

# The Psychological Science Agenda



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## Modest Research Funding Increases in Current Fiscal Year

by Pat Kobor & Sara Robinson, Science Public Policy Office

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On January 23, 2004, Congress finally approved the Fiscal Year (FY) 2004 omnibus appropriations bill containing funds for the Department of Health and Human Services, National Science Foundation (NSF), and other federal agencies. In this bill, Congress has provided a record-setting \$127 billion for federal research and development. However, 93 percent of the 2004 increase goes to just three agencies: the Department of Defense (DOD), Department of Homeland Security (DHS), and National Institutes of Health (NIH), with DOD accounting for 80 percent of the increase.

The omnibus bill includes an across-the-board cut of 0.59 percent for all agencies, even those whose budgets were signed into law in 2003. The one exception is DoD, whose appropriation, enacted in the fall, includes an 18.1 percent increase for its Science and Technology (S & T) budget, for a total of \$12.1 billion. The DHS budget gets a 56 percent boost to \$1.04 billion.

Other research agencies do not fare as well. The omnibus bill adds \$847 million to NIH for a total of \$27.1 billion, a modest 3 percent increase after five years of 15 percent increases. Congress provides a five percent increase for NSF, with a total budget of \$5.6 billion, \$4.1 billion of which is allocated for re-

search and related activities. The Department of Veteran's Affairs (VA) receives a 2.5 percent increase, bringing its research budget to \$820 million. National Aeronautics and Space Administration (NASA) spending will hold steady at \$15.4 billion, while R&D funding within NASA actually declines 0.4 percent to \$11.0 billion. The omnibus spending bill provides a \$2.9 billion increase for the Department of Education, up four percent from FY03.

Just as we began to absorb those numbers, the Bush Administration released its Fiscal Year 2005 (FY05) budget proposal on February 2, 2004. Highlights of the research agency budget requests appear below:

### **National Science Foundation**

The NSF's FY 2005 budget request is \$5.75 billion, a three percent increase, or approximately \$167 million over this year's newly-enacted appropriation for NSF.

Funding is included for five top "priority areas" including the behavioral research priority area, "Human and Social Dynamics." In addition, the budget includes a new \$5 million Innovation Fund to enable NSF to respond quickly to rapidly emerging activities at the frontiers of learning and discovery, and continued funding for the Science of Learning centers.

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### Department of Defense

The DoD budget includes a request for the Science and Technology account (basic and applied research) of \$10.55 billion. This is 12.7 percent less than the Fiscal Year 2004 funding level, but an increase over the President's request of last year. The budget request for specific behavioral science programs was not available at press time.

National Institutes of Health The administration's budget requests a disappointingly modest 2.6 percent increase for NIH, bringing its funding to \$28.8 billion. NIH would fund 258 added research project grants with its increase, but growth in numbers would mean cuts in funding for all research projects. NIH would cut back on the annual "cost-of-living" increases on non-competing continuation grants and limit cost increases on new and successfully re-competed projects to one percent, thereby creating more grants funded at lower levels.

The NIH Roadmap for Biomedical Research would receive \$237 million if the President's proposal is enacted, an increase of \$109 million over FY 2004. Within that amount, the Office of the Director would receive \$60 million, an increase of \$25 million, to disburse through the NIH Director's Discretionary Fund. The remaining \$177 million would come from NIH institutes and centers, each of which would contribute 0.63 percent of its budget request.

Research training would receive an increase of \$15 million, or two percent, for a total of \$764 million. The proposal includes funding for 17,791 research trainees, up 225 from FY 2004.

APA is advocating a ten percent increase in NIH funding, to \$30.6 billion.

Bioterrorism: Government-wide, funding for terrorism countermeasures is an area of budget increase, but not in all cases. Two bioterrorism preparedness programs are cut: the Health Resources and Services Administration's hospital preparedness program loses \$39 million,

a cut of 7.5 percent; and the Center for Disease Control's State and Local preparedness program loses \$105 million, or 11 percent. The latter amount is redirected into a new biosurveillance initiative that stresses new technologies at the expense of trained personnel who are needed to provide the response when early warnings of disease or attack occur.

Department of Homeland Security: DHS receives a 10.5 percent increase in the President's budget. The 2005 Budget requests just over one billion dollars for research and development. Within DHS, the Directorate of Science and Technology (S&T) serves as a centralized R&D arm that consolidates piecemeal R&D efforts into one agency. Its focus is to harness revolutionary technology, which can be used by law enforcement and emergency response personnel in carrying out their mission to protect the Nation. S&T works to solicit proposals and seeks to engage the established U.S. R&D community in the fight against terrorism.

National Aeronautics and Space Administration: The 2005 NASA budget provides \$9.4 billion for federal science and technology programs, a 1.3 percent increase over the 2004 level. The 2005 Budget supports the President's new initiative of sustained solar system exploration involving both humans and robots. This initiative encompasses programs of lunar exploration; further robotic exploration of the solar system; focused exploration of Mars to accelerate the search for water and life and to prepare for future human exploration; and robotic space exploration; and re-focused Space Station research on activities that support space-exploration goals.

