BSERVER Published by the American Psychological Society

Vol. 7, No. 4

Congress supports the Human 

APS via Gopher/WWW. APS resources are now accessible through gopher and world wide web 

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Sperry

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# **Richard F. Thompson APS President-Elect;** Eyde, Overmier to Board

#### Nearly 50% of eligible votes cast in 4th APS election

s it a California dynasty in the making? Yet another Californian is the winner in the APS election for president, or rather President-Elect, a new post that APS members voted to create last year.

Charter Fellow Richard F. Thompson, Keck Professor of Psychology and Biological Sciences at the University of Southern California, becomes President-Elect until he assumes the presidency in June 1995, when current President Marilynn Brewer (formerly of UCLA) will step down to join an increasingly long line



July/August 1994

Richard F. Thompson will become APS's sixth President.

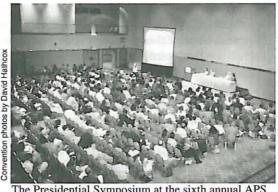
of distinguished APS Past-Presidents that includes James McGaugh (UC-Irvine) and Gordon Bower (Stanford), all Californians by university affiliation at the time of their election, if not by birth. And remember when

McGaugh became President-Elect of the Western

SEE ELECTION ON PAGE 12

## Sixth Convention & First **Teaching Institute Sizzled**

July was hot and so was the APS Convention, drawing 2,000 to a "Family Reunion" before the Fourth of July



The Presidential Symposium at the sixth annual APS Convention in Washington, DC.

WASHINGTON, DC, JUNE 30-Addressing a crowd of nearly 1,000 at the opening session of the sixth annual APS convention, President Marilynn Brewer declared the Washington, DC, meeting a kind of homecoming. "It's appropriate for us to think of Washington as APS's hometown," she said. "The first APS convention was held in nearby Alexandria, Virginia, across the

SEE CONVENTION ON PAGE 14

#### **Presidential Column**

#### The American Psychological Society

| President                          | Marilynn B. Brewer        |  |
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The **APS Observer** (ISSN: 1050-4672) is the monthly publication of the American Psychological Society (Federal ID Number: 73-1345573). On alternative months, beginning with February, the **Observer** consists of the **APS Employment Bulletin**. The May and June issues and the July and August issues are combined. Editorial and advertising offices are at APS, 1010 Vermont Avenue, NW, Suite 1100, Washington, DC 20005-4907; Tel: 202-783-2077, Fax: 202-783-2083, Bitnet: APS@APS, Internet: APS@BITNIC .EDUCOM.EDU

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All APS members receive the **Observer**. Domestic non-member subscription rates are \$35 (individual), \$50 (institution) and foreign rates are \$50 (individual) and \$65 (institution) per year. Add \$45 to upgrade from surface delivery to airmail for overseas addresses. Send subscription requests to the address above. Thirdclass postage is paid at Washington, DC. **Postmaster**: Send address changes to American Psychological Society, 1010 Vermont Avenue, NW, Suite 1100, Washington, DC 20005-4907.

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## **Clinical Science in The 21st Century**

Richard M. McFall Indiana University-Bloomington Guest Contributor



I am grateful for this opportunity to tell you about the recent "Indiana Conference on Clinical Science in the 21st Century." After presenting my own views, in the first part of this column, I present in the second half a compressed representation of the "Executive Summary" of the Conference.

#### **Background of the Indiana Conference**

The count-down has begun for the end of the 20th Century and start of the 21st. This once-in-a-lifetime calendar transition is a fascinating event; with its fresh set of zeros, it captivates us with its magical moment of ending-as-beginning, and makes secret numerologists of us all. The approaching turn-of-the-century is more than a superstitious curiosity, however; it coincides with unprecedented social, political, and economic changes that portend significant personal and professional transitions, too. Thus, the looming roll-over of the century has become a metaphor for the looming turbulence in our lives—a mixture of uncertainty and adventure, insecurity and opportunity.

One of the most significant changes we all face is the inevitable redesign of the nation's health care system. Although Bill and Hillary Clinton have been given much of the credit, and blame, for pushing this issue to the forefront, in fact it was forced upon us by economic realities. Our health care system simply was breaking the bank and could no longer be sustained. Although we still do not know what new structure will replace the old, it seems certain that the health care system of the 21st Century will look radically different from what we have known in our lifetimes.

#### **Opportunity for Scientific Foundations**

For clinical/health psychologists, this change in health care signals the end of business-as-usual. To some, it is a threat. To others of us, however, it is a welcome opportunity to reestablish the scientific foundations of clinical training and practice. The pending changes demand a thorough and critical reexamination of our unique contributions and legitimate roles within the emerging system. The most compelling answers to these questions will arise from scientific analysis and evidence.

The ticket to participation in the new system will be empirical evidence of our capacity to offer cost-effective services for "real" problems. In recent years, mental health care has become one of the costliest and fastest-growing segments of the total health care market. At the same time, mental health providers have resisted efforts to impose quality-control standards on their professional practices and outcomes— standards that now are routine in the physical health professions. In the new health care system, quality control will be central, with watchwords such as "efficiency," "cost," "access," "efficacy," and "accountability" becoming universal. Mental health providers must embrace these concepts if they are to be included in the new system. Who better to do this than scientifically trained psychologists?

#### Guided by Empirical Evidence ...

These concepts are not new to the faculties and students in the clinical/health PhD programs that have maintained a fundamental commitment to scientific research training over the years, ignoring fads and fashions, and refusing to succumb to expediency. Now graduates of these programs will have a vital role to play in the design, evaluation, and administration of mental health systems; they have the required skills to ensure that our

# National Academy Report Addresses NRSA Awards

Training Grants for Behavioral Scientists: Academy Pushes APS Advice

WASHINGTON, DC-Behavioral science students may receive a substantially larger share of federal National Research Service Awards (NRSA) for predoctoral and postdoctoral training if Congress and the National Institutes of Health heed the recommendations of a National Research Council (NRC) panel. The recommendations generated by the congressionally mandated panel study are now on their way to the Senate Finance Committee, the House Appropriations Committee, and other key congressional committees, and they directly reflect the advice of both the behavioral scientists who served on the panel and APS as presented in testimony to the NRC.

The recommendation represents a major shift in funding proposals, an increase of about 36 percent in awards in the behavioral sciences over fiscal year (FY) 1993 levels. This is a key focus of the 127-page report (Meeting the Nation's Needs for Biomedical and Behavioral Scientists) of the NRC's Committee on National Needs for Biomedical and Behavioral Research Personnel. The increase would be phased in annually by 1996 and would be targeted to postdoctoral training. The NRSA awards in the behavioral sciences would be increased from the FY 1993 level of 1,069 grants to 1,450 grants in 1996, if the recommendations are carried out.

#### Break with the Past

Further, awards would be maintained at about current levels in biomedical fields across that same period, if the recommendations are followed. Biomedical awards amount currently to approximately 5,175 predoctoral and 3,835 postdoctoral.

The NRC panel also proposed graduated annual increases by 1996 in individual stipends to approximately \$12,000 per year for predoctoral and approximately \$25,000 for postdoctoral awardees. Current levels are \$8,800 for predoctoral and from \$18,600 (first year) to \$19,700 (second year) for postdoctoral awardees under the National Research Act of 1974.

The 20-year-old NRSA program is one of the most important NIH mechanisms for training and educating scientists at all stages of their careers, and NIH is itself *the* major federal player in this training process.

#### **Clinical Research**

Referring to APS testimony directly, the report recommends that "consideration...be given to enhancing federal support for training...clinical investigators." Further, the report credits the 1992 APS Summit on Accreditation with focusing on "how best to produce clinical investigators...and how [current] accreditation practices have adversely affected the production of clinician scientists."

No one knows at this point how fully these recommendations may be carried out in this era of tight federal funding. But the report represents a breakthrough for behavioral science in the view of several of the APS members serving on the NRSA committee. What is significant about the report is not just its recommendations for more grants for behavioral scientists and larger dollar amounts of each grant, the APS members noted, but also what it denotes about the rising position of behavioral science on the nation's health care map.

Ira Hirsh, Co-Chair of the NRC committee and an APS Charter Member,

SEE NRSA ON PAGE 8

## NIH Office of Behavior and the APS Human Capital Initiative

## Wake the Kids! Phone the Neighbors! Congress Funds Behavioral Initiatives!

Millions of dollars in new federal support for behavioral and social science appear certain in fiscal year 1995 as the direct result of APS's efforts with the US Senate and House of Representatives. Specific dollar amounts have been provided for the *Human Capital Initiative* (\$5 million) and the soon-to-be-established Office of Behavioral and Social Science Research at the National Institutes of Health (\$2 million).

In addition, several other initiatives have received attention during the annual appropriations cycle, including the National Institute of Mental Health's new basic behavioral science research plan and its young investigators program. Full coverage of these exciting developments will appear in the September issue of the *Observer*.

# Interview with APS President-Elect Richard F. Thompson

Q: Despite their great diversity, psychologists generally think of themselves as all belonging to one big family. Where do you see yourself in that family picture?

I consider myself a mainstream psychologist, a centrist member of the family. It's true that my work is heavily biological, but the topic of greatest interest to me is learning and memory. It's a phenomenon that has been a central issue of psychology since the beginning.

My own particular interests are in brain mechanisms of learning and memory in humans and other mammals, how memories are formed, where they are formed, how we retrieve them.

But these are part of very general psychological issues. And they relate to a lot of practical issues as well. For example, our Alzheimer's center here at USC focuses not just on that disease but also, and especially, on memory impairments that develop in normal aging. To me, that is an issue even bigger than Alzheimer's, a really critical issue in our society, because we all grow old and many of us experience memory impairments.

#### Q: What do you see as the main challenges and opportunities for behavioral researchers in America today?

If we as a country are really serious about dealing with the horrific problems that confront our society—crime, violence, drug addiction, poverty, to mention only a few—behavioral scientists are going to have to play a much bigger role. Huge amounts of money will have to be put into research in the behavioral sciences.

This is so because most of the really serious problems in our society are behavioral, and the only ultimately effective treatments are behavioral, as for example for drug addiction. That doesn't mean we can cure these problems today. The behavioral technology doesn't yet exist in many instances. n the spring, APS members elected Richard F. Thompson, an APS Charter Fellow, to the office of President-Elect. Since the President-Elect position was created only last year—as a result of member-approved revisions to the APS bylaws—no one has yet served a full one-year term in the office. Thompson will be the first Presi-



dent-Elect to serve a normal one-year term, followed by one-year terms each as APS President and Past-President. Current APS President Marilynn Brewer is serving a unique two-year term as President—before stepping down to Past-President—in order to get the three-year presidency cycle totally in place. The President-Elect, President, and Past-President all are voting members of the Board according to the current APS bylaws.

Thompson is Keck Professor of Psychology and Biological Sciences at the University of Southern California and Director of the USC Program in Neural, Informational and Behavioral Sciences. He will assume the APS presidency in July 1995. Observer reporter Don Kent prepared the following interview with Thompson in June.

#### Q: But with more funding ...?

I'd like to draw an analogy with biomedical science. Return to the early 1960s; biological science was much less developed. But in the intervening years the National Institutes of Health [NIH] poured huge amounts of money into that area. The results have been cures and/or more effective treatments for a whole variety of disorders. So biological science says "Look at all the exciting things we've achieved." But while that field has enjoyed huge infusions of money across some 30 years, the amount of money provided for research in behavioral science has been minuscule by comparison.

Most of the treatments deriving from biomedical sciences resulted from basic research. And the same would, and will undoubtedly, be true of psychology—but we have not yet had anything like that same infusion of money.

Q: Why should we expect that similar levels of funding would produce like or better results?

To quote an article that appeared in the *New England Journal of Medicine*, of the top nine *underlying* causes of death in the United States, eight are behavioral. While the direct causes of death are things like heart disease, cancer, stroke, and injuries, the *underlying* causes are behavioral. They include tobacco (19%), diet and inactivity (14%), alcohol (5%), microbes (4%), toxic agents (3%), firearms (2%), sexual behavior (1%), motor vehicles (1%), and illegal drugs (1%).

In fact, as of 1990, the first, third, and fourth leading *direct* causes of death were

SEE THOMPSON ON PAGE 10

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# **APS Resources Are Now on Internet**

Convention abstracts, practical advice articles, and much more are available via gopher and world-wide-web

ou know about the "information explosion" on Internet. Seeing the need for a "controlled explosion," APS is trying to put some structure on Internet psychology information. Building an APS psychology section on a gopher and hypertext site—complete with links to related information— APS member John Krantz has established some structure to reduce the information overload for the scientific psychology community.

Traditionally, it has been easier for the creator of information to *place* information on the Internet than it has been for the interested user of information to *find* that same information. One problem relates to the variety of protocols (standardized means of transferring information from one computer to another) such as telnet, ftp, gopher, http, world-wide-web (www), wide-area information servers (wais), and others. Each protocol requires different knowledge and skills that are not necessarily transferable from one protocol to the next. In addition, there is nothing yet even remotely equivalent to a library's card catalog for the resources on the Internet. The result? Much information is available only to those few who have the inclination and time to develop sophisticated Internet searching skills.

#### **APS Is Online ...**

In an effort to make information of interest to psychologists easily accessible and to provide up-to-date information about APS to the Internet community, Krantz has helped establish an Internet service based at Hanover College. Collected there also—in one location so that sophisticated search skills are not required—are references to a variety of non-APS Internet resources that may be of interest to applied and research psychologists. Currently, APS is providing its information using two of the more advanced Internet protocols: gopher and http/www.

Gopher is a protocol—developed at the University of Minnesota—that presents information in directory listings. Each item in a directory may be a text file, an image, a program, or even a link to another directory. The file or directory may be on the same computer or on another computer. Unlike ftp or telnet, the user does not need to know which computer the information is on in order to retrieve it. Directory location data are kept with the directory listing and are used by the computer directly. Another advantage of gopher are the services set up that allow one to search for directory items around the world using keywords.

The world-wide-web is simply the set of computers that use hypertext transfer protocol (http) as their means of transferring information. As implied by the title, http is a means of transferring text based information. Within the text, the reader will find references (called "links") that will take the reader to other documents or other parts of the same document. In addition, the text is formatted (e.g., it has italics, bold, headings) and can be integrated, for example, with images, sounds, and movies. Thus, http is a means of communicating in a multimedia environment.

The APS gopher and APS http service have essentially

identical information. Both protocols are being used so that you can access the information in the manner with which you are most comfortable and which is most compatible with your local hardware and Internet setup. Current information on the APS Internet services includes:

- Current information about APS;
- Searchable APS Convention abstracts;
- Selected articles from the APS Observer;
- Links to the NSF, NIH, and NIMH gophers;
- Links to the PsycGrad Project run by and for graduate students;
- Information on related ListServe and Usenet discussion groups;
- Links to electronic journals and periodicals;
- Links to publishers on the Internet;
- ♦ Links to electronic job listing services in academia; and
- Links to departments and institutes that have gopher or http access.

#### **Growth Potential**

The Internet itself is not very old, but already you can access, for example, Hubble space telescope images, the complete works of Shakespeare, the Declaration of Independence, software collected in archives where it can be obtained free or for a minimal charge, and even journals produced expressly for electronic media. And while the APS presence on the Internet has just begun, as more information becomes available, the APS offerings will expand. For example, at present, there is a minimal archive of software. If you find or become aware of relevant freeware or shareware, inform Krantz and he will add it to the archive. Another possible avenue of expansion is a scanned image/document library. Non-copyrighted scanned images or public access documents useful in classes, or images of old labs that could be useful for classes in history of psychology, could be added and made available to the wider psychological community.

