



OBSERVER

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APS Is Moving On and Up

APS Headquarters Relocates, Again

Relocating three times in as many years could be interpreted as the sign of a deadbeat. But the reason the APS Headquarters Office now has completed its third move since first opening its doors in Washington, DC, two years ago is *growth*.

APS now occupies over 3,000 square feet atop an 11-story stately building of early art deco design built in 1926. Occupying nearly half of the 11th floor and overlooking McPherson Square and the White House, APS is only a block east of its former residence along the "K" Street corridor of scientific and professional organizations. It remains convenient to the heart of DC and to numerous federal agencies,

SEE MOVE
ON PAGE 10



APS Headquarters is located now within three blocks of the White House in this 11-story building at 1010 Vermont Avenue, NW, Washington, DC. (OK, OK, maybe it's five blocks, but that's the maximum.)

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George A. Miller Receives National Medal of Science

George Armitage Miller received the prestigious President's National Medal of Science in September for his contributions to understanding processes of the human mind.

Known best perhaps for his landmark work in psycholinguistics and cognitive science, Miller has been an innovator in many fields of psychology. The Princeton University psychology professor is one of 20 recipients of the award in 1991.

As summed up by Susan Chipman, an Office of Naval Research psychologist who has followed his work for many years, "He has an extraordinary record of innovation. Any one of his achievements might ordinarily be considered a lifetime scientific contribution. He was first to open many new directions of investigation that later became major foci of research."

Miller played a leading role in the rise of math- SEE MEDAL
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An APS Pledge Fulfilled

Milton D. Hake
Treasurer, APS

It arrived the other day, and blew me away!

The 1991 APS Membership Directory had a visceral impact that APS statistics, much as I love them, never have had. Oh, I've known for a long time that we've been growing at a phenomenal rate. Alan Kraut has described us as the fastest growing scientific society in the known universe, and he's right.

I've also known for a while that we're big, and getting bigger.

It was the 1991 Membership Directory, laying along side of the 1990 edition, that made our growth and size — over 12,000 members — tangible.

Awesome.

Of course it is not the *Directory*, per se. It is what the *Directory* represents — APS in all its facets:

- *Psychological Science*, and, in 1992, *Current Directions in Psychological Science*
- The **Annual Convention**, next year in San Diego, June 20-22
- Positive coverage in the **news media**
- **Science advocacy** in Washington
- The *APS Observer* and the *APS Employment Bulletin*
- Member **discounts** on journals and books, travel and lodging
- Strong **relations with** and representation through other **scientific societies and international and national organizations**
- Development of a **national behavioral science research agenda**
- **Liability insurance** tailored for academics, including those in part-time practice, industrial psychologists, and students
- The **APS Student Caucus**, the wellspring for research psychologists of the future

OK, so here comes the warm-up: It takes some money to do all this.

You will soon receive your 1992 membership renewal notice, and the basic membership dues will be \$95 (the student rate will be \$20).

Back in those golden days of 1988 when APS was founded, we promised no dues increase for three years. *We met our pledge.*

As one of the creators of that original pledge and as Treasurer for the last two years, I have made it my business to see that no dollar was wasted, and that every cent of potential revenue was earned. But I've not been able to control inflation. Moreover, the growth of APS has brought new opportunities, and the need for strong leadership in advancing psychological science continues.

These are tough economic times everywhere, no less so for APS. Mindful of the bleak economic outlook but also of our unique mission, the Board voted to set the dues at the levels noted above.

Now here comes the pitch: Remember the *Membership Directory*? Full members who renew their membership for 1992 by December 1, 1991, will receive the 1992 edition free. It's tangible, one of your many benefits of membership in the American Psychological Society.



Photo by Heinz Kugler

Milton D. Hake

NIMH Transfer Clears Senate

Alcohol, Drug Abuse and Mental Health Administration Reorganization Act of 1991 Awaits House Action

In the final minutes before Congress left Washington for an August recess, a proposal to transfer the National Institute of Mental Health (NIMH) to the National Institutes of Health (NIH) was approved by unanimous consent in the U.S. Senate.