Institute of Education Sciences (IES): The 2005 Budget provides a total of \$449.6 million for the broad activities of the institute, including \$91.4 million for statistics, and \$94.8 million for the National Assessment of Educational Progress. The President's budget in-

cludes a \$20 million increase in funding for research, development, and dissemination (\$185 million in 2005), which supports research programs on cognition and student learning and other research to advance understanding of how students learn and identify effective approaches and interventions to improve education. The Administration has also provided \$78 million for research and innovation in special education research in 2005, which was previously funded through the Office of Special Education and Rehabilitative Services

Department of Veterans Affairs: The VA's research account would take a 6.1 percent cut in the President's budget request for 2005, from \$820 million in 2004 to \$770 million.

Release of the President's budget is only the first step in the yearly process through which federal programs are funded. First, a budget must be approved by the U.S. House and Senate. Next, each of 14 appropriations, or spending bills, encompassing different combinations of federal agency spending requests, must be approved by both Houses of Congress and signed by the President. Watch PSA and the Science Policy Insider News (SPIN), our electronic newsletter about science policy issues, for the latest news on science funding and regulation from the APA Science Policy staff. ■

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## EXECUTIVE DIRECTOR'S COLUMN

MERRY BULLOCK, Acting Executive Director for Science

### Is APA an 800-lb Gorilla?

APA has been characterized as a large, lumbering creature – be it an 800 lb gorilla, a battle cruiser, or, most recently, as an SUV. These characterizations carry a number of assumptions – that APA cannot maneuver with much speed or flexibility; that APA steps on the toes of others who are smaller or more sensitive; that APA carries the egocentrism of the majority. Some of this is just an automatic consequence of the size of the discipline. For example, psychology is the most popular undergraduate major; APA is the largest behavioral/social science professional society; psychologists represent the largest body of behavioral researchers; psychologists dominate the utilization of IRB resources; and recruit large numbers of research participants. Thus, almost by default, this means that its issues, needs and concerns attain a visibility that others may see as disproportionate.

But, as with many stereotypes, there is probably a kernel of truth as well. Let me just provide two examples – we assume that it is only correct that psychology take the forefront in speaking for behavioral researchers in IRB issues – that the differences between biomedical and behavioral research are best illustrated by psychological research examples. It was thus a humbling experience to hear from sociology colleagues that they believe that psychologists are not certainly not the only and probably not the best to guard social science research concerns in IRB settings because psychologists are less likely to be familiar with the complexities of behavioral research done across the social sciences – such as oral history, kinship studies and the like. And APA can be slow and lumbering in producing policy or guidelines. APA's many Boards and Committees and a governance system that requires review and approval across many constituencies can



make the time to create association policy seem measured in larger units than in other associations – but it also increases eventual consensus.

But let me turn to the advantages of size. Being big does mean that APA has more resources at its disposal. Just like other associations, big and small, APA has limited resources and must use them wisely. But because its staff is large, APA can shepherd the field in a way that smaller organizations cannot. For example, in addition to advocating for funding and programs to those agencies that most obviously fund psychological research (NIH and NSF), APA can expend effort to secure and to protect funding programs in a broad range of agencies – the current portfolio includes the Department of Defense, the Department of Veterans Affairs, NASA, the Department of Education, and the Department of Justice. APA can also expend effort by searching out new opportunities. The most recent example and terrific success is within the new Department of Homeland Security – two APA-nominated psychologists now serve on prestigious DHS advisory committees, and APA continues to lobby to be sure that psychology will be included in graduate training programs designed to recruit scientists into government service for national security positions. Current and

former APA Congressional and Science Policy Fellows are furthering these efforts by providing a voice for scientific psychology by serving as congressional or intelligence agency staff.

Size also means that APA can act quickly to protect the discipline. You may remember that last year, Congress voted on an amendment offered by Rep. Pat Toomey (R-PA) that would have defunded four NIH peer-reviewed research projects on sexual health. You may also remember that the amendment failed to pass by only two votes! APA's broad distribution of action alerts and rapid construction of briefing sheets to give information to supporters of the NIH within Congress are credited in part with averting that vote. To prepare for similar attacks on research, APA partnered with the Consortium on Social Science Associations to take direct action. They formed the Coalition to Protect Research, a group with more than 40 organizations. It will work to educate Congress about the value and importance of this research to our nation's public health.

The good news, related to size, is that APA has a strong corporate identity; the bad news is that APA is identified as a corporation! Because APA has a large budget, because it has many programs, because it has so many members, and because it has so many staff, it may have the appearance of a faceless corporation in which individual action might not appear to matter. Nothing could be further from the truth! Everything that APA takes as policy, program development and strategic vision is the result of ideas, discussion, and work from individuals, most of them volunteers. Individual initiative is the lifeblood of the work of the association. Most of the initiatives, programs, task forces and work group were begun as an idea, often from an individual or a small group, percolated

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through the system. This also means that APA is a place where the individual has a formative role. I know you have listened to exhortations before about the importance and value of individual input into APA's program and policy development, but just like the stereotypes about APA these have a large measure of truth too. Talk with us, write to us (at [science@apa.org](mailto:science@apa.org)) and most importantly, join with us in committees, listservs and conferences and activities to help APA be a thoughtful, gentle and effective 800 pounder. ■

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## The NIH Director's Pioneer Award Program

The National Institutes of Health (NIH) invites nominations for the NIH Director's Pioneer Award (NDPA), a key component of the NIH Roadmap for Medical Research.