These services can be found at the gopher or http/www locations described here, selecting the protocol of your choice for best compatibility with your local hardware and Internet setup. There are two ways to find the APS gopher directory. Use the method most convenient for you: (1) Search (via veronica or jughead) for "American Psychological Society"; or (2) Go through the "Other gopher and information servers" to find the following gopher server under Indiana, Hanover College Gopher. The path, once you are on the Hanover College Gopher is: /Hanover\_College\_Information/Public/American Psychological Society Gopher Directory. The actual gopher protocol information is as follows:

Name=American Psychological Society Gopher Directory Type=1 Host=gopher.hanover.edu

Path=1/Hanover\_College\_Information/Psychology/APS

For http users (e.g., Mosaic or Cello), the URL is: http://oak.hanover.edu/psych/APS/aps.html

These services are available for your use. If you have any comments or suggestions, contact John Krantz (KrantzJ@ hanover.edu) or Lee Herring (LHerring@bitnic.educom.edu), APS Director of Communications. ◆

# **APS Members Are Internet Savvy**

Survey reveals high degree of sophistication with the Internet and FTP

he Institute for Scientific Information (ISI) and the American Psychological Society (APS) recently sponsored a study to determine the level of FTP (file transfer protocol) usage among APS members who use the Internet. The study was conducted using a questionnaire distributed via Internet to 20% of APS members.

The study results were used in the development of a set of electronic information products produced cooperatively and introduced by ISI and APS (see May/ June 1994 *Observer*) at the APS Convention. Specifically designed for APS members, these publications include *Personal Searcher* and *Focus On*. Available by subscription, each provides complete current bibliographic information—and author abstracts—so psychology researchers can keep abreast of developments in their field of specialization.

Since the publications are accessed over the Internet, a particular effort was placed on understanding members' experience with FTP, a critical aspect of the timeliness of these two current awareness products. FTP is a prevalent Internet protocol used to transfer files from one computer to another over the Internet.

#### **Active Users of Electronic Mail, FTP**

Study results indicated that APS members have a high level of sophistication with the Internet and its services. As expected, 97% of the members surveyed use electronic mail. Most members are also using the Internet to share files with colleagues, access bulletin boards, search remote databases, and download data. Nearly 60% of the membership navigates through the Internet using one of the various gopher tools available on Internet. About 60% of APS members either use FTP regularly or have at least used it a few times and consider themselves users of FTP. Only 15% of the APS Internet users have not used FTP at all.

#### Productivity and Availability

The Internet offers a wealth of resources and communication channels. (See article on opposite page regarding other APS resources available on Internet.) Often, users need to

access and download data for use at a personal workstation. As a result, FTP is quickly growing in popularity and use. APS members specifically noted several advantages to using FTP as a productivity and research tool. More than 35% of respondents use FTP to access and to transfer files to and from others. More than 40% of respondents also noted that FTP is fast and easy to use, a significant advantage for electronic information tools.

It is important to note how many members who do not currently use FTP

functions have access to them if desired. Over half indicated they have access to FTP versus 2% who specifically noted that they did not have access to FTP. Although another small group of members indicated they did not know if they had FTP access, most universities and

many colleges provide ready access to FTP, and most APS members are affiliated with a higher education institution.

#### **Ready Resources for** Learning FTP

Of those members familiar with FTP, most considered it easy to learn. Of those who are currently FTP users, half learned

APS members specifically noted several advantages to using FTP as a productivity and research tool. it on their first try or found it easy once they were shown how to use it. Meanwhile, 70% of the respondents who are not currently FTP users perceive FTP as relatively easy to learn. There are a number of training

resources readily available to help those not familiar with FTP and Internet more generally, another ISI study revealed. Many bookstores, and particularly university bookstores, sell books about the Internet. And, an advantage of an affiliation with universities is that many offer opportunities for learning how to access the Internet and how to use FTP. Specifically, faculty, staff and students often have any of a number of choices available, depending upon their needs: class instruction, personal instruction at

> the office, written instructions, or telephone support—any of which is generally provided by the computer services department at the university or college.

Both the APS and ISI appreciate those members who took the time to complete the research survey.

More than 36% of those who received the survey returned their response within four days. It is with this feedback that we have been able to develop and offer information services of interest and value to you. For more information regarding *Personal Searcher* or *Focus On*, please contact ISI at 1-800-336-4474, extension 1483. ◆

readily available to help those not familiar with FTP and Internet more generally...

training resources

There are a number of

#### NRSA FROM PAGE 3

said, "The panel considered research in a variety of fields related to the nation's health, and the behavioral scientists on the committee made it clear that there are many important diseases where the



behavioral component is as important as the biological component. Therefore the committee saw fit to make increases in several areas, most prominently in behavioral

Ira Hirsh

science but also in nursing research, oral health research, and a newly emerging conglomerate called health services research."

Hirsh said the committee also "recommended strongly that the NIH [National Institutes of Health] gather appropriate statistics on the composition of the scientific workforce that is being helped by the NRSA program and urged further that the NIH devise ways for monitoring the outcomes and the research careers that emerge from the awards."

#### **Behavioral Science Is Central to Health**

Former APS Board member Nancy Cantor served on the NRC panel and said, "I think this [recommendation] is recognition of the increasing importance of



science in the national health agenda. That's what we behavioral scientists on the panel argued for—that behavioral science has increasingly important roles

behavioral

Nancy Cantor

to play in the national health agenda and that...training of first-rate behavioral scientists should become an NIH priority, and a national priority, too." Cantor said, the recommendations represent a consensus of the 16-member committee and that several of the biomedical scientists on the committee were sympathetic to the behavioral science emphasis. She added, "I think most people recognize now that behavior plays a major role in the health of the American public. What we argued in the committee was that the state of the art in behavioral science is sophisticated enough to make

major contributions to Americans' health."

APS President-Elect Richard F. Thompson, another member of the NRC panel, called the recommendation that NIH increase training for behavioral and social sciences "a substantial change. I think this relates very closely to the APS

initiatives demonstrating that most of the fundamental problems facing American society—and that Congress is most worried about right now—are behavioral. Of the nine leading causes of death, eight are fundamentally behavioral—and Congress is beginning to get the point," Thompson said.

#### Give Health a Chance

"We behavioral scientists have got to be careful not to promise more that we can deliver. But the point we made over and over again on the NRC panel is that if you look at the amount of funding that has gone into basic biomedical research and the improvement in treatment of disease that has come about as a result of it, you have to realize that we haven't had that same chance in psychology. We haven't had that kind of money for basic research. The genetic revolution wouldn't have happened without all that money being poured into basic biomedical research. We need the same kind of infusion of funds into basic research in behavioral sciences, and the place to start is with our very best students," Thompson elaborated.

NRC panel member R. Duncan Luce said that the consensus on the recommendation for a substantial increase in funding of training awards for behavior science pre- and postdoctoral students "came about after something of a struggle" but that several on the panel believed that many of society's problems have a strong behavioral component. "Thus it is important to try increase the number of people within the health care community who are trained in handling the behavioral component. We particularly urged additional postdoctoral fellows in that area, and the proposed increases are quite considerable," said Luce, a former APS Board member.



Duncan Luce

"Postdocs are a good deal less common today in the behavioral areas than they are in biological science, where they are practically mandatory and frequently prolonged. But if behavioral scientists are going to be working in a cross-disciplinary fashion in health science, they do need some additional training,

often in a medical context, or in interdisciplinary programs involving several academic departments," Luce said.

Cantor also stressed the importance of postdoctoral training to enhance behavioral scientists' exposure to interdisciplinary training, as postdoctoral opportunities have "not traditionally been a part of behavioral science training in most healthrelated fields."

#### **Bottom-Up Opportunities**

The study was guided by Pamela Ebert Flattau, director of the Studies and Surveys Unit

of NRC's Office of Scientific and Engineering Personnel. Flattau, an APS member, believes that although less than 10



Pamela Flattau

percent of predoctoral behavioral science students receive NRSA awards, the program's impact is much greater than that figure suggests. "By training people in new research directions related to national health research goals, you are

SEE NRSA ON PAGE 45

APS OBSERVER American Psychological Society

# **APS Teaching Institute Draws Larger-Than-Expected Crowd**

APS's first annual preconvention Institute on the Teaching of Psychology drew an overflow registration of nearly 450, almost twice as many as had been expected! Occurring one day before the Sixth APS Convention in Washington, DC, the Institute's full day of activities consisted of eight invited addresses, 29 participant idea exchange groups, and about 90 poster presentations.

Given the success of this first Institute, APS President Marilynn Brewer said at the opening session of the APS Convention that the preconference will become a "new area of growth" for APS.

Preconference speakers included Philip Zimbardo of Stanford University, Elizabeth Loftus of the University of Washington, and Ludy Benjamin of Texas A&M University. LaRue Allen of Wayne State University delivered the opening plenary address and other speakers included Linda Bartoshuk of Yale University, James L. McGaugh of the University of California-Irvine, Richard M. Lerner of Michigan State University, and Thomas F. Oltmanns of the University of Virginia.

#### **Crowd-Pleasing Attendance**

"We could not have predicted such a fantastic attendance," said Institute chair Douglas Bernstein. "There is no question that scheduling the [Teaching] Institute as an APS preconvention activity was the right thing to do, from everyone's perspective," said Bernstein. In fact, the large number of Teaching Institute pre-registrations necessitated changes in meeting room arrangements in order to accommodate the large crowd planning to attend.

"Helping teachers of psychology become better teachers was our primary goal with this first APS Teaching Institute," said APS Executive Director Alan Kraut, "but it's apparent too from several attendees' reactions that the experience was both fun *and* informative." Pleased at the reactions to APS's first conventionrelated effort to help teachers of psychology, Kraut said the Institute format provides an effective and visible mechanism for APS involvement in promoting quality teaching in scientific psychology.

#### **Exchanging Ideas Informally**

Particularly popular were the discussions that occurred at the Participant Idea Exchange scheduled conveniently during a one-hour lunch. One of some 30 topics was individually pre-assigned to each round table which provided an informal context for the exchange of information on teaching techniques and teaching-related issues (e.g., curriculum design, ethics). Many participants would like to have had more than the scheduled hour in order to visit other tables to learn about and discuss the several other topics of interest.

Several attendees who had never attended such an idea exchange before, were impressed with the innovative format.

#### Informative Presentations

In addition to the Idea Exchange and posters, the Teaching Institute treated attendees to an assortment of teaching icons. Famous names (Zimbardo, Loftus, and Benjamin) in teaching came to life in the Institute's various plenary and concurrent sessions. Below is a mere sampling of the Teaching Institute sessions.

#### Memories in the Making

Elizabeth Loftus lectured on the "Repressed Memory Mystery." She cited a broad array of findings on the misinformation effect. In some experiments,



La Rue Allen of Wayne State University delivers plenary address on sociocultural issues in the psychology curriculum.

researchers were able to create in their human subjects entire memories of things that had not actually occurred, and in about 50 percent of such cases the subjects were 100 percent confident the false implanted memories were true ones.

Loftus also presented a video clip of a therapist-client session taped surreptitiously by investigators, showing how the therapist initiated the suggestion of repressed sexual abuse in the first session with the client.

Such techniques result in many false accusations against innocent people, Loftus said, adding, "I have to make the point that of course I'm not saying that everyone (family members or others) accused of these kinds of crimes is innocent. We do have to accept the reality that childhood traumas and sexual

SEE TEACHING ON PAGE 30



Ludy Benjamin lectures on the place of history in the psychology curriculum at the first APS Institute on the Teaching of Psychology.

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#### **THOMPSON** FROM PAGE 4

heart disease, stroke and injury. And in each case during the prior two decades significant declines in death rates had occurred in all these areas. This is due almost entirely to changes in behavior reduction in smoking, regulation of cholesterol, better management of alcohol, increased use of seatbelts, increased exercise.

So we *have* made an impact—maybe even greater than that of biomedical science in some areas—cancer research, for example. Biomedical science has made tremendous progress in treatments, but it has yet to find cures. But psychology can do better by helping people stop smoking, for example.

#### Q: What do you think APS ought to be doing to make the funding agencies aware of what behavioral science could achieve?

I must say I think the APS staff have been doing a fantastic job in that regard. APS headquarters is on top of the key issues of research support and governmental support for both research and policy issues that relate to behavior. APS has focused heavily on both NIH and NSF [National Science Foundation]. The Human Capital Initiative was in part for NSF. And it resulted, as we know, in NSF reorganizing its divisions to give larger recognition and greater funding to behavioral science.

### Q: What about future directions of APS?

I'm going basically to take my brief from the APS staff, because I think the directions they are pursing are exactly the right ones.

### Q: How do you see applied research in this context?

I'm very strongly in favor of trying to apply basic science to the problems of society. I'm not one of these basic scientists who lives in an ivory tower and says we should only do basic science. What I say is that support for good basic science will ultimately lead to the kinds of applications we want. In my own case, this is my focus on memory and aging. But we should be working on the applications side of it all along, right from the start. Many of us who have been basic scientists have come to feel that to justify our existence we, too, have really got to try to develop applications to the problems of society.

### Q: But hasn't APS focused primarily on basic research?

Well I think it has. APS met a tremendous need. Like many others, I became a charter member. Many of us had become disenchanted with organized psychology's intense focus on very parochial issues, having drifted farther and farther away from basic science. But it seems to me that in the Human Capital Initiative, APS has a strong focus on the applications of basic research to the problems of society.

APS has been a tremendous success story, now reaching 15,000 members. It is rapidly incorporating all of the academic researchers and scientists in psychology. And it is important to keep in mind that it covers *all* fields of psychology, from biological to personality, clinical, and social.

But doing good science in no way precludes doing applications. People in broad fields ranging from social psychology to sociology to economics are among those who should be grappling with problems of the inner city ghettos. It's going to take interdisciplinary approaches, and psychologists are very good at that. **D.K.** 

Background

**Richard F. Thompson** is a psychobiologist with a particular interest in the neurobiological substrates of learning and memory. A Charter Fellow of APS, Thompson is Keck Professor of Psychology and Biological Sciences at the University of Southern California and is Director of the University's new neuroscience center, the USC Program in Neural, Informational and Behavioral Sciences.

Thompson is an active researcher, having published over 300 articles and many books, and has contributed significantly to science policy development and implementation, having served on National Research Council (NRC) committees since 1972 and on the President's Commission on Mental Health in the late 1970s. He is currently a member of the NRC's Commission on Behavioral and Social Sciences and Education and served on the NRC panel for the National Research Service Awards that just released its report *Meeting the Nation's Needs for Biomedical and Behavioral Scientists* (see story on page 3).

Thompson received his BA in psychology in 1952 from Reed College and his Masters from the University of Wisconsin in 1953. He earned a PhD in psychobiology from the University of Wisconsin in 1956 and then worked in C. N. Woolsey's neurophysiology lab there under a National Institutes of Health postdoctoral fellowship until 1959. Among his many honors are election to the American Academy of Arts and Sciences (1989), receipt of the Warren Medal of the Society of Experimental Psychologists (1989), election to the National Academy of Sciences (1977), and chairmanship of the Psychonomic Society Governing Board.

## Member Profile

## **APS Fellow Helps Single Parents Acquire College Education**

### Marvin Levine establishes scholarship fund at SUNY-Stony Brook

A new financial resource will be available to students at the State University of New York at Stony Brook when the Single Parent Scholarship Fund begins its operations in September. Each year, three students who are raising a child without a partner will be selected to receive \$2,000 per year for their junior and senior years, so that by its second year, the fund will be providing three juniors and three seniors with \$2,000 each. That represents three quarters of the in-state tuition at Stony Brook.