The transfer is part of S. 1306, the Alcohol, Drug Abuse and Mental Health Administration [ADAMHA] Reorganization Act of 1991, which was threatened with derailment in the days leading up to the recess due to concerns about the impact of the legislation on state programs for mental health and substance abuse services.

Besides moving NIMH and the other existing research units of ADAMHA (the National Institute of Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism) to NIH, S. 1306 reconstitutes the remaining ADAMHA programs into a new services agency. This reorganization, which separates mental health and substance abuse research from services, is strongly supported by the Secretary of Health and Human Services (HHS), Louis Sullivan.

APS was the only behavioral science research organization called on to take part in an eleventh-hour effort that helped to secure Senate passage of S. 1306. As reported in the July 1991 *Observer*, APS has endorsed the legislation, particularly the transfer of NIMH.

If the bill had not been passed before the August recess, chances were slim that the bill could be enacted before the beginning of the new fiscal year. Even now, the fate of the bill remains a question, given the significant obstacles facing it in the House of Representatives, where it may be taken up when Congress returns to Washington in early September.

Sense of Urgency

"Our sense of urgency regarding this bill," Alan Kraut, APS Executive Director, wrote to members of the Senate, "has to do with the mental illness and substance abuse problems affecting so many of the country's citizens."

"In order to meet these challenges," he said, "there is an immediate need to strengthen federal programs of behavioral and biomedical research in these areas, and an equally compelling need to increase the effectiveness of treatment and prevention services in yours and all other States." According to Kraut, "S. 1306 would do both."

Stronger Behavioral Mandate

The Senate bill creates an unprecedented mandate for behavioral research at NIMH. It authorizes a comprehensive

research program designed to "further the treatment and prevention of mental illness, the promotion of mental health, and the study of the psychological, social and legal factors that influence behavior." NIMH's existing statutory mandate does not specifically refer to psychological or behavioral research except in the context of programs for women and minorities.

The new mandate could mean the beginning of a new era for behavioral research at NIMH. APS has advocated for an expansion of the behavioral research activities at NIMH for several years. Last year, the Senate Appropriations Subcommittee which oversees the HHS budget took up this issue in its report for FY 1991.

In that report, the Subcommittee, chaired by Senator Tom Harkin (D-IA),

SEE TRANSFER ON PAGE 21

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Senate Appropriations Follow APS Priorities

FY 1992 Appropriations Committee Reports for NIH, NIMH, and NSF Spotlight Psychological Research Support

What's black and white and read all over? If you are a federal research agency, the answer is the Senate Appropriations Committee report on your budget. For fiscal year (FY) 1992, those reports urged greater support of behavioral research at the National Institutes of Health (NIH), the National Institute of Mental Health (NIMH) and the National Science Foundation (NSF). This occurred despite a congressional preoccupation with a new budget system, a continuing federal deficit, and an upcoming election.

APS's testimony on the FY 1992 budget [see July 1991 *Observer*] for the Department of Health and Human Services (HHS), which houses NIH and NIMH, urged Congress and the Administration to place greater emphasis on health and behavior, and on the role of behavioral research in mental health, and in disease prevention and health promotion.

The Senate report on HHS — issued in late July — includes reference to many of these behavioral science issues.

APS government relations staff then worked closely with the Senate to develop the report language, featured below. The topics addressed include connections between lifestyle and health status, psycholinguistics, the neurological basis of cognition, behavioral and social science research in aging, normative development of ethnic minorities, young investigator awards for behavioral scientists, and behavioral science research centers in mental health.

APS also testified before the Senate Appropriations subcommittee overseeing NSF concerning a separate directorate for behavioral and social science at that agency. That issue too is raised in the report on NSF for FY 1992, as described below.

Of What Importance Are These Reports?

You may be wondering "Why are these documents so important? What do they mean?" First of all, Appropriations Committee reports are among the primary means by which Congress exerts influence on funding priorities within federal research agencies. To be mentioned positively in an appropriations committee report is something of an honor. By the same token, to be castigated in a report is at best a sign of impending problems and at worst, a precursor to funding cuts.