The goal of the program is to stimulate high-risk, high-impact research by enabling exceptionally creative investigators from multiple disciplines -- including biomedical, behavioral, social, physical, chemical and computer science; engineering; and mathematics -- to develop and test groundbreaking ideas relevant to NIH's mission. In fiscal year 2004, the NDPA program will fund 5-10 awards of up to \$500,000 direct costs per year for 5 years.

The program is not intended to support ongoing research projects or expand the funding of persons already well supported. Investigators at early stages of their careers and those who have not previously applied for NIH support are especially encouraged.

Nominations will be accepted from March 1, 2004 through midnight April 1, 2004, Eastern Standard Time. For more information, visit the NIH Director's Pioneer Award Web site at: <http://www.nihroadmap.nih.gov/highrisk/initiatives/pioneer>. ■

## APA Fellow Brenda Milner Receives NAS Award

by Jonathan Tin, Special Programs Associate

The National Academy of Sciences Award in the Neurosciences, a prize of \$25,000 awarded every three years for extraordinary contributions to progress in the fields of neuroscience, was awarded to Brenda Milner, Dorothy J. Killam Professor, Montreal Neurological Institute, and professor, department of neurology and neurosurgery, Faculty of Medicine, McGill University, Montreal. Milner is a fellow of APA and a past recipient of the Distinguished Scientific Contribution Award.

Milner was chosen "for her pioneering and seminal investigations of the functioning of the temporal lobes and other brain regions in learning, memory, and speech."

"Brenda Milner is one of the giants of our time. Her delineation of memory dysfunction after lesions of the hippocampus has provided the basis for modern understanding of memory and for the divisions of memory storage mechanisms into explicit and implicit forms", said Eric Kandel, University Professor in the Center for Neurobiology and Behavior at Columbia University (New York), Senior Investigator of the Howard Hughes Medical Institute, Nobel laureate (Physiology or Medicine, 2000) and MNI Advisory Board Member. "The origins of modern cognitive neuroscience of memory can be traced directly to her rigorous and imaginative studies."

Milner's current research focuses on the specialization of the brain hemispheres. She and her colleagues are using sophisticated brain imaging technologies to examine differences between the right and left hemispheres. Milner is particularly interested in the role of the right hemisphere in remembering the location of objects.

The award was established by a gift from the Fidia Research Foundation in 1988.

Past recipients include Nobel laureate Paul Greengard and Lasker Awardees Drs. Vernon Mountcastle, Seymour Kety, Seymour Benzer and Louis Sokoloff. This marks the first time the award will be presented to a scientist working outside the United States. ■

## Identifying Risk in Research Involving Children: Call for Examples

The Social and Behavioral Sciences Working Group on Human Research Protections is preparing a report to assist IRBs in their review of social and behavioral sciences research involving children.

The Working Group seeks examples of research in three categories identified in the federal regulations: (1) minimal risk; (2) minor increment over minimal risk with the prospect of direct benefit to individual children; and (3) minor increment over minimal risk with no direct benefit to individual children but likely to yield generalizable knowledge about the child's disorder or condition. For more information on how you can help, please visit the Working Group's web site at: <http://www.aera.net/humansubjects/Posting-Children.pdf>. ■

## SCIENCE BRIEFS

# Psychological Science and Intelligent Home Technology

by Wendy A. Rogers & Arthur D. Fisk: School of Psychology, Georgia Institute of Technology



WENDY A. ROGERS

Wendy A. Rogers is Professor and Associate Chair in the School of Psychology at Georgia Institute of Technology. She received her B.A. from the University of Massachusetts, and her M. S. (1989) and PhD (1991) from Georgia Institute of Technology. She is a Past-President of Division 21 (Applied Experimental and Engineering Psychology) of APA and is currently President-elect of the Human Factors and Ergonomics Society.

Arthur (Dan) Fisk is Professor and Coordinator of the Engineering Psychology Program at Georgia Institute of Technology. Prior to his academic career, he was Manager, Human Factors Engineering at AT&T. He received his PhD in Experimental Psychology from the University of Illinois in 1982. Fisk is a Past President of the Human Factors and Ergonomics Society and a Past-President of Division 21 (Applied Experimental and Engineering Psychology) of APA. He is currently Secretary-Treasurer-elect of the Human Factors and Ergonomics Society.



ARTHUR D. FISK

They are the Co-Directors of the Human Factors and Aging Laboratory ([www.prism.gatech.edu/~wr43/hf\\_aging](http://www.prism.gatech.edu/~wr43/hf_aging)). Their research is funded by the National Institutes of Health (National Institute on Aging) as part of the Center for Research and Education on Aging and Technology Enhancement (CREATE), and by a National Science Foundation grant entitled "The Aware Home: Sustaining the Quality of Life for an Aging Population."