The source of the idea, and of the money, is Marvin Levine, Professor Emeritus of Psychology, and a Charter Fellow of APS. The *Observer* asked Professor Levine about his decision to start this fund. "I've been living an ideal, wonderful life," he answered. "I believe in giving something back."

Having gotten to know several single parents who were students in his classes, he is familiar with the special problems they face, and he believes he can make a valuable contribution by helping them out. "These people are good candidates for help. They are doing something constructive, in spite of serious difficulties. They show the spirit to grow, and I want to help ease their burdens," he said.

#### **Many Applications**

Each year, the financial aid office at Stony Brook receives over 100 applications from single parents, most of whom are divorced mothers. Scholarship recipients will be selected on the basis of financial need and academic achievement.

We asked how a retired professor

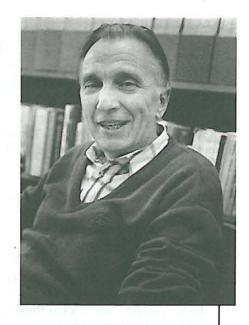
could afford to give \$12,000 per year. All of his family members are well-provided for, says Levine, and he himself has a pension which gives him a comfortable income for the rest of his life. He also has saved money, and has made "some decent investments."

Levine began with the idea of setting up the fund anonymously, but the "university convinced me that to publicize my role might provide a good model. The idea might catch on and inspire others," said Levine. (We might ask, what better way could there be to ensure that one's charitable contributions go 100% toward solving a designated problem?)

#### Author and Scholar

Marvin Levine was the first member of his family to go to college. (His father missed the opportunity because of the Depression and having to support his children.) He attended Columbia University on a partial scholarship receiving his bachelor's degree in 1950, went on to get a master's from Harvard in 1952, and a PhD in 1959 from the University of Wisconsin. His career work in experimental cognitive psychology has been concerned with intellectual and spatial problem solving. He has been at Stony Brook since 1965 and has authored two books, A Cognitive Theory of Learning (Lawrence Earlbaum Associates, 1975), and Effective Problem Solving (Prentice-Hall, 1988).

Levine's choice of single parents as the recipients of his generosity bears no particular relation to his research career, but it does reflect the fact that his interest in "problem solving" goes beyond abstract puzzles, to include interpersonal and social problems. He sees the increase in the number of single parents as an "evolution of our culture. People find themselves in different circumstances, within such a historical transition." He



points out that many of the recipients of welfare are single parents, and he believes that much of the poverty associated with that condition is attributable to faulty social policy.

Rather than complaining or feeling frustrated and angry, Marvin Levine has chosen to take a step and help alleviate this growing social problem. **Paul M. Rowe** 

These people are good candidates for help. They are doing something constructive, in spite of serious difficulties. They show the spirit to grow, and I want to help ease their burdens.

> MARVIN LEVINE SUNY-STONY BROOK

Paul M. Rowe is a free-lance science writer based in Washington, DC.



#### **ELECTION** FROM PAGE 1

Psychological Association (WPA) swapping places with WPA Past-President Bower who immediately became APS President—just after cutting his presidential teeth at APS? Well, Thompson is also now President-Elect of WPA! Stay tuned.

Two APS Charter Fellows, Lorraine D. Eyde and J. Bruce Overmier, also were elected to the APS Board of Directors to succeed outgoing Members-At-Large, Elizabeth Loftus and Claude Steele, whose terms ended in June. Nearly 50 percent of APS members cast ballots in the May election.

Dynasty or not, "another Californian" is hardly the way to describe Dick Thompson. He is director of USC's expansive new neuroscience center, known as the USC Program in Neural, Informational and Behavioral Sciences. His area of research is the broad field of psychobiology, with a focus on neurobiological substrates of learning and memory.

Over the past two decades Thompson has been involved in a wide range of scientific administrative activities at the national level, including the Assembly for Behavioral and Social Sciences (in the mid-1970s) of the National Research Council (NRC) and a Presidential Task Force on research in mental health. He is currently a member of the NRC's Commission on Behavioral and Social Sciences and Education and served on the NRC panel for the National Research Service Awards (see page 3).

Thompson is the author of several books and has published more than 300 research papers. He was elected to the National Academy of Sciences in 1977.

#### **New Board Members**

Laurie Eyde is an industrial/organizational psychologist with the US Office of Personnel Management (OPM) in Washington, DC. Priority agenda items in OPM are Vice President Al Gore's initiative to reinvent federal government and the information superhighway. More than 35 psychologists with masters and doctoral degrees work with Eyde on these and other issues. Overmier, a University of Minnesota professor of psychology has research interests in the psychobiology of stress and its consequences on ability to learn and cope. He was an advisor to APS in its initial stages and served on the steering committee of the APS-initiated Human Capital Initiative during its start-up. He has a great deal of international experience and is a strong advocate of APS collaboration and cooperation with scientific organizations here and worldwide.

#### **Thompson's Interests**

Thompson, who outlines some of the issues and challenges he sees ahead for psychological science and APS in a separate article in this issue of the Observer, is perhaps currently best known as director of USC's neuroscience center. He says he moved from Stanford University to Los Angeles seven years ago "because USC was developing a new neuroscience program and it looked very exciting. USC built a beautiful new research building for the neurosciences with 50,000 square feet of usable space. The program is very broad. We have people ranging from molecular biologists, systems level neuroscientists, anatomists, chemists, behavioral scientists, and biological, cognitive, and linguistic psychologistsabout 20 professors in all."

"We have just established an interdisciplinary PhD program in neural, informational and behavioral sciences, and behavioral science is a key part of our program, made up of both behavioral and cognitive computational approaches. This is one of the things that makes the program different from other neuroscience programs, which often tend to be rather reductionistic," Thompson explained.

"Key neuroscience appointments that we've made include cognitive psychologist Irving Biederman [an APS Charter Fellow], whose field is visual perception, and psycholinguist Mark Seidenberg [also an APS member], who does computational modeling on language acquisition. Our computational modeling approach is a unique feature which includes a strong component from USC's department of computer science.

#### Perspectives: Eyde and Overmier

How do Eyde and Overmier view their roles in shaping the future of APS?

As an applied psychologist and researcher, Eyde responded that she would like to see APS become more "relevant to applied researchers, including human factors, industrial psychology, child development, counseling and clinical researchers and some in other areas. As



Eyde

we know, psychology has moved in the direction of becoming more applied. Applied psychology is the area I know best, and that's what I will try to promote."

Eyde's specialty areas in her research and within OPM are professional test standards, job analysis, computer-based test interpretations, ethics, and interrelationships between work and family in the future workforce.

Her current OPM work combines industrial and clinical perspectives. It focuses on assessing people's fitness for duty and jobs and includes trying to



Overmier

identify people who show high risk behaviors. The area is known as "suitability," Eyde says. It currently includes development of tests for screening law

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#### **CONVENTION** FROM PAGE 1

Potomac River, another convention was held right here in this hotel in 1991, and of course APS is headquartered here now."

#### **Fireworks and Sparklers**

Inaugurated in Washington, too, was the one-day First Annual APS Institute on the Teaching of Psychology (preconference) that preceded the APS meeting. The Teaching Institute drew nearly 450 participants, almost twice as many as expected by organizers (see story on page 9). Said Brewer of the auspicious start to the preconference, "It started off with a bang ... and its success marks the beginning of a whole new APS area of growth and activity."

As at the first APS convention, representatives from some 30 federal granting agency offices were also on hand to provide direct and practical advice to potential and current research grantees. The more than 50 publishers and product/ service exhibitors, 50-plus addresses and symposia, and 700-plus research posters, as well as a special electronic journal product-review session hosted by APS and the Institute for Scientific Information. helped make the meeting a sparkling success.

"The array of truly superb presentations and information at this year's convention," said Convention Program Committee Co-Chair Robert Guion, "will be difficult to beat. And I think the primary reason for the meeting's high quality was Marilynn Brewer's having put together such a great committee to organize it!"

"The pairing of the

teaching preconference with the APS Convention was the source of lots of positive comments about this year's meeting," said program Co-Chair Scott Brown. "And I think the APS meeting derived much of its success from the wide diversity of topics presented. The sessions were well attended; people were very excited and enthusiastic, and several who hadn't attended the preconference commented to me that they now wish they had," said Brown. Other members of the Program Committee include Mahzarin Banaji, Douglas Bernstein, Greg Miller, Denise Park, and Michael Leon.

#### **APS Frontier Is** Widespread

theme of

Pursuing the McDermott. homecoming and APS family history at the opening session, Brewer said she had tapped "APS's collective memory" when she got to thinking about where historians might locate the Society's actual birth-

a number of places of origin. "I would say that APS conception took place during the meeting of the Southeastern Psychological Association in New Orleans in April, 1988." Brewer admitted, however, that "these things are the hardest to pinpoint." It was there (in New Orleans) that "the idea of a separate organization for scientific psychology was put in motion by a small group of members of the then informal coalition known as the Assembly of Scientific and Applied Psychology (ASAP) and the name of the American Psychological Society was first

place. That made her realize that APS had



APS Charter Member Janina Jolley (center) wins a subscription to the new electronic journal (Personal Searcher) produced by APS and the Institute for Scientific Information (ISI). Flanking Jolley at the special Product Review Session are ISI's Jennifer Bol (left) and Mitch Lapides. Margaret Bly, Central Michigan Univ., also won.



Award winners present at the sixth annual APS Convention: (left to right) William Estes, Hans Eysenck, Julian Stanley, Larry Squire, and Kathleen

introduced."

The Society's "relatively short gestation period included a landmark meeting held at Bonnie Strickland's house in Amherst, Massachusetts, in June of 1988 where the bylaws for the prospective organization were first drafted," Brewer said. "But it seems that the official birthplace has to be the 1988 American Psychological Association convention in Atlanta, Georgia, where the results of a mail-ballot vote of ASAP were announced and [ASAP members] overwhelmingly approved the formation of APS as an independent incorporated association."

Brewer called that vote for founding APS "an act of near unanimity that I haven't seen before or since among diverse psychologists."

#### Go West ....

Then, like any self-respecting pioneering society, APS migrated westward "...in part to Reno, Nevada, where the first issues of the APS Observer were produced under the editorship of Steven Hayes of the University of Nevada, and in large part to Norman, Oklahoma, where the first administrative headquarters of APS was set up in Logan Wright's beautiful ranch home," Brewer continued. "Fortunately, APS was well nurtured and grew rapidly, quickly outgrowing this temporary accommodation."

In less than a year from its birth, APS held its first convention and later that summer our temporary office was moved to Washington "which we now call home and where, under the leadership of our able executive director Alan Kraut and his very dedicated staff, we have gained amazing presence and visibility in this our nation's capital," said Brewer.

#### **Tradition at the APS Family Reunion**

Maintaining the APS "family" tradition (begun by then President James McGaugh at the first convention), Brewer asked for a show of hands from the large audience-first from those who attended APS's first convention, and then from those attending for the first time. New attendees were about three times as numerous as those who had attended the 1989 convention, prompting Brewer to say the demonstration of growth was "even more exciting." "Here we are,



Hans Eysenck (left) receives hand calligraphied award citation from Martin E.P. Seligman.

at a growing family reunion, ... and as much as we value our original participants, the lifeblood of the organization, we want additional members participating every year. It's encouraging to discover we've got a full spectrum represented here tonight."

#### **Elections and Awards**

Brewer welcomed and congratulated APS's new President-Elect Richard F. Thompson and new Board members Lorraine Eyde and J. Bruce Overmier.

Following a keynote address by Urie Bronfenbrenner, Brewer presided at the presentation of APS's William James Fellow Award for two scientific psychologists (Hans Eysenck, Institute of Psychiatry-London and Larry Squire, Veterans' Administration-San Diego). Both internationally recognized for their outstanding contributions to psychology,

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Larry Squire (left) receives William James Fellow Award from James McGaugh and is congratulated by Marilynn Brewer.

Eysenck and Squire received their awards, respectively, from Martin Seligman, University of Pennsylvania, and James McGaugh, University of California-Irvine.

The hall rocked with laughter and applause when Eysenck responded, "For a scientist, appreciation of fellow scientists is about the best thing he can hope for. And I'm very grateful to you all for giving me this honor. It means a lot to me as it must to anybody who is so honored by his fellow citizens and scientists. Of course age is a very important variable in it. It's a very chancy business. If you choose somebody too young, he may blot his copy book-if he is too old, he may die before he gets here. I think you pitched it just about right. Thank you very much."

Squire said, "I'm really very flattered to be honored this way by my colleagues of the American Psychological Society and I'm pleased to accept this recognition on behalf of my sizeable laboratory group at San Diego ... and I am especially

CONTINUED ON NEXT PAGE

### Hans J. Eysenck Award Citation

The American Psychological Society names Hans Jurgen Eysenck as a William James Fellow in recognition of a lifetime of distinguished contribution to psychological science.

For more than fifty years, he has led the struggle to bring science to bear on the most significant psychological issues of our times. A skeptic, who insists that human aspirations conform to fact and not vice-versa, he brings phenomena from the penumbra into the light. At the age of fifteen, he fled Hitler's Germany and within twenty years became one of England's most prominent scientists. His seminal early work on individual differences focussed on extraversion, neuroticism, and work on individual differences focussed on extraversion, neuroticism, and psychoticism as the underlying dimensions of personality. He led and won the battle to put therapy on a scientific, behavioral footing. With a vision of human nature as biosocial, he breathed life into the study of the genetics of personality. He has allied himself with unpopular positions, such as the attack on psychoanalytic therapy, the selective contribution of cigarettes to cancer based on personality, the genetics of intelligence, the benefits of behavior therapy for physical health, and the puzzling, but strong predictive power of planetary position at birth on career choice. His is an articulate, moderate, and stable voice raised to defend positions in need of a de-fender. Time and again the accumulation of facts have vindicated him fender. Time and again, the accumulation of facts have vindicated him.

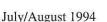
For the reach of his visionary intellect, for the grasp of his scholarly achievements, for his students who have fanned across the globe to lead the next generation, for his good sense, for his vigorous voice, for his devotion to fact, and above all for his unflagging courage, we recognize Hans Eysenck as a leader in psychological science.

William James Fellows

### Larry R. Squire Award Citation

The American Psychological Society names Larry R. Squire as a William James Fellow in recognition of his distinguished achievements in psychological science. Larry Squire is a leading investigator of brain memory systems. His work, with students and colleagues, exploring the anatomical substrates of memory has played a major role in establishing that different forms of memory are mediated by separate brain systems and has clarified the differential roles of specific regions of the medial temporal region in memory. His studies of the temporal gradient of retrograde amnesia in animals and humans have increased our understanding of time-dependent influences in the consolidation and retrieval of information and revealed that the involvement of the hippocampus in memory is time-limited.

For his incisive analyses of critical conceptual issues which have significantly influenced current research and theory concerning brain processes underlying memory, Larry Squire is recognized as a leader in psychological science.







#### FROM PREVIOUS PAGE

gratified to be able to receive this award from Jim McGaugh who has been a mentor for me and who, in 1971, gave me the best advice that I ever received in my life, that you must remain among your peers. And I felt I was lucky to be able to work among my peers in psychological science. And finally I would like to say that I do take this recognition as a recognition by psychological science of the usefulness of strategies that combine psychology and neuroscience [for] a sequenced approach to problems." Squire mentioned many collaborators and mentors in accepting the award.