But wait, there's more. Even though reports do not have the force of law, they convey congressional interest and lend weight to the efforts of APS and others in the behavioral science community to gain increased support and recognition in federal research programs.

With these points in mind, here are the relevant portions of the Senate Appropriations Committee reports on the FY 1992 budgets.



▼ *Health and Behavior* — National Heart, Lung and Blood Institute (NHLBI)

The Senate report calls for strengthening the health and behavior research portfolio at NHLBI. The report states:

The Committee is well aware that diseases in which unhealthy behaviors play a significant role contribute the major share of the burden of illness in our society. Smoking, diet, and other so-called lifestyle behaviors have been directly linked to heart and lung disease. Given the prevalence of these problems, the Committee is extremely eager to see the NHLBI strengthen its health and behavior research portfolio.

▼ *Biobehavioral Research* — National Institute of Neurological Disorders and Stroke (NINDS)

The report recommends that NINDS give higher priority to biobehavioral programs and research on the neurological bases of cognition:

The Committee recognizes that despite significant advances in biobehavioral research areas such as brain chemistry and behavior, learning and memory, and other aspects of the brain and nervous system, there must be increased support in order to develop ways to relieve the physical, financial, and psychological burdens that encumber numerous Americans with neurological or communicative disorders.

It is the Committee's view that higher priority should be given to biobehavioral programs which support research on conditions such as autism, attention deficit disorders, developmental language disorders, dyslexia, sleep disorders, and chronic pain. Further, the Committee regards research on the neurological basis of cognition as an area with much promise for understanding the complex functioning of the brain especially in the areas of learning and memory, and urges NINDS to make this research more of a priority.

▼ ***Normative Development, Child Maltreatment Research* — National Institute on Child Health and Human Development (NICHD)**

The House Appropriations Committee issued report language [see July 1991 *Observer*] urging NICHD to develop a separate Request for Applications (RFA) on the normative development on ethnic minorities. The Senate report contains similar, slightly stronger language in support of an RFA. This issue was initiated by APS and the Society for Research on Child Development.

In addition to the normative development language, the Senate report calls for the expansion of the child maltreatment intramural research programs:

The Committee is aware of the national and international efforts that the NICHD intramural laboratory is making in trying to uncover both the roots and consequences of child maltreatment. Given the enormous policy implications of this research, the Committee commends the Institute for this research direction and encourages its expansion.

▼ ***Behavioral and Social Science Research on Aging* — National Institute on Aging (NIA)**

The report expresses support for a number of behavioral and social science research programs:

The Committee is interested in several health and behavior initiatives at NIA which have implications for future policies and planning for the health of older Americans.

Therefore, the Committee places significant priority on funding for the following in FY 1992: Health behaviors and aging, which will examine the health status of the elderly and identify potential psychosocial and other behavioral interventions for improving the health status of older people; aging and long-term care, which will identify and develop ways to respond to the long-term care needs of a rapidly increasing elderly population, particularly minority elderly and other special populations; intergenerational relationships, involving studies of family relationships, informal caregiving, changing patterns of family structure, and other basic family issues throughout the life course; and the oldest old, involving studies on the quality of life, health care requirements, economic situations, and social support for the segment of society whose needs must be adequately planned for in order to avoid potential health care crisis.

▼ ***Psycholinguistics and Behavioral Models* — National Institute on Deafness and Other Communication Disorders (NIDCD)**

The report notes the importance of psycholinguistics research and urges the development of behavioral models of speech mechanisms:

The Committee commends NIDCD's support for basic research in the area of psycholinguistics. The study of the cognitive mechanisms of language has important implications for the recovery of aphasic individuals who are suffering impaired language comprehension or use due to stroke, traumatic head injuries, brain lesions, or brain damage. The Committee also encourages NIDCD to expand support for the development of behavioral models that among other things will increase understanding of the underlying neural mechanisms for receiving and interpreting speech.

▼ ***Young Investigators, Behavioral Centers* — National Institute of Mental Health (NIMH)**

Expressing continued concern about the decline in the number of young behavioral science investigators, the report states:

The Committee urges that NIMH set aside sufficient funds for mechanisms such as FIRST awards, small grants, and other methods to reverse the decline in the number of young NIMH investigators in the behavioral sciences. The Committee requests that NIMH report to the Committee by January 1, 1992, on its funding of this effort and its progress in this regard.