### An Aware Home

Imagine if your home were "aware" of your activities so that it might help you remember what it was you went into the kitchen for or whether the visitor at the front door is someone you know or even what the proper procedure is for performing a recently learned home medical procedure. An aware home is not from the world of science fiction – indeed, it is within the realm of science. An innovative research program at Georgia Institute of Technology (Georgia Tech) is focused on developing psychological and computer science to support many home activities. It is the Aware Home Research Initiative (<http://www.cc.gatech.edu/fce/ahri>).

Wendy A. Rogers and Arthur (Dan) Fisk are the psychologists on the interdisciplinary team involved in the Aware Home Research Initiative that also includes computer scientists, human-computer interaction specialists, and engineers. These researchers are working to-

gether to advance science and engineering in support of "aging-in-place."

There is a growing need in society to enable older adults to remain in an independent living environment. Seventy-five percent of people aged 70 and over live in conventional houses (Shafer, 2000) and many of them live alone, without access to immediate support (Wagnild, 2001). Many older adults fear losing their independence and being required to move to an assisted living environment (e.g., AARP, 2000). Moreover, the initial and long-term economic implications of transitioning to one of these settings are substantial to the individual and to society as a whole. Given current demographics the projection of these costs will exponentially increase.

The Aware Home Residential Laboratory is a fully furnished, state-of-the-art, 5,040 square foot, two-story residence (see Figure 1). The two floors are identical apartments, each consisting of a full



Figure 1

kitchen, dining area and living room, two bedrooms, two bathrooms, an office, and laundry room. The apartments facilitate conducting computer science and engineering research on one floor while simultaneously being able to support psychological research on another floor. The Aware Home serves as the focus of research and development efforts to support aging-in-place. State-of-the-art measurement of physical and cognitive impairments can provide critical information to guide development of appro-

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appropriate and usable technologies for older adults. Most importantly, an understanding of the housing needs of older adults serve as the impetus for the research and development efforts. Evaluation studies of monitoring, communication, and smart environment interfaces and technologies will lead to the development of useful and usable interventions to support independence for older adults.

### 6 Independent Living Requirements

The independent performance of basic activities of daily living (ADLs), such as eating, bathing and dressing, as well as instrumental activities of daily living (IADLs), such as cooking healthful meals, adequately dealing with medication, and doing the laundry, is a precondition for autonomy and independence in everyday life (Lawton, 1990). Activities aimed at life enrichment and self-fulfillment are also critical aspects of successful aging (Rowe & Kahn, 1998). Such activities that involve the willingness to accept new challenges and to engage in lifelong learning, have been termed enhanced activities of daily living, or EADLs (Rogers, Meyer, Walker, & Fisk, 1998). EADLs imply the adjustment to changes, for example keeping up with technological and communicative developments such as the Internet, and taking advantage of them.

Older adults who are living in their own homes may be faced with situations in which there is a mismatch between the demands in their daily environment and their capabilities. These situations may be the result of both increased demands (e.g., learning to use a new medical device) and deficits in the capabilities of the individual (e.g., age-related changes in cognition, perception, or movement control). To remain fully functional, older adults must find ways to compensate for gaps between task demands required for living and their capabilities. Although numerous perceptual and movement control prostheses are available, the development of cognitive prostheses based on transitioning psychologi-

cal science into computing and engineering applications has been lacking.

### Cognitive Supports for Older Adults

The major cognitive issues that are critical for independent living are captured under the following broad categories: prospective and retrospective memory, demands for attention, working memory, task planning, and strategic approaches to compensate for cognitive changes. There is a promise for psychologically based approaches to address many of the cognitive challenges of daily living. However, currently there are few, if any, efforts to attack these problems from an interdisciplinary perspective. Consequently, there is a disconnect between technology development and psychological theories that can enable older adults to maintain (and in many situations enhance) independence and to sustain their quality of life. Technology has tremendous potential but is relatively uninformed by a realistic assessment of needs and human capabilities. The results of basic psychological science hold out the promise of informing the design and implementation of such technological systems for translation to real world complex environments.

### How might an Aware Home support the cognitive functioning of older adults?

Consider the following scenarios: Mr. J. has been having memory problems lately. Sometimes, while preparing dinner, he forgets what he was doing; his memory problems are exacerbated if he is interrupted in the middle of his preparations. Fortunately, Mr. J.'s kitchen is equipped with a reminder system – he simply needs to glance at the visual display mounted by the countertop to see images of his recent actions. By touching the display, he sees and hears additional visual and auditory cues that help him to regain his place. Mrs. Q. has recently been diagnosed with diabetes. She has to use a blood glucose meter daily to monitor her glucose levels. As she sits at her kitchen table to perform the glucose check, an automated system records her activities, recognizes when she has made an error, and provides her with correc-

tive feedback to ensure that she performs the procedure correctly. This automated “coach” will help her to learn to calibrate the device and properly check her glucose levels. The system will also provide her with guidance in interpreting the results and determining whether she should eat, take medicine, or exercise more to regulate her glucose. Mr. K.'s memory problems are typically related to finding something in his house (e.g., his eyeglasses, the cordless telephone, his asthma inhaler). These items are used in different locations throughout the house and he has difficulty remembering where he left them. To assist him, he uses the “object finder” system in his house. Given that the house is instrumented with cameras that can capture activity in all rooms, he can search through various locations on the monitor (without having to walk all over the house) to search for the lost object itself or a cue about where the object is.

