# Speaking Truth to Power: Psychological Scientists on Advisory Panels

April 22, 2001

As psychologists gain more knowledge of the pathways and influences involved in human behaviors, the more relevant are the implications of their expertise both in terms of scientific advancement and the governing of human affairs. This makes it increasingly critical that the best minds in psychological science be involved in policy and program debates over agenda-setting, prioritizing and the search for answers to the social and health problems that confront society. It is welcome news, therefore, that top researchers in psychological science fill more seats than ever on U.S. government advisory panels wherever scientific priorities are debated and decided. The largest number probably are found at the National Institutes of Health (NIH), where psychological scientists serve on national advisory councils that have broad mandates to advise NIH on everything from programs to budgets to policies; on boards of scientific counselors that advise on scientific priorities, and on peer review panels that review training and research grant proposals. (At NIH, these peer review panels are generally termed "study sections.")

They advise not only NIH, but also the National Science Foundation, the Department of Education, the Department of Health and Human Services, and virtually every other office that sets the nation's research agenda. This also includes committees at the National Academy of Sciences and the Institute of Medicine, two private entities that conduct policy-oriented studies for the government and for private foundations.

## WIDER REPRESENTATION

At NIH, the voice of psychological science can be heard not only where you'd most expect – advising NIH institutes that deal with mental health, substance abuse and other behavior-intensive fields – but also in such traditionally biomedical strongholds as the study of cardiovascular and pulmonary conditions, vision, hearing and communication, and allergies and infectious diseases, to name a few.

"All NIH branches pay more attention to behavioral studies now than they did a decade ago," says Ralph E. Norgren of Pennsylvania State University's College of Medicine, an APS Fellow who serves on the Integrative, Functional, and Cognitive Neuroscience Study Section of the Center for Scientific Review (CSR), the NIH office that handles overall review of grants.

## George V. Rebec

George V. Rebec, Director of the Indiana University Program in Neural Science, serves on the Training and Career Development Review Subcommittee within the National Institute on Drug Abuse (NIDA). (In addition to the overall NIH peer review system, individual institutes maintain "in-house" review committees for some types of grant proposals, often including training and health services, among others.)

"I believe my service has an important impact," says APS Fellow Rebec. "We can help shape policy by providing feedback to program officials about various application requirements, evaluation criteria, and so forth. I think it's critical that behavioral issues be strongly represented in a field such as neuroscience, where molecular and cellular advances can sometimes overshadow the need for corresponding work at the behavioral level."

"Although it is important that all behavioral neuroscientists have some grounding in basic molecular processes," said Rebec, "it is equally crucial that molecular neurobiologists appreciate the value of behavioral training and make it available in their programs. Too often behavioral training is ignored or given only superficial treatment. I'm glad that NIDA recognizes the behavioral need and includes roughly equal numbers of behavioral and clinical neuroscientists on my study section as molecular biologists and neurochemists."

APS Fellow and Charter Member Steven Hayes of the University of Nevada at Reno is a member of NIDA's national advisory council (see sidebar). Hayes agrees that serving on such panels helps keep the perspectives and contributions of psychological science on the table. "You can bring certain sensitivities to the discussion that might not otherwise be part of the dialogue," he says. "For example, the role of behavior and of behavioral interventions can slip out of view at times, even in an institute as supportive as NIDA. Being part of the process ensures that this does not go unchecked."

This is especially true in light of breakthroughs in molecular biology, according to APS Member Rita S. Berndt, of the University of Maryland School of Medicine, who sits on the advisory council of the National Institute of Deafness and Communication Disorders (NIDCD). (See sidebar)

"I have heard many people voice concerns that the recent breakthroughs, and the obvious emphasis the NIH has placed on such studies, will lead to a de-emphasis of behaviorally-related studies," Berndt says. "This does not need to be the case, as it's very clear that much good behavioral research is needed to define the phenotypes of many of the disorders targeted for genetic study: schizophrenia, Alzheimer's Disease, specific language impairment, and so on. Part of my role is assuring that such studies are viewed as critical components of research."

### **DEEPER UNDERSTANDING**

James L. McClelland

As a representative of basic behavioral science on the National Mental Health Advisory Council – the highest-level advisory group for the National Institute of Mental Health, James L. McClelland of Carnegie Mellon University, Pittsburgh, says that while support and respect for his field are "very high, the portfolios in neuroscience and molecular biology are larger" than those in the behavioral sciences."It is important to continue our advocacy for outstanding basic research at the psychological and behavioral levels," says APS Fellow and Charter Member McClelland.