Raising concerns about NIMH's delays in implementing a program of behavioral research centers, the report states:

The Committee has not received a timetable for implementing a behavioral science research centers program, including schedules for announcing, reviewing, and funding such centers. The Committee requests that NIMH provide by January 31, 1992, a status report on the agency's plan for this initiative.

▼ ***Separate Directorate* — National Science Foundation (NSF)**

APS testimony on the FY 1992 budget of the NSF focused on the need for a separate directorate for behavioral and social science research in the agency. As a follow-up, APS worked with the NSF Appropriations Subcommittee to ensure that NSF acts on this issue, as seen in the following directive:

The Committee is aware that a Foundation-convened task force recommended establishment of a separate directorate for behavior and social science research. The Committee directs the Foundation to respond to this recommendation by notifying the Committee of its plans by February 1, 1992.

Member Profile

Behavioral Scientist Appointed Second-in-Command at NICHD

Wendy Baldwin, a social demographer and a supporter of APS almost since its inception, was named Deputy Director of the National Institute of Child Health and Human Development (NICHD) in July. She replaces Antonia C. Novello who was appointed Surgeon General early in 1990.

NICHD, with a budget this year of \$479 million, funds extramural research in areas such as adolescent pregnancy, day care, infant mortality, nutrition, mental retardation, cognitive development, learning, and a wide range of areas concerning children, youth and parents. Also included in its behavioral research portfolio are studies on contraception, and sexual risk-taking in connection with AIDS and other sexually transmitted diseases, learning disabilities, psychobiology, and medical rehabilitation.

Noting Baldwin's promotion to the number-two slot at the agency, *Science*, the weekly publication of the American Association for the Advancement of Science, said [July 19, 1991] behavioral scientists now may have to stop complaining "that they don't get any respect at NIH [the National Institutes of Health] ... because the number of top-level (nonphysician) behavioral scientists at NIH is now going from zero to two." The other APS member referred to is Alan I. Leshner, Deputy Director of the National Institute

of Mental Health, which is slated to become part of NIH pending congressional approval [see related story on page 3].

Baldwin is a specialist in family planning and adolescent sexuality and has worked with psychologists almost continuously in her 20 years with the NIH. In fact, to assume her new NICHD post she is leaving her position as Chief of NICHD's Demographic and Behavioral Sciences Branch in the Center for Population Research.

The Same Language

Baldwin believes her training as a social demographer corresponds with many of the areas of interest to psychologists. "We are interested in the same behavioral outcomes, such as child well-

being and reducing the rate of teen pregnancies — and there's tremendous agreement on important topics and outcome variables. The differences in these disciplines come more from how the researcher frames the questions and how to obtain answers. There is nothing incompatible

between the demography and psychology of these research issues — they are complementary. I think there is strength that comes from bringing them together. I want to facilitate that important research interaction," she said.

"I think there's a growing appreciation

for the behavioral components of health issues, and the behavioral sciences are going to be increasingly visible in the health field. It's an exciting time to be at the NIH and to be a behavioral scientist. NIH Director Bernadine Healy is determined to look at new things we should be doing and at how we should be functioning to do the best for science," Baldwin said.

"As more behavioral scientists join the [research and administrative ranks of] NIH, the work becomes even more rewarding. Behavioral science will now be included in a much broader base of research including population studies, child development and rehabilitation. Now there will be a community of scientists here at NIH speaking the same language and showing the same concerns," she explained.

APS Importance to NICHD

Baldwin says she attends APS meetings "to learn the results of research, to get ideas about where the field is going, and to see how the NICHD can contribute to the field."

The APS annual meeting is also "an opportunity for NICHD to display its wares and show what our programs are, what we have available for psychologists in research and training," she said. Several Institute staff have attended the APS meetings and also have participated in the popular and well-attended federal agency poster session on research funding.

"APS is a very important society because so many of the research psychologists are there. They are the people we at

... there's a growing appreciation for the behavioral components of health issues, and the behavioral sciences are going to be increasingly visible in the health field.