### Current Projects

The vignettes above represent current research projects underway at the Aware Home. Each project is being investigated by an interdisciplinary team of psychology and computer science faculty and students (for a list of these students, please visit: <http://www.apa.org/science/psa/sb-rogers.html>).

The Memory Surrogates project is investigating the potential benefits of a display that would provide cues about previously performed actions. The prototype system, called the “Cook’s Collage,” provides surrogate memory support for general cooking tasks. Cameras are mounted in unobtrusive locations (beneath a cabinet) and visual snapshots from this angle show the detailed activity of hands and objects. These images are shown on a flat-panel display on the kitchen cabinet. Psychological issues being investigated from the user’s perspective include determining the information display characteristics that are most supportive of memory; the form of information that is most useful; and whether the utility of the information displayed

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interacts with type of interruption or age of user.

The Technology Coach is designed to support the activities of the older person much like a "virtual assistant." This project involves developing the computational perception capabilities to recognize what actions are being performed and providing the person with corrective feedback if they perform a step incorrectly or out of order. We are currently testing the system to support the accurate use of a blood glucose meter. Psychological issues that must be addressed in this research include understanding the type of feedback, timing of feedback, form of feedback, and the information display that will best support performance of older adults.

### Finding Lost Objects

Developing a system to support finding lost objects in the home must be based on an understanding of the factors that influence the behavior of losing the objects in the first place. What objects are typically lost, by whom, under what circumstances, and how frequently? The nature of the technological support will depend on the answers to these questions. We are addressing these issues via a comprehensive survey of younger and older adults. These data will provide insight for the design of human-centered object-finding services.

### Conclusion

Independently living older adults experience cognitive problems, memory problems in particular, that influence their performance of daily activities. Technology has the potential to support the cognitive functioning of older adults in the home if the technology is developed with consideration for the older adults' needs and capabilities. However, to be successful, we must understand the specific issues with which older adults have difficulties, the source of those difficulties, the contexts in which they occur, and the potential for a cognitive aid to support performance. It is then critical to translate these findings into prin-

ciples that can guide the development of augmentation systems and to test systems that are designed based on those principles. The system itself may impose certain demands on the user as a function of the design characteristics and hence must be evaluated in the context in which it will be used. The research being conducted at the Aware Home has the potential to enhance the independence of older adults. ■

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## Predocutorial Interdisciplinary Research Training (PIRT) Program in the Education Sciences

The passage of the No Child Left Behind Act of 2002 signals that the education enterprise of the United States has entered a new era in which policy and practice are expected to be based on evidence. Practitioners will have to turn routinely to education research when making important decisions, and education researchers will have to produce research that is relevant to those decisions. It will require training new researchers in sufficient numbers to address the many tasks at hand. The Institute of Education Sciences (Institute) has released a Request for Applications (RFA) to provide institutional support for new Predocutorial Interdisciplinary Research Training (PIRT) Programs in the Education Sciences. The Institute's objectives in creating the PIRT programs are to: (1) support the development of innovative interdisciplinary training programs for doctoral students interested in conducting applied education research; and (2) to establish a network of training programs that collectively produce a cadre of education researchers willing and able to conduct a new generation of methodologically rigorous and educationally relevant scientific research that will provide solutions to pressing problems and challenges facing American education.

In order to increase the supply of scientists and researchers in education who are prepared to conduct rigorous evaluation studies, develop new products and approaches that are grounded in a science of learning, design valid tests and measures, and explore data with sophisticated statistical methods, this initiative

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## Interesting Careers

### A Social Psychologist in Rehabilitation Technology

by David Boninger, Three Rivers

I've always been a "people person" – mesmerized by simple observations and always puzzling over why we do the things we do. My curiosity was further fueled by a family history peppered with people whose fate was determined by things that other people did that defied explanation. Both my mother and father were indelibly scarred by the events of World War II and Hitler's assault (only one of my four grandparents survived the war). Thus, began my interest in psychology.

So off I went from the safe haven of my youth growing up in a suburb of Cleveland, Ohio to Northwestern University to study psychology. After suffering through four losing football seasons as a psychology major at Northwestern, I decided to pursue graduate studies in social psychology at Ohio State University. I figured that even if my graduate work failed to provide all the answers, I would at least have the opportunity to root for a winning football team.

I received my PhD in social psychology from Ohio State in 1991, and began my first position as assistant professor of social psychology at UCLA. At that time, I had the same career aspirations that almost all new faculty members have. I wanted to do quality research on topics that fascinated me, I wanted to teach students about social psychology, and most of all, I wanted to help students develop the skills that would allow them to become researchers and teachers themselves someday. I loved my job, especially the chances I had to work closely with bright and highly motivated students. In fact, things could not have been better (almost). I had just gotten a great job at UCLA, and my wife, Faith Gleicher (who was also a social psychologist), had just gotten a great job at UC Santa Barbara. The nice thing about this complicated situation is that we lived in Camarillo, a nice little town about half way between Los Angeles and Santa Barbara. The bad thing about



DAVID BONINGER

this complicated situation is that collectively, Faith and I spent about 20 hours a week commuting. For me, it seems that 95 percent of my lengthy commute was spent sitting in the parking lot that Los Angelinos euphemistically call the 405 (i.e., Interstate 405).