The James McKeen Cattell Awards for outstanding contributions in the area of applied psychological research were presented to Julian C. Stanley of Johns Hopkins University and Harold W. Stevenson of the University of Michigan. Ellin Scholnick, chair of the Cattell Award committee, presented the awards. Stevenson could not be present to receive his award personally.

Stanley said, "I'm especially pleased that the award has gone to Harold Stevenson also, because this [provides] recognition of the close relationship between scientific psychology and educational psychology and also of the importance of the measurement function in the



Exhibit hall visitors were immersed in a sea of some 50 publishers and product/service exhibitors as well as 700-plus posters.

identification of talent and the guiding of talent." Stanley also called attention to the people who worked with him, "without whose help I wouldn't have been able to launch in 1971 this large movement across the country for helping talented youngsters be identified and helped by providing

### Julian C. Stanley Award Citation

The American Psychological Society names Julian C. Stanley as a James McKeen Cattell Fellow in recognition of his sustained and rigorous contributions to applied psychological research.

Julian C. Stanley began as a major contributor to the design and statistical analysis of applied research. He then launched a study of mathematically precocious youth that has been a model of applied research. Currently in its third decade, his longitudinal study has shaped our knowledge of the nature of mathematical ability, our understanding of giftedness, the construction of educational environments optimal for the development of talented youths, and the lives of the thousands of adolescents who have been touched by his program. Their accomplishments are testament to the impact of his research.

As he recognized and honored their extraordinary abilities, the American Psychological Society, by naming him a James McKeen Cattell Fellow, recognizes his.



### Harold W. Stevenson Award Citation

The American Psychological Society names Harold W. Stevenson as a James McKeen Cattell Fellow in recognition of his sustained and rigorous contributions to research on children's learning and instruction, his success as an educator of productive scholars, and his efforts on behalf of institutions and organizations which nurture the fields of developmental and educational psychology.

As a pioneer in the field of children's learning, he shaped our understanding of the fundamental parameters that govern learning, such as social rewards, anxiety, and failure. His current research provides a blueprint for the education of future generations of children by exposing the rich interplay of the influences of culture, instructional practices, and educational arrangements on learning and achievement in the class-room.

The bridge Dr. Stevenson built between the laboratory and educational practice exemplifies the accomplishments the James McKeen Cattell Fellow Award was designed to recognize. intensive academic summer programs giving a single subject such as mathematics, writing skills, biology or calculus."

Presentation of the **Shahin Hashtroudi Memorial Award**for memory research followed. Marcia Johnson of Princeton University, president of the foundation that administers the award, made the presentation to **Kathleen McDermott** a graduate student studying under Henry Roediger at Rice University. She received the \$1,000-prize for research that provides evidence of close links between perception, imagination, and cognition.

Brewer concluded the awards ceremony with presentation of a certificate of gratitude to William Estes for his dedication to the founding editorship of Psychological Science. Brewer stated, "Over the past five years Bill Estes...has tirelessly nurtured our flagship journal to its current premier standing as a beacon of behavioral science with international reputation and recognition. It is Bill's success in bringing Psychological Science into the world of science that has resulted in an APS debt of gratitude now beyond measure. To begin to repay him for his devotion to the success of the journal would be naive. But we thought we could at least present Bill with a certificate, a kind of an 'IOU' acknowledging our gratitude as he nears the end of his term as editor."

Kay Estes was also recognized with her husband Bill, "because this has been a partnership in nurturing our flagship journal," said Brewer over the fervent applause.

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#### FROM PREVIOUS PAGE

#### Magnets, Electronic Journals, And More

Brewer heralded the launching of APS's new Internet publication, a cooperative venture with the Institute for Scientific Information, and encouraged attendance at a convention session introducing the new information retrieval



system designed specifically for scientific psychologists.

The convention is a magnet for other associations holding their meetings in conjunction with APS's, Brewer noted, including

M. Guion of Bowling Green State University.

the American Association of Applied and Preventive Psychology, the Society for Personality and Social Psychology, the American Board of Professional Neurop-



Program Co-Chair Scott Brown (*right*) chats with APS Executive Director Alan Kraut and postdoc Maryanne Garry of the University of Washington.

sychology, Psi Beta, Psi Chi, the Society for Text and Discourse, and others.

She expressed warm thanks to Scott W. Brown and Robert M. Guion, cochairs of the 1994 convention program committee, for "a marvelous job of orchestrating a full program of 60 addresses and symposia as well as 700plus poster presentations." And she highlighted the "sold-out exhibit hall... with publications, computer software, and the like...that keep the convention event going." In fact, we'll see you next year in New York City, Thursday, June 29 through Sunday, July 2! ◆

## **Research Funding Officers Provide Practical Advice to Convention Attendees**

#### Popular Federal Funding Poster Session is rare opportunity for researchers

Representing major grant programs amounting to literally tens of millions in research dollars were some 60 key federal agency staff gathered in one place to promote their research grant programs during a special poster session at the APS Convention in Washington.

Chaired by the National Institute on Aging's Associate Director for Behavioral & Social Research, Ronald Abeles, the special 2-hour session provided the chance for new and continuing grantees, and particularly potential grantees, to talk face to face with federal agency staff with the most up-to-date information on the federal research grant process. Abeles gathered 29 federal agencies and divisions to participate in the session in order to more personally inform potential grantees of research grant opportunities.

#### **Nervous System**

"For virtually any kind of research you can think of, there is a home," Constance Atwell reassuringly told visitors to her poster on the National Institute of Neurological Disorders and Stroke (NINDS). She is head of the division of extramural research activities which oversees all NINDS grant divisions. "Sometimes people worry that nobody would be interested in what they do, but that's really hard to imagine. Among the several institutes at the NIH [National Institutes of Health] there is at least one with a grant program that would likely be interested in your particular research area," she emphasized.

Herb Lansdell, staffing the NINDS Division of Fundamental Neurosciences poster, commented on the issue of funding. "There's something special about research on the human brain, and consequently, we are doing well in maintaining reasonable funding levels." He said that in the past two years grants rated up to the 14th percentile had been pegged for automatic funding, "a disappointingly low level. But now we actually fund those rated just over the 20th percentile rank, a level better than NIMH [National Institute of Mental Health]" he said.

#### **Office of Naval Research**

One of the biggest single funding agencies present—with about \$15 million in annual research grants—is the Office of Naval Research's Division of Cognitive and Neural Sciences and Technology. APS Charter Member Susan Chipman staffed ONR's poster and said that cognitive science, perception, and computational neuroscience are main areas of special interest to psychologists.

Chipman said the research there relates to the two main application areas of the ONR: personnel optimization and bioengineering. Computational approaches are emphasized throughout. In the personnel area, the ONR is interested in fundamental scientific issues underlying selection and training, performance, human-machine interactions, and teams and command/control issues. The bioengineering area supports reverse-engineering approaches to information processing architectures and the development of innovative design principles that can be applied to future signal processors, classifiers and robotics systems.

ONR also has a Young Investigator Program for those less than five years beyond their PhD who show exceptional promise. Proposals from historically black colleges and minority institutions are encouraged.

#### FUNDING FROM PAGE 17

#### NSF

At the National Science Foundation (NSF) poster, APS Charter Member Leslie Zebrowitz of its Division of Social, Behavioral and Economic Sciences talked with visitors about NSF funding of research in social psychology, developmental psychology and human cognition, in decision research, management sciences, and biological sciences. The grants in her division run between \$30,000 and \$100,000, considerably less than at NIH. Many researchers apply to both NIH and NSF, Zebrowitz said, but some NSF divisions do not accept proposals that have also been submitted to NIH.

#### Cancer

Shirley Mills of the National Cancer Institute's (NCI) Prevention and Control Extramural Research Branch said NCI is actively funding behavioral aspects of AIDS research, breast cancer, colon/rectal, prostate and skin cancer, and is especially interested in tobacco cessation (chewing and smoking), diet and nutrition, as well as psychosocial dimensions of the lives of patients and survivors.

"These efforts all have behavioral components, with primary or secondary prevention, early detection and screening for prostate and breast cancer, and a wide range of both research and demonstration projects in tobacco cessation," Mills said. Her extramural research branch also has a special mission. "We're the people who respond to investigators who have ideas that may not seem like an easy fit into ongoing programs but where there is something new or different they want to address. We help guide their applications through the review process and give them feedback," she said.

#### **Allergies and Infectious Disease**

AIDS research was the principal topic at the National Institute of Allergy and Infectious Disease (NIAID) poster, where Amy Sheon said her institute had been funding "a fairly comprehensive set of behavioral and social science studies surrounding what it takes to recruit people for AIDS vaccine trials, how to retain them, how to obtain informed consent, to

measure risk behavior, and to see how the vaccine changes their behavior. Do people think they are protected by the vaccine and therefore increase their exposure? We regard these issues as essential to the success of a future vaccine trial," she said.

"We're very keen to collaborate with behavioral and social scientists," she said. The next phase of vaccine trials has been postponed, however.

"We were gearing up to do Phase 3 both domestically and internationally. However, as of June 17, our AIDS research advisory committee recommended that we not yet proceed with this next phase efficacy trial because they were concerned that the vaccine might not work, and they had seen that some people had gotten infected who had been in Phase 2 studies—they got infected through high risk behavior, not from the vaccine, despite the way it has been portrayed by the press," Sheon said.

Among other concerns of the advisory committee was that some might have an antibody response to the vaccine and therefore test HIV-positive and then be discriminated against.

"At any rate, we instead are going to pursue other research studies either until more compelling evidence is available to support going ahead with the vaccine products we have now, or until there is another type of product available so that we could do vaccine trials and try two very different types of vaccines against each

Public Scince Topolaria

Program staff of the National Science Foundation: (*left to right*) Leslie Zebrowitz, Joseph Young, Merry Bullock, and Fred Stollnitz.



Rochelle Small of the National Institute on Deafness and Other Communication Disorders.



Sarah Friedman and Norman Krasnegor of the National Institute on Child Health and Human Development. Visiting the poster are (*left to right*) Bernard Brown, and Jordan Finkelstein.

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other and against placebos," Sheon said. "We anticipate that is going to be from one to three years away. So we have the vaccine trial sites set up, and they will now engage in other



David Liskowski of the National Aeronautics and Space Administration and Linda G. Pierce of the Army Research Institute.

feasibility research including prevention trials in sexual activity and drug-using activities. For example, do people report their activities more reliably when using an anonymous computerized interview or in a face-to-face interview? Or what are the best ways to educate people about vaccines-for example, using interactive video or standard video or print

material. And in the prevention area, for example, how effective is a female-controlled viricide in preventing heterosexual transmission? Or how can we successfully intervene to reduce unsafe needle use?"

#### **Drug Abuse**

At the National Institute of Drug Abuse (NIDA) poster, Larry Seitz said his prevention intervention research area is eager to see more proposals from behavioral scientists. The preponderance of the grants have been for psychosocial research, he said. NIDA



Tim Condon (*left*) and Jerry Frankenheim of the National Institute on Drug Abuse.

funds studies of the efficacy and effectiveness of prevention in families, schools, among peers, and in the workplace and community. It is interested in promoting its goals through self-help groups, use of the media, and community coalitions to combat drug use and distribution.

Seitz said school-based intervention research is a salient focus of the NIDA program. It funds studies of wide range of strategies of interest to behavioral scientists—cognitive, behavioral, therapeutic, and environmental policy strategies. Deadlines for submissions are October 1, February 1, and June 1, Seitz said. A new program



NIH/NIMH panelists present at the breakfast (*from left to right*). Theresa Levitin, Stanley Schneider, Ed Trickett, Lynne Huffman, Mollie Oliveri (*standing*), Stephen Koslow, Della Hann, Hilleary Everist, Howard Kurtzman, and Mary Currey.

announcement on school-based prevention intervention research is available from his office by calling 301-443-1514.

#### **Alcohol Abuse**

Gayle Boyd of the prevention research branch of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) said "there is a very strong feeling that alcohol abuse is associated with unsafe sex practices that lead to AIDS but it's not really known. So we are interested in research on this point, and on prevention of high risk behaviors related to alcohol use."

Boyd said, "We also need to know more about the relationship between alcohol and violence, and the opportunities for prevention of violence associated with alcohol. We are also interested in alcohol problems of the elderly, but it has been very difficult to solicit applications in this area from people who have sufficient expertise both in aging and in alcohol to make it through the peer review system," Boyd said. "It's a very understudied area."

She said the prevention branch is flexible in its funding decisions for the diverse topic areas. "We fund the areas in which we get good, solid applications," she said.

#### Breakfast with Mental Health Staff

The National Institute of Mental Health (NIMH) hosted its usual breakfast session but this year had twice as many NIMH representatives on hand, compared to past years, to acquaint junior investigators with NIMH grant programs and to answer specific questions about programs and processes. Also new this year was the presence of a representative from and National Institutes of Health (NIH), Theresa Levitin, a grant referral officer within the Division of Research Grants. The extra help paid off, since there were so many attendees (65) who took advantage of the opportunity to tap the expertise of the grant funding representatives.

"Navigating the unwieldy NIMH organizational structure can

CONTINUED ON NEXT PAGE

# **APS Board Discusses Research & Funding Issues with NIH Officials**

#### Heads of three of the largest grant funding agencies visit APS Board in June

ne of APS's founding principles was to create an effective presence in Washington for scientific psychology. Therefore, our founders and members alike should take note: During the Washington convention the APS Board of Directors was visited by the directors of the National Institute of Mental Health (NIMH), the National Institute on Drug Abuse (NIDA), and the National Institute on Alcohol Abuse and Alcoholism (NIAAA), three of the largest sources of federal funding for psychologists' research.

The discussions were wide ranging, from grant application success rates (don't expect them to get much better any time soon), to the search for a new director of NIMH (the search committee has been convened and applications are now being accepted), to peer review at the National

#### FROM PREVIOUS PAGE

make it time-consuming to identify the right program contact," Oliveri empathized. She proceeded to outline the NIMH structure, the difference between program staff and grant review staff, among other basic details concerning the grant review process and criteria, and the various types of grant award mechanisms.

Also represented at the Federal Poster session were the **Bureau of Labor Statistics**, Frederick Conrad; the **National Center on Child Abuse and Neglect**, Barbara Bates; **National Institute on Aging**, Ron Abeles; National Institutes of Health Fogarty International Center for Advanced Study in the Health Sciences, Josefa Ippolito-Shepherd; and the US Army Research Institute for Behavioral Sciences, Michael Drillings. ◆ Institutes of Health (NIH) (various experiments are under way to improve the system and reduce the paperwork burden).

Enoch Gordis, director of NIAAA, told the APS Board that psychologists account for a quarter of the principal investigators on grants awarded by his institute, which has a portfolio that spans from molecular biology to economics. He also said understanding alcohol abuse and addiction requires

the kind of integrated studies for which psychologists are particularly noted.

In discussing the current tight fiscal situation at NIH, **Rex Cowdry**, acting NIMH director, asked the Board for ideas

about communicating with researchers in the field. And psychologist **Alan Leshner**, recently appointed director of NIDA, pledged that one of his first goals is to strengthen the behavioral science portfolio of the institute.

The Board also received a visit from **Wendy Baldwin**, the director of extramural research at NIH. Baldwin, an APS member and former deputy director of the National Institute of Child Health and Human Develop-

ment, is a central figure in a number of issues of direct importance to scientific psychologists, including the current efforts to improve the NIH peer review system as well as what's being called the "reunion" of the NIMH, NIDA, and NIAAA with NIH (the three institutes became part of NIH two years ago when the former Alcohol, Drug Abuse and Mental Health Administration was reorganized to focus

on service delivery).