WENDY BALDWIN

NICHHD need to talk to — *they* are our constituency for the support of extramural research in population and in issues related to mothers and children," she said.

Health Behavior Research

Psychologists will have important roles to play in the new NIH-wide Minority Health Initiative led by the NICHD and recently announced by Secretary of Health and Human Services Louis W. Sullivan, she said. The focus of this new initiative is to take a closer look at disparities between minority and white mortality rates. Issues will range from infant mortality to young adult disparities.

"The points where the disparity is greatest involve violence and the sequelae of sexual activity, that is, HIV and other sexually transmitted diseases," she said. "However, there are not disparities in all areas of health; for example, smoking rates are not higher for black teens, they're lower — and that's true for a number of other health behaviors."

"However, homicide rates for black males are nine times higher than for white males. Most of it results from interpersonal conflicts that turn into violence," she said.

Baldwin also noted that 94 percent of the babies born to HIV infected mothers are minority. Thus, the research will endeavor to get at the health behaviors that are the sources of these disparities.

"The [Minority Health] Initiative goes beyond what you would consider traditional medical fields, but it is not out of the area of health behavior. It's 100 percent in the realm of health behavior and health behavior interventions. That hasn't always been of high profile, but now it is, and it's going to get more attention. Dr. Healy is very enthusiastic about the initiative," emphasized Baldwin.

Baldwin's interest in population and family planning emerged in undergraduate school at Stetson University in Deland,

Florida. She received her PhD from the University of Kentucky, having completed dissertation research in Colombia, South America, examining ways in which modernization in a society influences fertility behavior.

As a specialist in adolescent sexual behaviors, Baldwin scoffs at the statement by some that demographers and psychologists work poles apart. "Some [researchers] view the demographic studies and psychological studies as being polar opposites, but they ... are clearly complementary. We could do more to explicitly

link them, perhaps. For example, the person doing a large-scale study could be working hand in hand with someone who may be doing intensively psychologically oriented follow-backs on a small number of cases. You'd get the strength of knowing what the population parameters were and you'd also get the more in-depth insight into the processes

[APS members] are the people we at NICHD need to talk to — they are our constituency for the support of extramural research in population and in issues related to mothers and children.

WENDY BALDWIN

associated with the behavioral outcomes," she said.

Baldwin will be working directly under Duane Alexander, a pediatrician who has served as Director of NICHD since February 1986. Alexander also served as Deputy Director of the Institute in 1982. D.K.

APS is a very important society because so many of the research psychologists are there.

WENDY BALDWIN

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Spotlight on Research

How Does Learning Make Physical Changes in the Brain?

Turning Neural Activity into Structural Changes: Both Growth and Loss

Historically, the brain was thought to be relatively hardwired. Most scientists believed the brain had little capacity for adding or changing its structure or synaptic connections between nerve cells, especially after the organism's so-called developmentally "sensitive period" or "critical period" has passed.

Psychologists and other neuroscientists have shown over the past few years, though, that the brain's "wiring" is dynamic. New synaptic connections continuously form, and existing ones regularly reshape themselves. In fact, the brain changes perceptibly throughout the lifetime.

What accounts for these changes? Some automatic growth process? Psychologist William Greenough ruled out any such likelihood in his presentation at the June APS convention.

"Learning is the culprit," he declared, "not merely increased neuromuscular or motor activity." Greenough is Professor of Psychology and Cell and Structural Biology at the University of Illinois Urbana-Champaign's Beckman Institute.

Cerebellum as a Learning Model

Research by Greenough and his colleagues on adult rats indicates that behavioral learning drives changes in brain structure in very dynamic ways. The learning is in response to environmental challenges.

Greenough explained that he recently has examined the cerebellum because of ideal experimental characteristics of this

part of the brain, the visibility and relatively simple-to-map circuitry of the cerebellum's ubiquitous Purkinje cells, the only output cells in the cerebellum. While the cerebellum is responsible for the unglamorous task of regulating motor activity and sensori-motor integration, Greenough's rationale for studying the cerebellum is its potential for deciphering general principles that can be extended to higher brain structures involved in non-motor forms of learning.