Except for the commute, our academic careers were progressing wonderfully. However, at some point all that sitting in traffic made each of us a little restless. We got even more restless when we pondered how we would someday juggle the demands of the dual commute and our dual careers with the demands of being doting parents. In other words, we loved our jobs so much that the commutes were worth it, but we weren't so sure that we would feel the same way once the little ones arrived. So we took a leave of absence from our jobs, packed up everything we had, and moved to Israel – in the complete absence of any jobs. Of course, the good thing about not having a job is that you don't usually have much of a commute. Faith quickly learned to speak Hebrew, and I polished the Hebrew I had studied in college. During that first year, I was offered a job in the Department of Psychology at the University of Haifa and in the following year my wife had a job in the Department of Communication. Same university. No commute. Within a few years, we not only had two great academic positions, but we also found time to have

two wonderful daughters. But the commute from Israel to the U.S. proved to be even worse than the commute from Camarillo to Los Angeles. Our daughters were growing up far away from their extended families. And so after 6 years in Israel, our thoughts turned back to the U.S. A sabbatical year (2000-2001) in Phoenix, Arizona (where both my wife and I have family) turned into a permanent stay and a new adventure in the U.S.

The new adventure involved leaving the familiar confines of academia and entering the entrepreneurial world of the start-up business. In a partnership between myself, my brother Ron Boninger, and Chris Willems, we started a company (Three Rivers) whose mission is to use advances in rehabilitation technology to create products that enhance the mobility and independence of people with disabilities, particularly people in wheelchairs. Why a business venture? My brothers and I had always mused about "what fun it would be" to start a business together, and Ron has an MBA from Kellogg and has years of business experience to help navigate what for me were very uncharted waters. Why wheelchairs? My other brother, Michael Boninger, MD, and his colleague Rory Cooper, PhD, are leading researchers (and inventors) in the area of wheelchair-related technologies. Michael said, "Why don't you take to the marketplace what we've developed in the lab?"

Three Rivers was born and I had something to do that used many of the tools that I had honed as a professor in psychology. In particular, I began working full time to acquire federal grant funding to assist in the transfer of these technologies to the marketplace – and grant writing was home turf for me. The experience paid off: Three Rivers has now been the recipient of nine Small Business Innovation Research (SBIR and STTR) grant awards from the NIH and the National Institute of Disability and

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Rehabilitation Research. These technology transfer grants have already enabled us to bring two products to market. One is the Natural-Fit, which is an ergonomic wheelchair handrim that provides a more comfortable fit to the hand and eases the stress and strain of daily wheelchair propulsion. The other is the SmartWheel, which is a sophisticated measurement tool and the only commercial product in the world that precisely examines wheelchair propulsion in the natural environment of the wheelchair user. The SmartWheel is used in research on the causes of pain and injury among wheelchair users, and it is also being developed as a leading edge clinical tool that provides clinicians with the ability to quantify the process of wheelchair selection, fitting, and propulsion training. In recognition of our efforts, Three Rivers was the recipient of the 2003 Innovative Company of the Year Award in the Start-Up Category for the State of Arizona.

I have learned a lot about business. And here's one thing I've learned: sound knowledge of psychology is a good thing to have in business. So, I'm having fun, I love that were trying to get innovations out to people who need them, and I'm glad that I can still be a people-person, a psychologist, and a business person all at the same time! ■

## APA Invites Nominations for Distinguished Science Awards

The APA Board of Scientific Affairs (BSA) invites nominations for its ongoing awards program. Awards are given in three categories:

The Distinguished Scientific Contribution Award is presented to individuals who have made distinguished theoretical or empirical contributions to basic research in psychology.

The Distinguished Scientific Award for the Applications of Psychology is given to individuals who have made exceptional theoretical or empirical advances in psychology leading to the understanding or amelioration of important practical problems.

To submit a nomination for the Distinguished Scientific Contribution Award and the Distinguished Scientific Contribution Award for the Applications of Psychology, you should provide a letter of nomination, the nominee's current vita with list of publications, and the names and addresses of several scientists who are familiar with the nominee's work.

The Distinguished Scientific Award for Early Career Contribution to Psychology is awarded to outstanding young psychologists who are 9 years or less post-PhD (1995 or later). The 2005 Early Career Awards will be given in the five areas:

- behavioral and cognitive neuroscience
- social
- perception, motor performance
- applied research (e.g., treatment and prevention research, industrial/organizational research, educational research)
- individual differences (e.g., personality, psychometrics, mental ability, behavioral genetics)

The categories should be interpreted broadly and are not meant to be exclusive; all areas of psychology are of sufficient merit to be considered for awards.

To submit a nomination for the Distinguished Scientific Award for Early Career Contribution to Psychology, you should provide a letter of nomination, the nominee's current vita with list of publications, and up to five representative reprints.

To obtain nomination forms and more information, you can go to the Science Directorate web page ([www.apa.org/science/sciaward.html](http://www.apa.org/science/sciaward.html)) or you can contact Suzanne Wandersman, Science Direc-

torate, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242; by phone, (202) 336-6000; by fax, (202) 336-5953; or by E-mail, [swandersman@apa.org](mailto:swandersman@apa.org).