Rex Cowdry, Acting Director of NIMH, discusses research funding, peer review, and other issues with APS Board of Directors. APS Treasurer Paul Thayer and new Board member Lorraine Eyde are to his right.

delivery). Baldwin also is the "point person" for the establishment of the Office of Behavioral and Social Science Research (OBSSR) within the office of the NIH Director. Responding to concerns that the OBSSR had not

yet been established, despite having been created by Congress more than a year ago, she said that the bureaucratic paperwork was on the verge of being completed, and that a search committee for an office

> director was being formed. One scenario under consideration for filling the position, Baldwin told the Board, would be to bring in a senior person from outside the government for a year or two to get the office up and running.

(A side note: APS was involved in developing the legislation that established the OBSSR, and has continued to press for its implementation. At the end of July, at APS's

urging, the US Senate committee responsible for NIH's annual budget made known its extreme displeasure that NIH was taking so long in making the OBSSR happen. Look for details in the next *Observer*). **S.B.** 



science issues and seeks

advice of APS Board.

# Spotlight on Research \_\_\_\_\_ Psychologists Find Way to Help Blind Navigate

Practical applications derive from cutting-edge basic perceptual research of APS members using Satellite-based global positioning system, geography database, and acoustical virtual display

Research psychologists have long been concerned with basic perceptual and cognitive processes. And, how we hear things in our environment and how we form mental images of the space around us has been of particular interest to perceptual researchers Roberta Klatzky and Jack Loomis at the University of California-Santa Barbara. They are devising a system to "show" the environment to a blind person through stereo earphones. This virtual acoustical display is one of three major components in a portable navigation system being developed for the blind.

The "personal guidance system," as it is called, includes a geographic information system (computerized map) and a satellite-linked positioning device, which present information via the virtual acoustical display to help the traveler navigate through unfamiliar surroundings.

#### The World in Audio

In the current system, the virtual acoustic display repeats a single location-ID word, which appears to call from one side of the head or the other. The word grows louder closer to its apparent source. A traveler faces the sound and walks forward until the speaking stops and the next word is whispered from a different direction. Legally blind researcher Reginald Golledge, a geographer, recently demonstrated the guidance system on campus.

"The system worked incredibly well that day," recalls project leader Loomis, a perceptual psychologist. "The satellites were probably giving us 1-meter accuracy. He was walking right down the sidewalk, and you could actually hear over a loudspeaker the speech synthe-



Researchers Jack Loomis (*left*) and Roberta Klatzky stand with Reginald Golledge who is wearing components of the personal guidance system.

sizer talking. When Golledge got to a way point, you could hear it switch, and then another stimulus would appear in some other location..., and he would then turn and walk to that source."

The 28-pound guidance system is carried in a backpack. In addition to earphones, the traveler wears a headmounted electronic compass and uses a cane or guide dog for unanticipated obstacles. Future systems will be miniaturized to fit into a waistpack and may use verbal directions ("Go straight 20 feet, then turn left"), landmarks that "speak" ("I'm the bank, and I'm 40 feet away") or a combination of stationary signals of speech and beacons that appear as virtual sounds around the traveler.

The system Golledge demonstrated employs a commercially available mobile

receiver for signals from the global positioning system (GPS) of navigation satellites. A radio link to a nearby stationary GPS receiver provides correction data that should allow the system to calculate the traveler's position to within two to five meters. The geographic information system, housed in a microcomputer, uses continuous GPS readings to monitor location and select for the traveler appropriate information from a database of local streets, walkways, buildings, and permanent obstacles.

#### **Pilot Test**

The guidance system, built at the University of California-Santa Barbara, is a test bed rather than a production prototype, Loomis said. Although simpler navigation systems for the blind are reportedly near production, this system, based on a virtual acoustic display, will probably require another five to 10 years of research and development before reaching the market. But to date, a number of promising technologies have not delivered simply because "not enough attention was paid to developing the user interface," claims Loomis.

"The general problem is to find a good way of displaying information to the blind traveler," Loomis said. "Do we use conventional speech or do we use virtual display?"

Speech and homing signals that appear inside the head can guide the traveler to a destination. But, Loomis said, if the traveler is to build a mental image of the surroundings, virtual sounds that appear to come from different locations in the environment are probably the best approach. The first virtual acoustic display that Loomis and colleagues built in 1986-1987 produced good externalized sound. But the display now used in the personal guidance system does not.

"The most intellectually interesting part of this whole thing for me—and it's a pressing issue for anyone working with virtual acoustic displays," Loomis said, is "how do you make sounds that you're hearing in headphones, how do you make them appear outside the head?"

Echo, it seems, is very important. The first virtual acoustic display used a huge, plug-into-the-wall reverberation unit for adding echo to the synthesized sound. The smaller, portable display in the guidance system uses a much smaller unit and is less effective at producing externalized sounds. Results from a series of informal experiments suggest that it is this lack of echo, and not the use of earphones, which hinders the externalization of the synthesized sounds.

#### It's All Outside the Head

In parallel research, Loomis and coworkers are evaluating how well persons are able to pinpoint the sources of natural sounds in their environment, said Klatzky, a perceptual psychologist and APS Charter Fellow now at Carnegie Mellon University.

"Our strategy is to look at how well people can do with real sounds, because presumably a virtual display can't be better than real sounds," Klatzky said. "What we're finding is that people are extremely good at knowing what direction the sound came from, but they are less good at knowing what the distance was."

Once they know how well persons localize real sounds, the researchers can try to produce the same perception in the virtual acoustical display. Creating the perception of distance, though, is a challenge. "Even if we can get the sound to appear outside the head, maybe it will only appear 10 feet away," Loomis said. But, if the goal is to portray a sound 300 meters away, "10 feet isn't going to do it." They could use a code, such as pitch variation, to represent distance, he said. Or they might simply use synthesized speech to tell the distance.

The idea of a personal guidance system for the blind came to Loomis in June 1985 from a confluence of interests, and it evolved quickly into parallel paths of basic and applied research. Post-graduate work in the early 1970s had acquainted him with the problems of perceptual display and exposed him to the needs of the blind. At Santa Barbara, he became interested in computers, especially 3-D animation, and in the flight simulators he used for pilot training. His initial idea was a system in which a person with video displays in front of the eyes could be immersed in a visual environment simulating, for example, a street in Paris or San Francisco.

"Then it occurred to me that you could do the same thing for audition," Loomis said. "a natural ... way of communicating with the blind."

Loomis took the idea to Golledge, who had recently lost his sight and had also worked extensively on mental representation of space—essentially, behavioral geography. The two of them formed a basic research group with Klatzky and others to investigate navigation ability. Loomis also started work with the department engineer and a graduate student to construct a virtual acoustic display.

#### **Dead Reckoning**

"At that stage, we thought it imperative to show that blind people could, in fact, profit from this kind of system," Klatzky said. "A lot of people think that the blind are just not trainable with respect to space."

The research group undertook a study of dead reckoning to see how well people, without looking, could use their senses of motion and direction and other proprioceptive cues when performing simple tasks, such as finding their way back to the starting point after walking two legs of a small triangular route.

The results showed that people can perform short dead reckoning tasks, although with considerable systematic error, Klatzky said. The study also found that blind people, even those blind from early age, can perform these tasks about as well as blindfolded sighted people. Previous studies had suggested that the blind do worse on spatial cognition tasks than do sighted people.

"Humans don't seem to have these fantastic capabilities for dead reckoning. But when you do locomote in space, you know something about where you've been," Klatzky said. "Blind people seem to profit by this navigation experience as much as sighted people."

#### **Other Basic Questions**

Beyond its current work, the research group hopes to study other questions related to a guidance system for the blind. For example, if auditory cues are presented intermittently, how do you update your mental image of the environment while passing through it? How many different audio-cue images can you hold in mind at one time? And for how long? In addition, many technological issues with the current guidance system still must be worked out, in particular, those involving the accuracy and reliability of GPS positioning.

"We don't really foresee the personal guidance system being ready to buy off the shelf at K-Mart for a long time," Klatzky said. But, in the meantime, she expects work to continue on the basic scientific issues underlying blind navigation. **Hugh McIntosh** 

Hugh McIntosh is a free-lance science writer based in Washington, DC.

# **Teaching Tips**

TEACHING TIPS provides the latest in practical advice on the teaching of psychology. TEACHING TIPS is aimed at current and future faculty of two- and four-year colleges and universities.

Complementing the Annual APS Institute on the Teaching of Psychology, TEACHING TIPS will inform teachers about the content, methods, and profession of teaching. Chief editor Baron Perlman and Co-editors Lee McCann and Susan McFadden, all of the University of Wisconsin-Oshkosh, welcome your comments and suggestions.

Send article ideas or draft submissions directly to Barry Perlman, TEACHING TIPS Editor, Dept. of Psychology, Univ. of Wisconsin-Oshkosh, Oshkosh, WI 54901-8601; Tel.: 414-424-2300; Fax: 414-424-73177, Bitnet: PERLMAN@OSHKOSHW; Internet: PERLMAN@VAXA .CIS.UWOSH.EDU.

## Tell and Show: **The Merits of Classroom Demonstrations**

Douglas A. Bernstein University of Illinois, Urbana-Champaign

After years of watching undergraduates nod off during what I thought were well-organized and fascinating lectures on research methods in psychology, I had no choice but to become a psychic. Expanding on an idea suggested by Morris (1981), I now casually mention my psychic ability on the first day of each semester, claiming that it emerged in the aftermath of a car accident that had left me in a coma for several days.

Students are invariably enthralled; they can tell this is going to be a really good course! After lamenting that there will be no time in the course to explore parapsychology, I offer to demonstrate my powers of psi by trying to predict the future or read someone's mind. A few simple but very impressive tricks described in magic books, textbook instructor's manuals, and other sources—are more than enough to convince students that I am indeed capable of precognition and telepathy. Their astonishment is short-lived, because I immediately debunk the tricks (without revealing the methods of trickery) and assign as homework the task of explaining how I might have accomplished "psychic" feats. The next class session is inevitably a lively one in which students propose a number of explanatory hypotheses and suggest research designs capable of eliminating incorrect alternatives. Reading the assigned chapter on research design makes the students' task easier, and they seem a lot more interested in that chapter than their counterparts in my pre-psychic days.

Using "psychic" demonstrations to teach research design takes a bit longer than presenting a lecture on that topic; indeed, by their very nature, most classroom demonstrations take time away from lecturing. However, I think there are at least three reasons why this may not be such a bad idea.

#### Three Reasons to Use Classroom Demonstrations

 Because demonstrations are distinctive and offer a change of pace, they tend to

attract students' attention. This is good, because there is evidence that most students remain focused on our lectures mainly during the first ten minutes of class (Stockin, 1994). The attention-getting value of demonstrations is especially high when all students can actively participate in them rather than passively observe them. So though you can demonstrate compliance with authority by asking one student to, say, whistle a tune, the others might not be as attentive as they would if you asked the entire class to hop on one foot or to give the instructor a standing ovation. (This particular demonstration has the added advantage of making it impossible for any student to claim immunity to social demand characteristics.)

◆ Even if you never did a single demonstration in the classroom, chances are you will never have enough class time to cover everything in your lecture notes, let alone in the textbook. Ok, you could if you talked as fast as that guy on the old Federal Express commercials, but could your students process the information?

Speaking of which, just because we find time to lecture on something does not guarantee that our students will encode, store, and be able to retrieve the material. Thus, even if demonstrations do not themselves teach more than lectures (see McKeachie, 1990 and Muir & Webster, 1994, for data on the relative value of demonstrations vs. lectures for teaching complex vs. simple material), they can certainly illustrate concepts found in the textbook and thus make it easier and more enjoyable to learn by reading the text. In fact, my 27 years of teaching have left me convinced that the best use of class time is not so much to teach things as to do things-tell stories, give examples, present new concepts, and of course offer demonstrations-in ways that motivate the students to read the book, ask important questions, and learn for themselves. The resulting student interest, attention, and participation help them in learning concepts and principles, and they may learn better.

♦ Classroom demonstrations, like other breaks from the straight lecture mode, can provide highlights that make teaching more enjoyable for you as well as the students. Having highlights to look forward to each day is important because teaching courses again and again can easily become boring. When teachers are bored, their students know it (Appleby, 1990) and they become bored, too. And passive. And maybe even a little hostile, especially when filling out class evaluation forms.

It is no wonder that some faculty come to feel that teaching is not much fun, or at least not as much fun as it used to be. Demonstrating course content in ways that generate student involvement, responsiveness, and enjoyment can help maintain your enthusiasm in the classroom year after year.

#### **Demonstrations in Context**

I am *not* by any means arguing that faculty should stop lecturing. I am only suggesting that virtually any lecture can be enhanced by weaving into it demonstrations of varying length and complexity. At one end of the continuum are demonstrations—such as two-point threshold measurements—that require interrupting the lecture, distributing equipment, data sheets, instructions, and other materials, and 15-30 minutes of class time to complete. As already noted, I think exercises like these have a valuable place in the classroom now and then.

At the other extreme are quick demonstrations easily integrated into a lecture so smoothly as to hardly disrupt its flow. When lecturing on size constancy, for example, you can quickly and memorably illustrate Emmert's Law (Perceived Size = Retinal Image Size x Perceived Distance) by having the class look at a camera as you fire its flash unit. The resulting afterimage (whose size is fixed) will appear larger when the students look at a distant wall than when they hold their palms in front of their eyes. Similarly, it seems a shame to lecture about progressive relaxation training methods without having the students put down their pens, close their eyes, and listen for just a minute or two of live or taped relaxation instructions.

How do you decide whether, and where, to include more demonstrations in your courses? One way is to ask yourself whether there are lectures that you do not look forward to because they feel stale to you and/or don't seem to interest your students. If there are, there are probably demonstrations that could break up and enliven the presentation. If you choose to add new demonstrations, do keep in mind two important guidelines that many experienced teachers have had to learn the hard way.

#### Two Important Guidelines For Demonstrations

◆ It is rarely a good idea to try a new demonstration for the first time in front of your class. **Practice ahead of time** on friends, family, colleagues, or even alone, to be sure that you are clear on all the instructions and procedures, and above all, so the demonstration will actually work correctly.

The importance of rehearsal is well illustrated by the experience of a colleague who shall remain nameless except for his initials, Lou Penner. To demonstrate one of the practical applications of operant conditioning principles, Lou arranged for a local police officer to put a police dog through its paces on the stage of Lou's large classroom. The officer and dog were stationed at one side of the stage and a student volunteer, wearing a protective cuff, stood at the other. At the "attack" command, the animal sprinted for the student and, at the "halt" command, immediately attempted to stop. A rehearsal would have revealed that the stopping distance for a large dog hurtling across a highly polished wood stage is a lot longer than one might think. Contrary to plan, the dog actually reached the student, who was a bit shaken (though unhurt) by the experience. Not all demonstrations can go so dramatically wrong, but a dry run can reduce the chances of losing class time and confusing your students.

♦ It is vital that every demonstration is clearly linked in the students' minds to the principles or concepts it is designed to illustrate. This is an especially important concern when a demonstration is so funny, game-like, or absorbing as to stand alone as a pleasant diversion from the "regular" course material.