Structuring Activity

The greatest increases in dendritic growth and synaptic connectivity occur in animals who are challenged to learn in complex, super-enriched environments. Greenough discovered a net increase in the density of the synapses between nerve cells in these animals. The changes show up clearly in electron micrographs and radioactive scans of the spiny branchlets of the nerve cells.

Micrographs of the cerebellums of animals who are intensely engaged in learning contrast with those of animals who are merely "couch potatoes" housed individually or who perform a nonchallenging treadmill exercise routine.

Brain Changes in Young Monkeys

In one of their early investigations on the impact of learning on brain structure, Greenough and his colleague Mary Floeter had compared monkeys raised in either simple or complex social and physical environments. They raised one group of infant monkeys in large colonies with

members of various ages and provided them with a rich array of toys and stimulus objects that allowed for a large amount of motor learning.

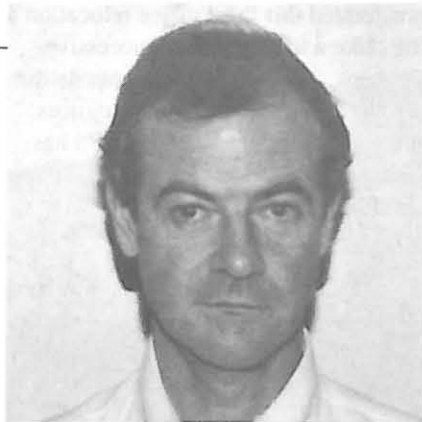
When compared with infant monkeys reared separately in social pairs or individually, it was found that the complex environment monkeys had bigger spiny branchlets on the Purkinje cells.

Brain Changes in Mature Animals?

In his more recent research [reported in *Neurobiology*, July 1990] with James Black, Krystyna Isaacs, Brenda Anderson, and Adriana Alcantara, Greenough worked with adult rats who were encouraged to learn complicated motor skills like running across a series of elevated runways between pylons. He called them "acrobats." "If you've ever tried to protect your birdfeeder from squirrels, you probably know that animals are very capable of this type of complicated activity," he noted to the APS audience.

After the rats had undergone 30 days of strenuous learning on the elevated runways, calculations were made of densities of Purkinje cells, blood vessels, and synapses in the cerebellum. This was done for the acrobats and for three types of control groups.

Greenough reported at APS that "The brain of adult animals can add capillaries when exercise demands that capillaries be added. (This is literally the first piece of evidence that indicates so.) The animals that did the dumb non-learning exercise had that demand. But in terms of the addition of synapses, it is the animals who were *learning* who added the connections. So we have two different forms of cerebellar adaptation to environmental demands. If the demand is for endurance,



Psychobiologist William Greenough proposes role for growth genes in behavioral learning-induced structural changes in the brain.

the cerebellum adds blood vessels. If the demand is for motor skill, the cerebellum adds synaptic connections. So connections seem to be what is associated with learning."

Greenough and co-researchers also found that the effects on brain structure of even four days' exposure to a super-enriched environment of exciting animal toys and mazes can be detected in electron micrographs. And, an experience of 30 days of an enriched learning environment persist long after rats are returned to the non-enriched individual cage environments.

Some evidence suggests that the brain retains the capacity to modify its synaptic organization to the demands of the environment throughout an animal's life. But with very old rats, those about two years old, a decline takes place that cannot yet be clearly attributed either primarily to weakened neuronal activity or to a decline in support from the vascular system.

The neuroplasticity observed in the cerebellum extends to other parts of the brain, Greenough believes. "The neat thing about the cerebellum ... is that you can ... figure out what is connecting with what. In the long run that means we have the opportunity in the cerebellum to figure out what is going on — from the level of morphology, to the level of neurophysiology function, to the level of behavior — at a cellular and physiological level when animals learn things."