The deadline for all award nominations is June 1, 2004. ■

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will fund the creation of innovative interdisciplinary research training programs in the education sciences. Grants will be awarded to institutions that can put together a program across disciplines such as psychology, political science, economics, statistics, sociology, education, and epidemiology that will provide intensive training in education research and statistics. Predoctoral students will graduate within a traditional discipline, e.g., economics, but will receive a certificate in education sciences, and will be expected to conduct doctoral research on education topics.

The RFA is posted on the Institute of Education Sciences web page: <http://www.ed.gov/programs/edresearch/applicant.html>.

Application forms and instructions for the electronic submission of letters of intent and applications will be available from the following web site: <http://ies.constellagroup.com>

Awards will be made in amounts ranging from \$500,000 to \$1,000,000 (total cost) per year for a duration of five years. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends. The number of programs funded depends upon the number of high quality applications submitted. Deadlines: Optional Letter of Intent March 11, 2004; Applications May 27, 2004. Contact: Dr. James Griffin, IES, Telephone: 202-219-2280; Email: [James.Griffin@ed.gov](mailto:James.Griffin@ed.gov). ■

# Regional Association Meetings Worth Attending!

by Jeanie Kelleher, Special Programs Associate

Each year, the seven regional psychological association annual meetings feature a wealth of programming on the latest in research, practice and education, continuing-education workshops and talks by prominent researchers and academicians. Listed below are meeting dates, locations, and program highlights.

Southeastern Psychological Association (SEPA), March 10-13, Atlanta, GA  
The SEPA meeting will celebrate the association's 50th anniversary and feature symposia, posters, invited experts and distinguished speakers such as:

- § John Lochman of the University of Alabama, presenting "Cognitive-behavioral interventions with aggressive children: preventive effects on delinquency and substance use."
- § Philip Kendall of Temple University, presenting "A lifetime of anxiety: from a research point of view."
- § Anthony Spirito of Brown University, presenting "Adolescent attempted suicide: community treatment, clinical trials and the gap in-between."
- § William Mikulas of the University of West Florida, presenting "Buddhist and Western psychologies: a practical synthesis."
- § Tiffany M. Field of the University of Miami School of Medicine, who will present the APA G. Stanley Hall Lecture "Touch therapy research."

The SEPA meeting will also offer continuing-education workshops. For more information, visit [www.sepaonline.com](http://www.sepaonline.com).

Southwestern Psychological Association (SWPA), April 8-10, San Antonio, TX  
SWPA's 50th anniversary meeting will feature invited lectures by APA CEO Norman Anderson, APA Past-president Robert Sternberg of Yale University, and APA President Diane Halpern of Claremont McKenna College. Joshua Aronson of New York University will discuss his research on stereotype threat, and Ludy Benjamin of Texas A&M University, will present a talk on Inez

Beverly Prosser, the first African-American woman to earn a psychology doctorate. Other key speakers include:

- § Psi Chi National Past-president Jesse Purdy, presenting on the future of Psi Chi.
- § John Gabrieli of Stanford University presenting an APA Distinguished Scientist Lecture on "How the human brain regulates thoughts, feelings and memories: evidence from functional neuroimaging."
- § SWPA President Kenneth Weaver, presenting "Flexibility inside the vise: high school psychology and state certification."
- § C. Rick Snyder of the University of Kansas who will discuss his research on hope.
- § Lauren Scharff who will discuss her work on teaching circles to improve teaching quality.
- § Maureen McCarthy of APA's Education Directorate, who will speak on what constitutes quality in undergraduate programs.

SWPA will also feature continuing-education opportunities and a workshop sponsored by APA's Science Directorate on academic careers for graduate students and postdocs. For more information, visit <https://www.swpsych.org>.

Rocky Mountain Psychological Association (RMPA), April 15-17, Reno, NV  
Speakers at the RMPA conference include:

- § Elizabeth Loftus of the University of California, Irvine, who will present the RMPA Distinguished Lecture on "Grand illusions of memory."
- § Bill Hill of Kennesaw State University, presenting "Making ends meet: strategies and resources for enhancing your teaching in an era of declining budgets."
- § Faye J. Crosby of the University of California, Santa Cruz, presenting the APA Harry Kirke Wolfe Lecture on "Teaching about and researching affirmative action."
- § Paul Bell of Colorado State University, presenting the past-president's address

on "Progress in preventing and curing Alzheimer's disease."

§ Stephen F. Davis of Emporia State University, presenting the Council of Teachers of Undergraduate Psychology's Invited Lecture on "Your cheating heart won't cry: academic dishonesty in the 21st century."

§ Giles Einstein of Furman University, presenting the Battig Memorial Lecture on "Parsimony or psychology: the flexibility of remembering to remember."

RMPA will also feature symposia and panel discussions on teaching, including a workshop on "Developing your teaching philosophy and style," led by Bill Buskist, of Auburn University, and Bill Hill. For more information, visit [www.unco.edu/psychology/rmpa](http://www.unco.edu/psychology/rmpa).