Consider the rumor chain, for example, in which a story is passed from one student to another until its content is markedly altered. This exercise can nicely illustrate phenomena such as leveling and sharpening, distinctiveness, constructive memory, the influence of gender and ethnic stereotypes on recall. However, if the students are not prepared to listen for and take note of changes in the story, and if afterward there is no opportunity for them to identify the principles illustrated by those changes, the time spent on the demonstration, though enjoyable, may have been wasted.

#### Conclusion

Still, I think the potential benefits of classroom demonstrations far outweigh their perils. As a means of holding

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nation's mental health care system satisfies the new quality control criteria. Furthermore, because the graduates of these programs are less likely to have personal stakes in maintaining the status quo, their recommendations and decisions are more likely to be in the public interest, guided by the empirical evidence and pointing us in the right direction.

If research raises questions about the validity of our most cherished tests, for example, and challenges the validity of the "clinical judgment" that training and experience are supposed to sharpen (Dawes, Faust, & Meehl, 1989), then these clinical scientists will insist that we bring our assessment and prediction practices into line with such evidence. If research indicates that doctoral-level clinical training and extensive



Participants at the Indiana Conference on Clinical Science in the 21st Century held in April 1994 (*left to right*). Back row: Scott M. Monroe, U. of Oregon, Blaine Ditto, McGill U., Kenneth J. Sher, U. of Missouri, Robert F. Simons, U. of Delaware, William J. Ray, Penn State, William M. Grove, U. of Minnesota, Timothy B. Baker, U. of Wisconsin, Don C. Fowles, U. of Iowa, Neil Schneiderman, U. of Miami, Susan B. Campbell, U. of Pittsburgh, Ken Heller, Indiana U., Laura L. Carstensen, Stanford, Richard McFall, Indiana U. *Middle row:* Alan R. Lang, Florida State, Judith C. Conger, Purdue U., Beth Meyerowitz, USC, Steven J. Beck, Ohio State, Robert J. DeRubeis, U. of Pennsylvania, Robert W. Levenson, U. of California, Richard Bootzin, U. of Arizona. *Front row:* Susan G. O'Leary, SUNY-Stony Brook, Mark Whisman, Yale, Gregory Miller, U. of Illinois-Urbana Champaign, Ana Mari Cauce, U. of Washington, Michael J. Telch, U. of Texas-Austin, Jane A. Steinberg, NIMH, Ian M. Evans, SUNY-Binghamton, Alan G. Kraut, APS.

experience are not significantly related to therapeutic efficacy (Christensen & Jacobson, 1994), then these clinical scientists will suggest that some services might be delivered more economically, and with equivalent efficacy, by persons with less training and experience. These clinical scientists also will suggest that we might decrease our national investment in the training of psychological practitioners at the doctoral level, putting those resources to better use. In short, these clinical scientists will demand that our discipline live up to high standards. We no longer should tolerate activities, under the banner of clinical psychology, that violate the basic epistemological tenets of science, the conventions of logic, and the ethical requirements for "truth in advertising" and accountability for results (cf. McFall, 1991).

More than a half-century ago, Woodworth (1937, 1992) worried that leaders in the field of clinical psychology might not be able to maintain and raise the standards of the profession because the field would be flooded with half-trained, semiscientific practitioners, some of whom he regarded as "out-andout charlatans." He raised these concerns before the dramatic growth of the profession following World War II; before the Veterans Administration and the National Institute of Mental Health (NIMH) started funding clinical training; before APA started accrediting clinical training programs in 1947; before the convening of the Boulder Conference in 1949; before there were state licensing boards in psychology; and before the boon of third-party payments for psychological services. Unfortunately, all of these subsequent developments have made it even more difficult to maintain high standards.

#### ... Into the 21st Century

Now, however, as we approach the threshold of the 21st Century, changes in the health care system offer clinical scientists in psychology a window of opportunity. It seems clear that science-based training and application should become the minimum standard for clinical/health psychology. The first step might be for doctoral programs with long-standing commitments and traditions in scientific research training to hold a conference aimed at building a coalition for this future.

#### **Executive Summary**

On April 21-24, 1994, Indiana University-Bloomington hosted a conference on "Clinical Science in the 21st Century." It was attended by invited scientists from 25 research-oriented PhD training programs in clinical/health psychology, one representative each from APS and NIMH, and the students and faculty of Indiana University's NIMH-supported Research Training Program in Clinical Science. Ten additional program representatives who had been invited, but were unable to attend, asked to be informed of the conference results and to be included in future developments. The aim of the conference was to analyze the changing landscape surrounding scientific clinical/health psychology, and to chart a common course of action for advancing clinical science.

By the end of the Conference, participants had reached a clear consensus in support of several actions. The most important was the creation of a new organization, the Coalition for Psychological Clinical Science. Initially, the Coalition will consist of those training programs invited to the Conference whose faculties have declared their interest in joining. The Coalition is viewed as an

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interim structure serving only as a stepping stone to the creation of a more open and permanent organization, the Academy of Psychological Clinical Science. The Academy will admit to membership any applicant PhD program that meets its minimum standards for scientific training in clinical/health psychology. The Academy not only will recognize training programs offering scientific training, but also will work actively in a variety of ways to advance clinical science in psychology.

Conference participants adopted the following resolutions relating to the proposed Academy:

- **Definition:** "Clinical Science" is psychological science directed at the assessment, understanding, and amelioration of human problems in behavior, affect, cognition, or health, and at the application of knowledge to such problems in ways consistent with scientific evidence.
- **Perspectives:** Clinical Science may occur at diverse levels of analysis; for instance, using biological, developmental, social, or cognitive science perspectives.
- **Goal:** The primary goal of clinical psychology training programs in Clinical Science is to prepare students for careers in clinical science research. Such programs should produce students who skillfully produce and apply scientific knowledge.
- **Organization:** An elected six-person Coalition Steering Committee is charged with developing a plan for the Academy—its charter, criteria and procedures for membership, governance structure, and organizational mission and agenda.
- **Immediate Actions:** Conference participants were expected to communicate with their home program faculties about the Conference, seeking support for its aims and products, and inviting the programs to join the interim Coalition. To date, feedback to the Steering Committee concerning the responses of faculty members at home universities has been very favorable.
- **Future Actions:** Participants agreed to convene a meeting of the new Coalition in the fall of 1994 (dates and location still to be arranged), with the intent of moving as quickly as possible to the establishment of the Academy. The Coalition Steering Committee is in the process of obtaining start-up funds, and has begun the process of building the new organization.

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#### **ELECTION FROM PAGE 12**

enforcement officers.

In response to Vice President Gore's effort to reinvent government, Eyde's group is developing an Internet communications system called MeasureNet that permits conferencing on critical issues of the national performance review such as reducing mismanagement levels and making government "leaner and nicer," Eyde says.

#### Overmier

Overmier thinks it is time to look at the question of quality versus quantity in APS membership. "Of course the membership level has to be maintained," Overmier says, but the main challenge to APS is no longer one of "building the numerical base of membership."

Overmier says, "Not every person trained in psychology regards commitment to psychological science and focus on science as the key element of the organization that represents them."

"I'm not talking here about a division between clinical or basic or applied. Many clinicians are very scientific in orientation and they strive to find and use the scientific bases for their practice and also bring clinical questions back into the research domain," he explained.

"A commitment to psychological science and the integration of science into all aspects of psychology—I think that's the challenge," Overmier says. He suggests this probably means "we should look at our membership qualifications more closely in the future, ask harder questions of people, and ask them to make that commitment as they join."

Overmier would like also to see APS take on new roles in international psychology. He suggests APS symposia might be held at meetings of the International Union of Psychological Science (IUPsyS), as well as IUPsyS symposia at APS conventions. He sees psychology as "a very international field, though the American approach has its unique features," and believes in "sharing it internationally and bringing some international perspectives into the American mainstream."

He currently has ongoing research in Norway, taught in Japan for three months last year, and has worked and/or studied in England, Poland, former Yugoslavia, and Russia.

Culture gaps have not been a problem in his line of research, he says, because "Norway rats are the same in Norway and the United States and Japan. But I suppose if I were a clinical or social psychologist I would have to make substantial adjustments." **D.K.** 

#### The Editor welcomes your letters to the Editor

Submit typewritten letters of up to 300 words in paper form and, if possible, on computer diskette: DOS (5.25" or 3.5" diskette) or Macintosh (3.5" diskette). Indicate which word processor you used or, ideally, save as an ASCII or text file.



#### **TEACHING** FROM PAGE 9

traumas, in particular, can be very damaging to people. But at the moment we do not have the means for distinguishing true memories about the guilty from false memories about the innocent. We can't get to the truth about the past by



Elizabeth Loftus gives closing plenary address on the fallibility of human memory.

remembering alone. And until we can, it seems prudent to be cautious about how we go about piercing some presumed amnesic barrier."

Loftus asked, "Is this unfair to those who were truly victimized? I don't think so. Because uncritical acceptance of every single claim, no matter how dubious, is going to have a chilling consequence—it's going to trivialize those true cases and increase the suffering of genuine victims."

Loftus pointed out important roles for psychology professors and teachers in reducing people's susceptibility to unscientific beliefs about memory.

"Even fairly educated people hold some beliefs that are contradicted by psychological science," Loftus said. "So, for example, if you look at the number of people who believe...that some people can have prenatal memories, 12 percent either agree or agree strongly with this claim, and about 42 percent are undecided about it. And how about (the notion that) memories of physical trauma are stored in the muscles? I know of no scientific support for that proposition and yet 42 percent agree with it and another 5.8 strongly agree."

Loftus concluded, "...if we keep ourselves abreast of these findings—not only in the area of memory but also in other related topics—and communicate the findings to our students, perhaps we won't have quite as many people out there who are either practicing therapy or being patients or clients with beliefs that are contradicted by psychological science."

#### Society in the Making

Philip Zimbardo offered five "basic lessons, or take-home principles" of social psychology:

- The first is the power of the situation and the use of various degrees and types of situational manipulations.
- The second is social construction of reality, by which individuals construct a subjective representation of the objective features of situations, biased by top-down processes of social meanings, values, consensual validation, expectations and affects.
- Zimbardo's third "take-home principle" is the rationalizing/justifying processes in the service of the ego; humans are often non-rational rationalizing creators who reinterpret situations to fit their needs, to justify decisions and even irrational acts, in order to seem rational, sane, reasonable, socially appropriate and acceptable.
- Zimbardo's fourth basic lesson is the impact of group dynamics and social norms on individual and collective behavior; membership in groups has a powerful, often under-recognized impact on behavior, as in the conformity effect, group polarization, "group think," and deindividuation.
- Zimbardo's final point relates to social psychology's concern for using knowledge to solve social problems—this is the pragmatic-applied dimension of social psychology.

Emphasizing the applied dimension, Zimbardo said social psychologists are in the vanguard of those who are "giving psychology away to the public." He noted they are developing new areas of application in psychology and law, health, education, organizational behavior, energy conservation, environmental psychology, and political psychology.

He concluded, "It is all social psychology: The artificial laboratory experiment on bystander intervention, the gaming study of nuclear war deterrents, the computer-dating study of attractiveness, the cross-cultural investigation of gender roles, the genetic study of altruism, the correlational research on the personality of situations, the esoteric theories, the agendas for application, the desire to know, and the commitment to help.

"I can imagine no more satisfying life than to be a modern social psychologist prepared to contribute to the storehouse of psychological knowledge and the streetfront store of reality smarts," he said.

#### History in the Making And for the Taking

Ludy Benjamin presented a lively panorama of the history of psychology, and offered bibliographies and sample test questions. He also provided down-toearth advice on how to make history of psychology courses exciting, fruitful and even entertaining.

Benjamin talked about the fact that he makes about 40 folders of photocopied archival documents available to his students—for example, a folder with correspondence of John Watson, and one on the founding of the Society for Psychological Study of Social Issues in the 1930s with some letters lauding the undertaking and others saying, "Why don't you just call yourself what you are, the Society for Pinkism."

Among his other historic papers, Benjamin said, is "a three-page letter sent to Sigmund Freud, in the 1920s, by a young woman in Ohio who had a dream that disturbed her and wondered where she would go to get it interpreted. So she sent a description of the dream to Freud, who answered her, and I have a copy of his response. I let my students have the Ohio woman's letter so they can put on their psychoanalytic hat and give their best interpretation of her dream—and then (when they've done that) I pass out copies of Freud's interpretation so they can see what he did with it.

"Actually, the students do much better than Freud," Benjamin said. "Because Freud, a rather ethical individual, was not going to take the letter as law without seeing the woman. His letter is quite cautious.... But I have to say it's a wonderful Freudian dream, with knives, sombreros, and front porches with the father and uncle at either side of the front door. Freud couldn't have asked for anything better."  $\blacklozenge$ 

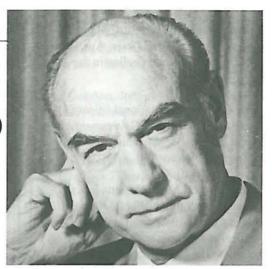
## Obituaries

## Physiological Psychologist Roger Wolcott Sperry (1913-1994)

Editor's note: Roger Sperry, Nobel prize-winning physiological psychologist, is remembered here by one of his early students and followers, Robert W. Doty. Sperry, an APS Charter Fellow, is perhaps best known for his pioneering "split-brain" research and his work on neurospecificity which won him, among other awards, the Nobel Prize for Medicine (1981) and the National Medal of Science (1990). One of a handful of psychologists (i.e., sensory physiologist Georg von Békésy and APS Charter Fellow Herbert Simon) to have received the Nobel Prize, Sperry's research has had a profound effect on the progress of physiological psychology specifically and brain science generally. Insights are provided into Sperry's later endeavors and philosophical interests, in the January 1990 Observer, but Robert Doty presents here a personal remembrance of this scientific giant and an elaboration on Sperry's most recent philosophical writings. As a graduate student, Doty took Sperry's neuroanatomy course in the late 1940s, and Sperry served as a guest examiner on Doty's dissertation defense committee.

n Sunday, 17 April 1994, Roger Sperry obtained surcease from a quickening neurological loss of motor control that had been insidiously crippling him for almost three decades. For this exceptional athlete, avid fisherman, savvy fossil hunter of the wilder American West, peerless surgeon, and talented sculptor his affliction must have been particularly difficult to bear. He did so with quiet courage, remarking toward the end in his typically gentle humor that he was beginning to fear some encroachment upon more than his motor system. But, there was not the slightest evidence of this in his writings or correspondence. Mercifully, the final thrust was from cardiac arrest rather than failure of brainstem motoneurons. The accompanying photo, provided by one of his former students, Marge Scott Scherick, shows him in sturdier circumstance in the late 1950s.

Roger Sperry will forever stand as one of this century's intellectual giants. He had an almost uncanny knack of selecting problems of fundamental import, and then devising ingenious experiments to yield clear, definitive answers. He revolutionized two fields of neuroscience, showing: (a) that neuronal connections are formed and maintained with a high degree of precision, presumably via chemical interchange; and (b) that each cerebral



hemisphere is potentially an independent cognitive mechanism. An even greater societal impact, however, may yet flow from his philosophical reworking of the mind-brain problem, promulgating a directly simple concept that could reverberate throughout human behavior.

He was born in Hartford, Connecticut, on 20 August 1913, but I know naught of his early years. It is apparent that his talents were well-nurtured at Oberlin College, where in 1935 he received his Bachelors degree in English, and then continued for a Masters degree in psychology two years later. His first major philosophical contribution (1952), arguing the primacy of movement over perception as a guide to comprehending the mind-brain relationship, acknowledges his indebtedness to his young professor of psychology at Oberlin, R. H. Stetson.