Although he considers the trend of linking psychological and behavioral processes with underlying neural mechanisms as a positive development, McClelland says psychological scientists "must still be

proactive in pointing out the importance of using these linkages to foster a deeper understanding of behavioral and psychological phenomena."

"Of course," he added, "one would always like to see a greater representation of one's own discipline [on the advisory council], but in my view any increase must arise primarily from the field at large, and must be reflected in the flow of outstanding research proposals from behavioral and psychological scientists."

His colleague on the NIMH council, APS Fellow and Charter Member Anne C. Petersen of the W.K. Kellogg Foundation, agrees but warns against "turf protection" that can retard the advancement of science. "Sometimes our colleagues resist pursuing new scientific opportunities if they perceive that they might lose funding for the work they've always done. I believe that advancing science for the good of people must always be our priority. This process inevitably involves replacing good research with research that has a greater likelihood of making a difference in advancing the scientific frontier for the good of people's health." (See sidebar)

#### **FURTHERING POLICY**

#### Leonard A. Jason

Leonard A. Jason, of DePaul University, sits on the Chronic Fatigue Syndrome Coordinating Committee of the National Institute of Allergy and Infectious Diseases, a committee chaired by the Surgeon General. Jason, an APS Fellow, says politics sometimes can get in the way of good science. "Individuals often make decisions about setting an agenda or supporting policies with political rather than data-driven points of view. It is exciting to be able sometimes to help policy officials better appreciate the importance of making decisions based on empirical data or best validated practices, and when one can make a difference with this type of input, that is very gratifying."Norgren, who serves on the CSR cognitive neuroscience review panel, says having an advocate at the table is particularly important to grant seekers. "If your particular subfield has no advocate on the study section to which your application is assigned, you are at a distinct disadvantage. Many scientists from other, usually more biological disciplines regard behavioral studies as 'soft science,' and thus not worthy of significant support. Even when they do see the need for behavioral studies, they often assume that no real expertise is necessary to conduct them."

## Gordon E. Legge

Gordon E. Legge, an APS Charter Member at the University of Minnesota, studies human visual perception and impairments. As a member of the national advisory council of the National Eye Institute (NEI), he not only helps weigh grant proposal recommendations but also advises about grant initiatives, other programs, even budgetary matters. "We are at liberty," Legge says, "to raise any questions or concerns regarding NEI programs."

Studies of the eye and vision are fundamentally interdisciplinary, he points out, and psychology has played an important role in the development and refining of perceptual and quality-of-life tests. Without

his voice at the table, that role might easily be dismissed from consideration.

#### Stephen J. Ceci

Stephen J. Ceci, an APS Fellow and Cornell University Professor of Developmental Psychology, says he often returns from meetings of the advisory committee for the National Science Foundation's Directorate of Social, Behavioral and Economic Sciences (SBE) "with the sense that I had an impact on some major policy initiative or I helped craft the wording for a major study that some team would be commissioned to undertake, or I had input into the selection of team members.

"One example is when I suggested that the NSF consider funding regional neuroimaging centers that would accommodate scientists from any institution in that region who wished to take advantage of the neuroimaging set-up," said Ceci. "Many scientists who are interested in using this technology are not located at institutions that have access to it."

## **REWARDING SERVICE**

Based on the *Observer's* unscientific sampling, the scientists who sit on these advisory panels are unanimous about one thing: they find the service rewarding.

Ceci, a former member of the APS Board of Directors, says his SBE advisory role brings "insights that aid my own research, for example when I learn about areas of scholarship I previously did not know about, or when I learn that a new initiative will be launched in an area related to my own. But the main reason I benefit is because each meeting immerses me in discussions with anywhere from 10 to 20 scholars who are smart and come from fields outside my own. I learn a great deal that I believe has informed my own research.

"I have come to the very definite conclusion," says the developmental psychologist who is Co-Editor of the APS journal *Psychological Science in the Public Interest (PSPI)*, "that many scholarly questions are best attacked from the vantage of multidisciplinary teams. One example is the question of class size: Do smaller classes matter, and if so for whom? The team we commissioned to tackle this question [for *PSPI*] was composed of psychologists, sociologists, and economists. When all three disciplines got together to write this report, I felt their conclusions went beyond anything that had been written in the debate over class size."