Eastern Psychological Association (EPA), April 15-18, Washington, DC  
Featured speakers at EPA's 75th anniversary meeting include: Lorraine Allan of McMaster University; Paul Costa of the National Institutes of Health; Nicola Clayton of Cambridge University; Howard Egeth of Johns Hopkins University; Shepard Siegal of McMaster University; Susan Goldin-Meadow of the University of Chicago, who will present the William James Distinguished Lecture; and Timothy D. Wilson of the University of Virginia, who will deliver an APA G. Stanley Hall Lecture on "Affective forecasting and the pleasures of uncertainty."

Other highlights include an integrative symposium on hormones and behavior with Rae Silver of Columbia University, Bruce McEwen of Rockefeller University, and Gregory Ball of Johns Hopkins University. Also included will be a mini-conference on visual perception and attention and an Academic Career Workshop sponsored by APA's Science Directorate. For complete and updated information on presentations and registration, visit [www.easternpsychological.org](http://www.easternpsychological.org).

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Western Psychological Association (WPA), April 22-25, Phoenix, AZ. Notable speakers at the WPA meeting will include Philip Zimbardo of Stanford University; James McGaugh of the University of California, Irvine; Martin E.P. Seligman of the University of Pennsylvania; APA President Diane Halpern of Claremont McKenna College; Robert Cialdini of Arizona State University; Christina Maslach of the University of California, Berkeley; and M. Brewster Smith of the University of California, Santa Cruz. In addition, Cheryl Spinweber of the Scripps Mercy Sleep Disorders Center will deliver the Presidential Address, and C. Rick Snyder of the University of Kansas will give the APA G. Stanley Hall Lecture on "Questioning hope and finding positive psychology answers."

Other highlights include four statistics workshops on various topics. APA's Education Directorate, Teachers of Psychology in Secondary Schools and Psychology Teachers at Community Colleges will offer a workshop on teaching introductory psychology. For further, updated information, visit [www.westernpsych.org](http://www.westernpsych.org).

Midwestern Psychological Association (MPA), April 29-May 1, Chicago, IL. The MPA program will feature presentations by Gary Wells of Iowa State University; James Pelligrino of the University of Illinois at Chicago; Nicki Crick of the University of Minnesota; L. Rowell Huesmann of the University of Michigan; and Alice Eagly of Northwestern University. In addition, Randy Gallistel, of Rutgers University, will present the APA Distinguished Scientist Lecture on "An information processing

perspective on conditioning." An Academic Career Workshop sponsored by APA's Science Directorate is also being planned. For more complete and updated information, visit <http://condor.depaul.edu/~psych/mpa>.

New England Psychological Association (NEPA), October 15-16, Providence, RI. While NEPA is still in the planning stages for its 2004 meeting, Paul Cunningham is set to deliver the presidential address on "Transpersonal psychology: bridging science and spirit," and Mahzarin Banaji of Harvard University, will give the APA Distinguished Scientist Lecture on "Mind bugs: the psychology of ordinary prejudice." The meeting will be held in conjunction with the New England Conference on the Teaching of Psychology on October 15th. For more complete and updated information, visit [www.nepa-info.org](http://www.nepa-info.org). ■

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## Workshop on Responsible Conduct of Research in Psychological Science

April 13-14, 2004: Marriott-Wardman Park Hotel, Washington, DC

The American Psychological Association (APA) and the DHHS Office of Research Integrity (ORI) present a workshop entitled, Responsible Conduct of Research in Psychological Science at the Marriott Wardman Park Hotel in Washington, DC, April 13-14, 2004.

**OVERVIEW:** The workshop agenda includes one and a half days of plenary and breakout sessions focusing on three topics: (1) Data-sharing, (2) Mentoring, and (3) Conflicts of Interest.

The workshop will afford participants an opportunity to explore ethical and responsible conduct of research (RCR) issues that arise in faculty-student relationships, the impact of investigator and institutional conflicts of interest on research, methodological and human participant protection issues in data archiving, and the impact of regulations and policies such as the HIPAA privacy

rule and the NIH data-sharing policy on behavioral research.

**REGISTRATION FEES:** The registration fee, which includes breakfast, lunch, and refreshments, is \$75.00. Registration is limited and prepayment is required to confirm registration. For more information, see APA-ORI Workshop Registration.

**STUDENT TRAVEL AWARDS/REGISTRATION FEE WAIVER:** In an effort to introduce students to responsible conduct in research early in their training, ten travel awards will be granted to five graduate and five undergraduate students currently enrolled in a college/university outside the Washington, DC metropolitan area and actively involved in research.

Ten registration fee waivers will also be granted to five graduate and five undergraduate students enrolled in colleges/

universities located within the Washington, DC metro area.

The application deadline for the student travel awards and registration fee waivers is April 1, 2004. However, awards are limited and acceptance is on a rolling basis, i.e., applications will be reviewed and decisions made upon receipt. Thus, applicants are encouraged to apply as early as possible.

**MORE INFORMATION:** Visit the website at: [http://www.apa.org/science/ori\\_workshop.html](http://www.apa.org/science/ori_workshop.html). Questions about the workshop can be directed to [ori@apa.org](mailto:ori@apa.org) or call (202) 336-6000. ■

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