Pursuing this interest in movement, he continued at the University of Chicago with Paul Weiss, a major figure in zoology. From a long series of ingenious experiments Weiss had come to propose a physiologically peculiar theory of "resonance" between a muscle and its central control circuitry (see Weiss, 1952). While Weiss' facts remain largely unchallenged, Sperry's doctoral thesis and later work ultimately forced a complete reevaluation of Weiss' interpretation. This process was perhaps crowned by Sperry's dramatically brilliant experiments on newts with rotated eyes. The newt forever reacted as though the world were upside down, even when the optic fibers from the rotated eve were allowed to reform their central connections. His thesis work on cross-innervation and muscle transposition in rats had, in addition, also put an end to almost a century of nonsense about facile reorganization of the central nervous system consequent to changing peripheral connections, as he meticulously set forth in his 1945 review.

Now a successful iconoclast, it was natural that he should turn next to that incomparable shaker of the temple of neuroscience, Karl Lashley, as a postdoctoral mentor. On his fellowship at Harvard and the Yerkes primate laboratories, then at Orange Park, Florida, he attacked another dubious concept of neuronal integration, that electrical fields or waves are critical in neocortical processes. The approach was to place multiple insulating elements (mica plates or subpial scarring) or short-circuiting

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APS OBSERVER American Psychological Society

#### FROM PREVIOUS PAGE

elements (tantalum pins) into the cortex, and then examine the function subserved by the affected system. The effects were essentially nil, and in sum adumbrated the now well-supported idea that the neocortical feltwork is organized vertically, into overlapping and interdigitating "columns" of neurons.

Returning to the University of Chicago, he began, with Ronald E. Myers, investigating the puzzle of the corpus callosum. Although there had been sporadic work, reported in German and Russian, showing behavioral consequences in animals of severing this massive interconnection between the two hemispheres, observations at the University of Rochester in the early 1940s by two skilled psychologists, A. J. Akelaitis and K. U. Smith, on epileptic patients with large but varying transections of the callosum, had failed to find significant deficit. This can best be attributed to the incompleteness of many of the transections as well as to the inadequacy of their tests; but the fact that such patients seemed to display normal mentality and bimanual dexterity (e.g., playing the piano), provided a startling challenge to understanding what might be going on in the brain. The clever invention of the "split-brain" preparation, severing the optic chiasm to channel all visual input to one or the other hemisphere, followed by transection of various interhemispheric connections, allowed thorough and decisive testing of the latter pathways in conveying visual information from one half of the brain to the other. Exploitation of this procedure by Sperry and his students rapidly led to appreciation of the manifold roles of the interhemispheric commissures in behavior.

It was Sperry's extensive experience with the animal models, thoroughly revising both concepts and techniques, that made possible the unprecedented insights into functions of the individual hemispheres in man. The shortcomings of the University of Rochester experiments could now be avoided when human patients-again treated largely successfully with callosotomy (and transection of the anterior commissure) for intractable epilepsy by neurosurgeons Phillip J. Vogel and Joseph E. Bogen-became available for testing in the Sperry laboratory. His proof that human consciousness could reside in the linguistically retarded right hemisphere was on an intellectual par with the Copernican and Darwinian revelations that helped define man's place in nature; for it is apparent from the work of Sperry and his colleagues that each human brain has, potentially, two vast networks capable of human experience-a fact cogently verified in instances of left hemispherectomy.

Such separability of the "lives" of the two cerebral hemispheres poses profound philosophical enigmas, and Sperry, true to his 1952 interest in the mind/brain dilemma, pursued and wrote widely on the meaning of these discoveries. Here, again, he has taken a revolutionary step, although now in the realm of philosophy proof will be incomparably more elusive. The deceptively simplistic nature of his proposal is that the mind, wholly a creation of the brain, works back upon the brain *pari passu*, and therefore controls the neuronal outcome.

In other words, decision devolves from mind *per se* rather than as the ineluctable culmination of cascading neuronal connections ascending causally from Brownian motion to neuronal populations. Such upward evolution, from atomic level to neurons,

would inescapably induce a mere robotic mind, driven by the chemistry of its past and the chance though intricate fluctuations of the moment; whereas if the causal chain proceeds from the highest, mental level downward, the integrated output of the neuronal action incorporates, and is controlled by, the conscious decision so familiar to each human being. This immediately gives new meaning to consciousness, and returns responsibility to the mind as distinct from ionic whim. "Materialists" will no doubt bridle at the thought, contradicting as it does some three centuries of effort to depict mental experience solely in terms of molecular-neuronal events; yet there is nothing "immaterial" in the concept, only the supposition that the operation of certain vast neuronal networks transcends their molecular description. In a manuscript to be published posthumously, Sperry renders the choice between "upward" versus "downward" control with his usual ingenuity: (a) given that the brain is the sine qua non of mental experience, and (b) that ignorance is essentially total as to how this comes about, it is not only more logical to assume that the mental aspect is capable of controlling the entity (i.e., the neuronal network), it is socially far more constructive than accepting, willy nilly, arguments for the robotic mind in the absence of decisive evidence either way! It bears emphasis that nothing "psychic" is implied in these ideas, Sperry having already made the astutely devastating criticism of such pseudoscience; were paranormal communication to exist, where better to expect it than between the two hemispheres of patients lacking the corpus callosum !?

As he so richly deserved, Sperry, a Charter Fellow of the American Psychological Society, was repeatedly honored for his contributions: the Passano Award, 1973; the Lashley Award of the American Philosophical Society, 1976; the Wolf Prize in Medicine, 1979; and the Lasker Medical Research Award, 1979; the Nobel Prize in Physiology and Medicine, 1981, which he shared with David H. Hubel and Torsten N. Wiesel; and the National Medal of Science, 1989. Of equal value to him was the keen enthusiasm of his many students and colleagues, so richly instantiated in the volume edited by Colwyn Trevarthen (1990); and yet another Festschrift is in the making; it was to have honored his 81st birthday.

We all mourn his passing, yet more rationally must celebrate the memory of a life so wonderfully and courageously lived.

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Robert W. Doty Department of Physiology University of Rochester School of Medicine

**OBITUARIES** CONTINUED ON NEXT PAGE

## Obituaries \_\_\_\_\_ FROM PREVIOUS PAGE \_

## The Seasons of a Man's Life Author **Daniel J. Levinson (1920-1994)**

Born in New York, the son of Isaac and Rochel Soshen Levinson, APS Fellow Daniel J. Levinson died on April 12 in New Haven, Connecticut. Involved for the greatest part of his academic career, first at Harvard University and then Yale University, Dan always considered himself a transplanted Californian. He preferred the informal to the formal, permeable boundaries about time and work, and days filled with movement between-and uniting-work, family, friends, and sport.

His doctoral work was completed in 1947 at the University of California-Berkeley on the authoritarian personality. He was a staff member, researcher, and author in the project which resulted in the publication of The Authoritarian Personality in 1950. At Harvard, beginning in 1950, he was active in sociopsychological research studying the experiences of patients in hospitals, the careers of patients and of professionals, and the structure of leadership constellations. His interest was ever in understanding, in seeking to evolve new theory, in working at the interface of the organization, career, and personality.

Levinson was a respected researcher, and among the research awards he received in recognition of his research skill was a Career Investigator Award from the National Institute of Mental Health (NIMH) from 1955-1960. He also received a faculty fellowship by the Foundations Fund for Research in Psychiatry from 1960-1965, and also from NIMH he received a Career Development Award from 1965-1971.

He moved to Yale in 1966 where, as his friend and colleague Marshall Edelson noted, "a major shift, both substantive and methodological, occurred in his work. He began a study of adult development...and he moved from an absorption with scales and measurement to a reliance on the in-depth interview and the life history." His preoccupation with "getting it right" and carefully thinking through theory resulted in two major books, The Seasons of a Man's Life in 1978 and The Seasons of a Woman's Life, to be published posthumously.

Levinson taught at the University and its medical school until retiring in 1990. His research emphasis was on understanding the structure of life and on its continuing evolution. He could be impatient with those who could not see the continual capacity for development throughout life.

His work on adult development bridged the boundary between the academic and the world of popular culture. The Seasons of a Man's Life was translated into Japanese, German, Swedish, and Dutch. He was invited to lecture on several public television specials which endeavored to make constructs of adult development generally accessible. Like a responsible and good scientist, he perceived the task of popularizing academic work as important but was rarely satisfied with the results. He believed that an

informed public ought to be given the opportunity to savor theory-to work with constructs.



To know another meant knowing the person and the nature and meaning of work, family-children, and passions and problems and sharing in them. Those who were mentored by Dan were quite special, for they enjoyed his focused attention on their work, and family; his great caring; his struggle to communicate clearly, and joined him on his ongoing voyage of discovery.

At a memorial service honoring his life, Steven Weine, a young psychiatrist mentee, represented all those mentored by Dan. In a Kaddish for Dan, he wrote this farewell:

... who mentored countless young men and women tirelessly and passionately who came to him in the grips of heroic aspirations.

who taught generations of psychologists, sociologists, psychiatrists, social workers, interns, fellows, residents, students, professors, chairmen-touching their deepest self, rattling their bones, holding their hand,

who did not need to evoke pathology ever,

who studied, wrote, talked about, mentored on the normal healthy, everyday breathing thinking feeling sacred flowering existence call life structure,

who listened and listened and listened and listened listened listened listened and understood.

who talked and talked and talked and talked until you understood,

who entered into a relationship with us...

Dan leaves his wife, Judy, with whom he shared work, growth, and love; two sons, Mark and Douglas, and four grandchildren. In all of them is much of Dan. His life and work touched many-and then many more. He will be missed.

> BORIS M. ASTRACHAN DEPARTMENT OF PSYCHIATRY **UNIVERSITY OF ILLINOIS-CHICAGO**



### Behavioral Science Loses Dedicated Advocate for Behavioral Research in AIDS

### Bill Bailey (1959-1994)

APS notes with great sadness the death of William A. Bailey on April 23, 1994. Bill was a Legislative and Federal Affairs Officer with the American Psychological Association and well known to several members of the APS staff. He died as the result of complications from AIDS.

Bill worked right up until the end on the issues that meant the most to him: getting the federal government to work harder against AIDS and do more to help its victims. And he was remarkably effective: it was hard to resist Bill's unique mix of in-your-face advocacy and considerable personal charm. Bill knew the score and played fair, bringing dedication, warmth, optimism, and disarming sincerity to his cause. He was Washington's best lobbyist for behavioral research on AIDS.

Bill Bailey made a difference to hundreds of people who knew him and millions who never got the chance.



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#### **DEMOS** FROM PAGE 25

students' attention, motivating them to read and ask questions, and making teaching more enjoyable, demonstrations are hard to beat. And new ones are so easy to find. Information about effective demonstrations on virtually any topic in psychology is readily available from the instructor's manuals that accompany most textbooks, from specialized handbooks (e.g., Benjamin, Daniel, & Brewer, 1985; Makosky, et al., 1990) from journals such as *Teaching of Psychology*, and via electronic mail networks such as TIPS (Teaching in the Psychological Sciences; subscribe by sending the message: subscribe tips Yourfirstname Yourlastname to LISTSERV@FRE.FSU.UMD.EDU on Internet or to LISTSERV%FRE.FSU.UMD.EDU@CUNYVM.CUNY .EDU on Bitnet).

Give some of these sources a try. I know that you will like the results of enlarging your repertoire of demonstrations, and that your students will, too. Trust me, I'm psychic.

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**Doug Bernstein** is professor of psychology and director of the introductory psychology program at the University of Illinois. He chairs the program committee for the National Institute on the Teaching of Psychology and organized the first Annual APS Institute on the Teaching of Psychology, which took place prior to the APS convention in June, 1994 (see article in this *Observer* issue).

# The Student Notebook

## Sixth Annual APS Convention And Washington Attract Students

Nearly 2,000 APS members and students from around the world converged on the nation's capital in time to take in the Fourth of July celebration and the presentation of the finest collection ever of psychological science at the Sixth Annual APS Convention. There was something to see for all convention attendees.

Among the popular attractions were the more than 720 posters, housed in a large exhibit hall that provided a panorama of a seemingly endless maze of posters. In addition, there were over 25 symposia on a range of topics such as child abuse and neglect, auditory imaging and memory, the changing nature of work, lesbian and gay issues, and neuroimaging and aging. Other points of interest included numerous addresses and debates in all areas of psychology. The convention also featured a film festival on language development, and book publishers provided visitors the opportunity to purchase the latest scholarly 'souvenirs' at bargain prices.

#### **Student Research Competition**

Another popular attraction included the APS Student Caucus (APSSC) research symposium, where the four 1994 award recipients presented their research. Both professionals and students took advantage of the opportunity to learn about the winners' research which generated a great deal of stimulating discussion.

Several student caucus members who were also presenting research at the convention enjoyed special treatment either in the form of complimentary hotel rooms or cash awards. Students who had won awards volunteered a few hours of their time to work at the registration desk, the job placement center, or the book display.

#### **APSSC Election**

The APSSC also held its yearly business meeting in which new officers were elected to serve on the Executive Council for the upcoming year. Many of the newly elected officers are introduced below and the remainder will be introduced in the next Student Notebook issue. The APSSC Council box on the opposite page includes the new officers and their addresses.

#### Washington Sights

In free time, many took time to see some of the permanent exhibits located throughout Washington, DC. Among the sights included were the White House, Capitol Building, Washington Monument, Lincoln Memorial, National Archives, Smithsonian Museums, and Vietnam War Memorial.

Endless varieties of ethnic foods throughout the city in neighborhoods such as Georgetown and the Adams Morgan district were available. And students up for the challenge sampled numerous varieties of ethnic beers at the 'Brickskeller' whose menu features over 500 beers from around the world.

Other weekend festivities included Washington's well-known annual Folk Life Festival featuring this year the food and culture of Thailand, Africa, and India. Independence Day celebrations drew one million to the Mall for fireworks.

#### See You Next Year

The 1994 convention was a worthwhile experience for all student attendees, who likely are planning already to attend the 1995 convention. But, for those of you who missed Washington, mark you calendar *now* for next year's meeting in New York City (Thursday, June 29-Sunday, July 2). And, watch for the upcoming call for submissions to the 1995 APSSC research competition! Deanne Heinisch - Editor

### **Student Research Award Winners**

Every student who conducts research does so with the goal of making a significant contribution to psychological science. With this in mind, APS Student Caucus (APSSC) designed a research competition to encourage and acknowledge outstanding student research. Each year, one undergraduate and three graduate students are recognized for their accomplishments.

The application procedure for the competition is simple and is explained in detail in a fall *Observer*. Students who are first author on a paper they have submitted to the convention are eligible to apply.

This year's competition was very competitive, as nearly 50 students submitted strictly outstanding applications. The applicants are to be commended for their quality research. Each winner was awarded a \$250 prize and had the opportunity to present his or her work at the student research symposium at the convention.

The APSSC Executive Council extends thanks to all who submitted applications and congratulations to the winners. The 1994 competition winners and their advisors/co-authors were:

#### Graduate Winners:

**Gedeon Deak** and Anne D. Pick, Univ. of Minnesota: What's a Penlight? Preschoolers' Systematic and Flexible Use of Abstract Categorization Criteria

Loreen R. Huffman and Jeannette M. Haviland, Rutgers Univ.: Children With Autism Exhibit More Frequent Emotional Expressions in a Controlled Experimental Situation

**Cheryl L. Rusting** and Randy J. Larsen, Univ. of Michigan: *The Structure of Desired Moods and Their Personality Correlates* 

#### Undergraduate Winner:

Christie I. Partlo and Sara Staats, Ohio State Univ.: Battered Women: Depression Intensity and Duration, Threat, Wishes, and Expectations for Change

## Meet Your 1994-1995 APSSC Executive Council...

The newly elected members of the APSSC Executive Council would like to introduce themselves to you. Feel free to contact any one of them to introduce yourself or discuss an issue regarding the Caucus. Watch upcoming issues of the *Observer* where you'll meet the rest of the members of the Council.