Ceci adds an important caveat, however: "Having said that diverse teams of scholars are capable of producing work that single disciplinary teams could not, it is only fair to note that working with other disciplines requires some re-tooling and learning of common vocabulary and new methodologies."

#### Susan Folkman

Susan Folkman, an APS Fellow and Charter Member, sits on the NIMH advisory council with McClelland and Petersen. Folkman, who is at the University of California in San Francisco, says her service exposes her to "a much bigger picture, to broad questions concerning mental health, and to ways in which behavioral science research can address these big issues."

## PROMOTING COLLABORATIONS

At UCSF, Folkman co-directs the Center for AIDS Prevention Studies. She points out that her advisory council exposure includes not only scientists but "non-scientists who have stakes in these issues as consumers, representatives of affected groups, or as people working in allied areas with vested interests in seeing advances in our behavioral science.

"The experience leads to looking at questions that I wrestle with in a different light," says Folkman. "It can affect how I shape my own research, and that in turn affects what I learn and publish. Sometimes it can promote collaborations that otherwise might not occur. In general, I emerge from meetings better informed at many different levels and with my wits sharpened."

#### Morton Ann Gernsbacher

Appointments to study sections are for four-year terms, and appointees are not allowed to serve consecutive terms. They can, however, "re-up" later. Morton Ann Gernsbacher, an APS Fellow and Charter Member at the University of Wisconsin, did just that because, she says, serving as an advisor "stretched my interests." She now sits on the Deafness and Communication Disorders Institutional Review Group. "My signing on for a second tour of duty was to gain this intellectually broadening experience again," she explains.

"Most researchers tend to stay very narrowly focused on their limited domains of interest," agrees NIDCD Advisory Council member Berndt, whose own research focuses on language and other cognitive impairments that result from focal brain injury, particularly stroke. "I'm certainly no exception. It is very beneficial to be forced to look at the larger picture. You also get to meet many interesting and intelligent people from other fields."

A "more concrete benefit," according to Berndt, is that "the labyrinthine structure and less-than-transparent operations of the NIH are clarified. The knowledge gained can be put to good use in mentoring young scientists and helping them navigate the funding system. Successful efforts along these lines produce a major benefit for the field."

APS Fellow and Charter Member Larry R. Squire, of the University of California-San Diego, yet another psychologist on the NIMH advisory council, agrees: "This kind of experience shows how biomedical research is organized, how NIH operates, and how the peer review system functions."

McClelland says he also learns from his service on the NIMH council "a great deal about the priorities of NIMH, and about the direction the agency is taking in its effort to promote both basic science and applications of scientific knowledge to the treatment of individuals. I have also met some fascinating colleagues in other branches of science."

The experience brings sharpened grant writing skills as well. "There can be no doubt that reviewing so many applications helps one to identify in a generic way what makes an application particularly strong and what detracts from an application," says Gernsbacher. "This can help improve one's own grant writing skills."

Indiana University's Rebec agrees: "I can bring back to my colleagues and to my student trainees very useful information on the critical requirements and latest guidelines for preparing and submitting proposals of their own."

Why should other psychologists invite the additional burdens of three or more meetings a year, plus conference calls and reading and reviewing numerous grant proposals? There are many reasons. Squire, of the University of California-San Diego: "This is a way to give back to the system that supports our research."

Legge, of the University of Minnesota: "It is our moral and ethical responsibility as recipients of grant support and as stewards of our profession to contribute to the oversight and direction of government-funded research."

Gernsbacher, of the University of Wisconsin: "The quality of our peer review system depends on high quality researchers agreeing to serve in this way. Whenever I hear someone grousing about the potential ineptness of a grant review process, I think to myself, 'Have you given *your* four years?""

Hayes, of the University of Nevada-Reno: "Compared to other service obligations, it is one of the more 'fun' duties you will be called upon to fulfill. There are a lot of great people on these bodies – people you may otherwise rarely meet."

Folkman, at UCSF: "It's a chance to see the bigger picture, to help identify central issues that can advance science and the public health, to learn how funding priorities evolve and then to have a hand in the process. It's always good to interact with smart people – and the councils have a high concentration of them."

And McClelland, of Carnegie Mellon University: "Just do it! It will expand your horizons, serve the interests of your field, and bring you into contact with many outstanding representatives of related points of view and perspectives."