it would have been. Over my time at Cornell, research was an integral part of my overall education in that it allowed me to delve deeply into a topic and explore my interests. Research spurred me to get more involved in my classes, and it also gave me concrete skills that I wouldn't have picked up from classes alone,” says Baharvar.

Research provided Baharvar with the opportunity to apply what he learned in the classroom to real-world situations. Baharvar's research was not a typical ILR project. It was built on the basis of negotiation, and it is cross disciplinary. It integrates anthropology, sociology, government, psychology, history, and even labor relations since racial disputes often manifest themselves in the workplace. Serving as a resource for Baharvar was Professor Ronald Seeber, whose expertise is in the field of alternative dispute resolution. Seeber was Baharvar's research advisor, and they met to discuss Baharvar's project once every two weeks.

Baharvar saw this project as a way for him to pursue his interest in mediation. “I think that ethnic conflict is the most tragic and also increasingly rampant problem in global society today. The field of peacemaking is crucial to the stability of world society and is part of making the new world order. I hope that my research will contribute to the understanding out there, and my own understanding since I want to go into the field. The Cornell Presidential Research Scholars Program helped me to figure out what I want to do in life,” he says.

Baharvar's plans were to attend law school and public policy school after graduating, and to eventually start his own NGO or work in an already established one in peacemaking efforts. “As far as peacemaking and my interest in this topic, that is what I intend to go into in the future. This project built my skills at international contacts and networking, because the way that I made contacts in South Africa started with the people who I met at my internship during the summer,” he says.

The Presidential Research Scholars Program provided Baharvar with well-rounded exposure to professors, as well as exposure to other research at Cornell. The program provided work-study funds for him to work in five departments in four different schools within Cornell, and it also paid for his research in Switzerland during the summer. “Had it not been for the support of the Presidential Research Scholars Program, I would not have been able to take advantage of so many opportunities. I feel pretty lucky,” he says.

Yonina M. Fishof '02

Yonina Fishof first interviewed Baharvar during his senior year at Cornell. During Baharvar's first year at Harvard Law School, Fishof conducted a follow-up interview.

Fishof: How has your CU research experience influenced what you are doing now? Was it helpful? How was it helpful?

Baharvar: It has directly affected what I am doing now in that as my research thesis, which focused on peacemaking, has gone beyond theory and academics to becoming a cause I aim to further through my life here. I am teaching peace to seventh graders, once a week, through a role-playing curriculum called "Peace Games." And I am applying to do a concurrent degree with the Kennedy School of Government here at Harvard, where I hope to build an expertise on conflict resolution and international affairs to complement my legal training.

But in more general terms, my research at Cornell made me feel much more comfortable in taking initiative to engage and collaborate with professors, to discuss my own interests and aspirations with them, and to solicit their personal feedback. The research was also a great extra preparation for law school because it built my confidence and comfort in navigating my way through libraries and other seas of information, since this is a key aspect of the research I do now in writing memos and briefs for my law classes. Finally and most importantly: my research at Cornell, and the wonderful mentors I worked with, encouraged me to connect—in creative, nontraditional ways—my coursework with independent, focused, and personally fulfilling intellectual pursuits. I am trying to continue this at law school by going into the depth of the basic legal courses I am taking. As I learned at Cornell, I am now trying to get at the root, the spirit, the underlying forces behind "the law."

Fishof: What would you have done differently at Cornell?

Baharvar: I would have jumped into it (research) sooner, from my freshman year, rather than very gradually letting the research become a significant part of my life.

Fishof: What would you tell freshman and other students considering doing undergraduate research?

Baharvar: Don't be inhibited, for fear is the worst enemy of humankind, it is the thief of dreams. If you have something that you are passionate about, don't wait to perhaps take a class roughly about that topic—take your academic experience into your own hands and find a faculty mentor to help you research the exact topic that YOU want to know about!

In the Fall of 2002, we asked Baharvar, once more, what was on his mind:

Baharvar: Currently, I am just starting my second year at the Harvard Law School. I will graduate with a JD in 2004. I intend to do a joint or separate degree in sustainable international development and/or international educational policy and administration, although I still do not know where, possibly England.

At this point in my life, I evaluate my Cornell research experience as a fantastic opportunity that I was lucky to have. It was formative in terms of allowing me to actively explore academic skills and interests, empowering me to see myself as a scholar who would contribute to a field rather than a passive student. It was also a stepping-stone which led to still more doors opening for me. For instance, it made it possible for me to work internationally during a summer (at the United Nations), and it was the basis for one-on-one working relationships with faculty. In retrospect, I can see how these experiences have helped me to excel and succeed in many ways, both academically and otherwise.



**For more information:**

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rs60@cornell.edu

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