#### Secretary Sunni Reilman

Sunni is currently working to obtain her advanced gerontology certification. In addition, she has approximately three years left before she earns her degree in clinical psychology at the University of Colorado-Colorado Springs. Her research interest is primarily in geriatric neuropsychology. She has been involved in APSSC for the past two years because she believes that the best way to learn about an organization is to be involved in it. This year, she intends to continue to interact with people at other schools and help students start new chapters. Sunni proudly boasts that she is the only member of the Executive Council who is also a grandmother.

#### Treasurer Chris Ratcliff

Chris is currently in his third year at Texas Christian University in the general experimental program. His emphasis is in social psychology and he is interested in investigating attitude-behavior consistency focusing on the level of typicality of different category members. He has been involved with APSSC for approximately six months because he thinks it is an important step in becoming an active researcher. In addition, he believes his position on the Executive Council will allow him to make the Caucus a more integral part of students' transition from graduate school to the working world.

APS OBSERVER

American Psychological Society



Stephen Fiore is elected APSSC President, replacing Dianna Newbern.

#### Graduate Advocate Rachel Jo Pallen

Rachel is a first-year graduate student a the University of Arkansas-Fayetteville in the clinical psychology program. Her research interests include the management of anxiety disorders using behavior therapy, mood states, and rapid eye movement desensitization and reprocessing. She first became involved in APSSC last year when she served on the Executive Council as Undergraduate Advocate. This year, as Graduate Advocate, she would like to develop a program to financially help graduate students conduct research.

#### *Undergraduate Advocate* Aram Packlaian

Aram is currently a senior at the University of Houston-Clear Lake. Once he earns his Bachelors degree, he intends to continue in industrial and organizational psychology with a special interest in sports psychology. His research interests include investigating why a more talented team with the best coach does not always win. He became involved in APSSC at the national level after successfully starting a chapter at his university. As Undergraduate Advocate, he intends to communicate the interests and concerns of undergraduates to the Council. In addition, he would like to help develop new programs to assist undergraduates such as an undergraduate mentorship program and a scholarship program.

CONTINUED ON NEXT PAGE

### APSSC Officers \$ 1994-1995

All of the members of the Executive Council welcome students and others who wish to contact them about concerns particular to their own offices.

#### **Executive Council**

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#### Secretary

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Treasurer Chris Ratcliff

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**Past President** 

Dianna Newbern Department of Psychology Texas Christian University Forth Worth, TX 76129 Tel: 817-921-7410 RP901PS@TCUAMUS

> Special Officers and Committee Chairs

Minority Affairs Committee Lynyonne Cotton Howard University 2251 Sherman Ave., NW #1042E Washington, DC 20001

# **APSSC Executive Committee Proposes Revisions to Bylaws**

Review these revised bylaws and return the ballot below

Recently, the APSSC Advisory Council conducted a review of the Student Caucus Bylaws in order to determine if they were in need of revision. After meeting with the APSSC Executive Committee, the following revised Bylaws were submitted. Several of the changes are being proposed in order to make the APSSC Bylaws consistent with changes implemented in the APS Bylaws last year. Refer to the November 1993 Student Notebook to see the original APSSC Bylaws. Procedure dictates that APSSC Bylaws changes be approved by a two-thirds vote of the members who reply to a mail ballot sent to the total membership. Student Caucus members are asked to send their vote by Oct. 1, 1994, on the voting slip that acompanies this article, to Chris Ratcliff, Dept. of Psychology, Texas Christian Univ., Fort Worth, TX 76129; Email: ratcliff@gamma.is.tcu.edu.

#### American Psychological Society Student Caucus Bylaws

#### Article 1 - Name and Purpose

1. The name of this organization shall be the American Psychological Society Student Caucus.

2. The purpose of this organization is to be a representative body of the student affiliates of the American Psychological Society. As such, the APS Student Caucus (hereafter, APSSC) is committed to the goals of that organization which are to promote, protect, and advance the interests of scientifically oriented psychology in research, application, and the improvement of human welfare. Further, the caucus seeks to enhance the professional development of its members and improve the education of the science of psychology.

#### Article 2 - Membership

1. All student affiliates of the American Psychological Society shall be members of the APSSC.

2. All student affiliates shall be treated without discrimination on the basis of race, national or ethnic origin, religion, gender, sexual orientation, age, or mental or physical disability. This does not preclude the Student Caucus from carrying out activities or programs which have as a goal the amelioration of conditions that may restrict members from full participation in the Student Caucus or its activities.

#### Article 3 - Officers, Duties, and Terms of Office

1. The officers of the Student Caucus shall consist of a sevenmember Executive Council including a President, a Graduate Advocate, an Undergraduate Advocate, a Communications Director, a Volunteer Coordinator, an Editor-in-Chief, and either a Past-President or a Member-at-Large. The officers of the Student Caucus Executive Council shall be elected at the APS National Convention by the attending student affiliates. Candidates for executive offices and voting members must be present when the elections are held. The executive officers shall serve one-year terms. All seven officers will have full voting rights on the council.

2. Each member of the Executive Council shall perform the usual duties of the respective office and specific duties provided elsewhere in the Bylaws. Qualifications for persons who are nominated to run for an Executive Council position are

a. All students shall be student affiliate members of APS.

b. Individuals must be a student for at least one semester of the term of office for which they are nominated.

c. Students serving as Undergraduate Advocate must have status as an undergraduate student while all other Executive Council positions shall be held by students with graduate school status.

3. The Executive Council officers specific duties shall include the following:

a. PRESIDENT: serves as the exclusive liaison between the Student Caucus and the Board of Directors, chairs the APSSC Executive Council meetings, and serves as an ex-officio head of all non-standing committees.

b. GRADUATE ADVOCATE: serves as a graduate students advocate; is responsible for the mentorship program and the research competition program.

c. UNDERGRADUATE ADVOCATE: serves as an undergraduate advocate. The officer must be an undergraduate to allow fair representation on the council.

d. COMMUNICATIONS DIRECTOR: is responsible for the Executive Council minutes; information networking (e.g., electronic mail systems); membership recruitment; chapter recruitment and development (e.g., matching funds program). e. VOLUNTEER COORDINATOR: provides travel award advertisement letters to the Editor-in-Chief; chairs the committee which selects annual convention travel award recipients; provides awardee list to the National Office; plans and coordinates the convention awardee training and work schedules.

f. STUDENT EDITOR-IN-CHIEF: chairs the editorial committee and is the exclusive liaison between APSSC and the *APS Observer*. Any submissions claiming to represent APSSC must be endorsed by the Student Editor-in-Chief before they are forwarded to APS for any further consideration.

g. PAST-PRESIDENT: This position is automatically offered to the President at the end of his/her term. In the event the President is unable or unwilling to serve a second year, this



office will be elected and referred to as Member-at-Large. This position is only advisory, but carries a vote on the council.

4. The Advisory Committee of the Student Caucus will be comprised of the Executive Council, Student Chapter Chairs, and all Committee Chairs.

5. A member of the Executive Council may be removed from office by the unanimous vote of the other Executive Council members. The President (or Past-President in the event of incapacity of the President) shall then appoint a person to take over the duties of the vacant office with the approval of the majority of the Executive Council until the next APS national convention.

#### Article 4 - Local Chapters

1. Student Caucus Chapters are granted to colleges and universities that want to be active participants in APS.

2. Application for a student chapter requires: (a) a faculty sponsor who is a professional member of APS; (b) a minimum of five student members; and (c) student members of the chapter be student affiliates of APS. Student founders are asked to provide basic information about their institution, department, and students, and to designate a faculty sponsor.

3. Student chapters are not honor societies.

4. There are no dues to be an APS affiliate, other than those required by the Society. Local chapters pay no additional dues to APS or to the national Student Caucus. However, chapters may, at their own discretion, charge nominal dues to student members of their local organization. In other words, students may be APS Student Affiliates and therefore members of the Student Caucus yet not meet additional financial or activity requirements of the local school chapter, and thus not be members of that chapter.

#### Article 5 - Standing committees and Special Project Committees

Standing committees will be formed in the following manner:

 Committee chairpersons will be recommended to the president by executive council members and appointed by the president with the approval of two-thirds of the executive council. Committee members will serve the length of the term of the existing executive council.

2. Special Project committees will be formed as needed in the following manner:

a. Special committees shall be formed as needed to serve more brief terms than standing committees. The president shall name a chairperson with the approval of two-thirds of the executive council. The committee shall cease to exist at the completion of the named task of the special committee, at the end of the term of office of the executive council, or at the discretion of the executive council with two-thirds vote to dissolve the committee.

b. The committee will report to the Executive Council as needed.

#### **Article 6 - Rules of Procedure**

1. The rules contained in the current edition of Robert's Rule of Order (Newly Revised) shall govern the Student Caucus in all cases to which they are applicable and in which they are not inconsistent with these Bylaws or any special rules of order the Student Caucus may adopt.

#### **Article 7 - Amendments**

1. These Bylaws may be amended by a two-thirds vote of the members who reply to a mail ballot sent to the total membership. Bylaws amendments may be initiated by the Executive Council, by petition of two-thirds of the Advisory Committee, by petition of two-thirds of the voting student members attending the national conference, or by petition of 5% of the total student membership.

2. Periodically, but at intervals no greater than every five years, the Executive Council shall appoint a special committee to review the then-current Bylaws and the operation and structure of the Caucus and to make recommendations about them to the Executive Council.

#### **Article 8 - Dissolution**

1. In the event of the dissolution or termination of the Student Caucus, all of the assets and titles to and possession of the property of the Student Caucus shall pass to the American Psychological Society; or, if APS no longer exists, to the American Association for the Advancement of Science; or, if AAAS no longer exists, to a similar scientific society selected by the Board of Directors.Psychology, Texas Christian Univ., Fort Worth, TX 76129.

## **Official APSSC Bylaws Ballot**

\_ I approve the bylaws changes.

\_\_\_\_ I do not approve the bylaws changes (please comment).

Comments:

I am a current student member of APS.

Signature

Print Name

Mail ballot by October 1, 1994, to: Chris Ratcliff, Dept. of Psychology, Texas Christian Univ., Fort Worth, TX 76129

# Organizational Profile

### Association for Medical Education And Research in Substance Abuse

### **Origins and Purpose**

The Association for Medical Education and Research in Substance Abuse (AMERSA) was organized in 1976 by the Career Teachers in Alcohol and Drug Abuse. Its purpose is to improve the quality of substance abuse training in all health professional schools through the development of innovative curricula, educational workshops, and clinical research.

### Membership

AMERSA has 400 members representing a wide range of disciplines, including medicine, nursing, dentistry, psychology, and social work. All members receive a free subscription to AMERSA's peer-reviewed journal, Substance Abuse, and reduced rates at the annual conference. Full members also have the right to vote and hold office. Full membership, with annual dues of \$100, is open to all persons holding faculty appointments in health professional schools who are engaged in substance abuse education and research. Associate, affiliate, corporate, and emeritus memberships are offered.

The "Organizational Profile," a regular feature of the APS Observer, informs the research community about organizations devoted to serving psychological scientists and academics. It is difficult for anyone to keep abreast of the various organizations of potential personal interest. This section should help in that task. The Editor welcomes your suggestions as to organizations warranting coverage.

### **OFFICERS**

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Antonette Graham, Treasurer Case Western University

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R.J. Canterbury, II University of Virginia

Marianne Marcus University of Texas School of Nursing

Donnie Watson Cork Institute

Douglas Ziedonis Yale University

### BACKGROUND

AMERSA is the only national organization of faculty members devoted primarily to enhancing education and research about substance abuse in medical, nursing, social work, psychology, dental and other health professional schools. AMERSA members have been responsible for several key advances in substance abuse education, such as a curriculum for substance abuse currently used in the majority of US medical schools and a mandatory section on substance abuse for National Board Exams. Other member accomplishments include a five-volume teaching module, Project ADEPT, that provides a comprehensive introduction to substance abuse topics, and a questionnaire (SAAS) that measures attitudes of health care professionals toward substance abusers.

AMERSA's three-day annual national conference draws health care professionals from across the country to share new developments in substance abuse education, treatment, prevention, and research. The conference is unique for two reasons: (1) it fosters multidisciplinary and interdisciplinary collaboration of health professionals with a diverse range of backgrounds, experience, training, and differing practice environments, and (2) while not ignoring the importance of clinical and educational research, the conference places a strong emphasis on the development of educational programs for substance abuse. AMERSA's eighteenth annual conference will be held November 17-20, 1994, in Bethesda, Maryland. Topics to be discussed will include new information about commonly abused and misused drugs, perinatal addictions, pharmacotherapy, and model treatment programs.

AMERSA disseminates key findings and adds to the existing body of knowledge through its peer-reviewed journal, *Substance Abuse*. The journal emphasizes substance abuse education and technology transfer. Contributors are invited to submit articles on empirical research in alcohol, tobacco, and other drug problems, for a broad-based national and international readership. *Substance Abuse* is one of the means by which AMERSA realizes its long-standing commitments: to improve the quality and availability of substance abuse education and to improve the effectiveness of substance abuse treatment.

#### Contact:

Phyllis Arnold Brown University Box G-BH Providence, RI 02912 Tel: 401-863-7791 Fax: 401-863-3510



#### NRSA FROM PAGE 8

really bringing about important changes," she said. She noted that "a large part of the research initiatives are determined by those who apply for the awards—it's not a top-down approach at all, and many new ideas and approaches emerge from the NRSA application process."

#### **Tracking Success**

She cited opportunities for psychologists to be involved in overcoming one of the major shortfalls the committee noted in the NRSA program. For example, tracking of the careers of NRSA awardees over the years has been inadequate since the inception of the program under the National Research Act of 1974.

"NIH should begin to track more effectively the people who are going into R&D careers and also document where people are failing to make the connection into productive careers. To do that well, the social and psychological research community will have to be tapped to monitor the development of careers in science," she said.

Hirsh noted that methods for predicting supply-and-demand of personnel in health fields are still under study by a special panel of the NRSA committee. That panel recommended that previous supply-anddemand models should be abandoned, and its recommendations on new models and methods for predicting supply-anddemand are due later this year.

#### **NIH Response**

As to the likelihood that NIH will adopt the NRSA committee's overall recommendations, APS Executive Director Alan Kraut said, "This is coming at a time of very scarce resources, and it is not clear at all whether this report will be fully implemented. Nevertheless, it sets a new target for behavioral science. It reflects a new awareness on the part of influential people that behavioral science plays an important role in the health research agenda. It comes at a time when we've got our Human Capital Initiative working its way parallel through Congress and through federal agencies, and that makes a nice merger. It emphasizes that psychology has something important to say about national problems."

NIH sources said they will determine which of the recommendations NIH can carry out independent of appropriations, and which will require budget requests to Congress (stipend increases, for example). Some of the changes in numbers of positions might be brought about in NIH, without additional congressional action, and the recommended stipend increases would probably be built into future budget requests, an NIH official suggested. **D.K.** 

### **<u>One</u>** Easy Way to Reach the Best Candidates for Your Position Openings:

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