Selective Pruning of Branchlets

Cerebellar hemispheres actually *lost* connections in adult rabbits subjected to eye-lid conditioning in recent research conducted by Greenough, Richard Thompson, Brenda Anderson, and Joseph Steinmetz. Greenough was surprised to discover a situation in which nerve cell connections were *shed* rather than *established*, but this work — using stimulation to the contralateral pontine nucleus as the conditioned stimulus and a standard air puff as the unconditioned stimulus — clearly showed a loss of synapses resulting from this associative learning. These changes were found in a within-animal comparison of the conditioned versus the non-conditioned hemisphere. Clearly, brain changes can be bi-directional, explained Greenough.

Growth Genes

How do the neurons firing get turned into neurons interconnecting? Greenough implicates developmentally regulated genes involved in growth that are "expressed" in the nervous system under conditions of activity. These are the same key genes thought to be involved in neural development processes early in life.

His slides show darkened areas in the visual cortex of animals reared in complex environments, and he adds, "All these ... radioactively labeled areas basically show that the animal is expressing the gene [that controls other structural genes.] At a very simple level this looks like one of the translation points at which activity is actually causing an effect on the chemistry of the brain which is going to be potentially translated into changes in structure," Greenough says. "That's purely hypothetical, but there is no question that the expression of that change is very different for animals in complex environments than for the individually caged animal," Greenough said. This latter work was done with colleagues Ivan Jeanne Weiler, Christopher Wallace, and Ginger Withers. **D.K.**

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MOVE FROM PAGE 1

associations, and research coalitions with which APS has strong ties. The National Science Foundation is a short walk as is the Office of Management and Budget.

With the hiring of four new permanent staff — an administrative assistant, a newsletter editor, two government relations staff — and a summer intern over the past year and a half, APS soon outgrew its 1,960 square feet of office space occupied in October 1989 at K Street, NW, in Washington's Investment Building. The unrelenting growth of APS's membership and a concurrent growth in services necessitated a move to larger quarters, as soon as possible.

The third-floor office space that seemed so overwhelmingly sufficient in the fall of 1989 now could barely house the staff, let alone the storage boxes. Space once available for staff meetings had long since been taken over by mail processing activities and cartons of stored paper, membership directories, and forms.

Bigger and Better

"In anticipation of additional staff over the next year and because of increased sophistication of APS operations," APS Executive Director Alan Kraut decided "it was time to move on." A convergence of other factors also contributed to the decision to move at this time, he indicated. Namely, the former residence at 1511 K Street, was slated to be completely gutted, and renovated.

The impact of the national economic recession on the District's office space market has created a "tenant's" market in terms of opportunities for a good lease rate on office space. Timing was opportune, and APS took advantage of this situation.

Walking Tall

Kraut, a developmental psychologist,

characterized this third office relocation as being "like a toddler's first successive three steps. When the toddler can do three in a row on its own, the parent rejoices that the child can now walk!" APS has established that it can "walk" by asserting its credibility on Capitol Hill and with federal agencies (e.g., NIH, NSF) over the



The new APS office overlooks McPherson Square (*foreground*) and the White House (*at center of photo — look closely, it really is there*).

past two years and has established its presence in the scientific community through its growth to over 12,000 members.

APS Office Location Chronology

Most APS operations were transferred from the Norman, Oklahoma, logistics office to Washington, DC, in the late summer of 1989, and APS's 3-person staff then temporarily occupied a two-room townhouse office over a liquor store on Capitol Hill. In October of that year another relocation was needed to accom-

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APS outgrew its office space within 21 months of occupying its former residence on the third floor of the Investment Building (above) at 1511 K Street, NW, in Washington, DC.

moderate increasing space requirements as the permanent Washington staff took on more of the tasks being given up by the Oklahoma logistics office and the Nevada newsletter office.

Even though APS had already begun to establish a significant presence on Capitol Hill and in the scientific community at that time, the move to the Investment Building on K Street (see *Observer* November, 1989) represented a major psychological step in that it was APS's first office space in Washington that permitted attention to more than just the minimal requirements of a nonprofit business operation.

The latest relocation is a significant improvement, however, and it will allow APS staff to function more efficiently. Looking to the future, it is hard to predict what lies ahead for APS in terms of office requirements, but if the past rate of membership growth is any indication, we will all have to pinch ourselves to verify our state of consciousness. ♦



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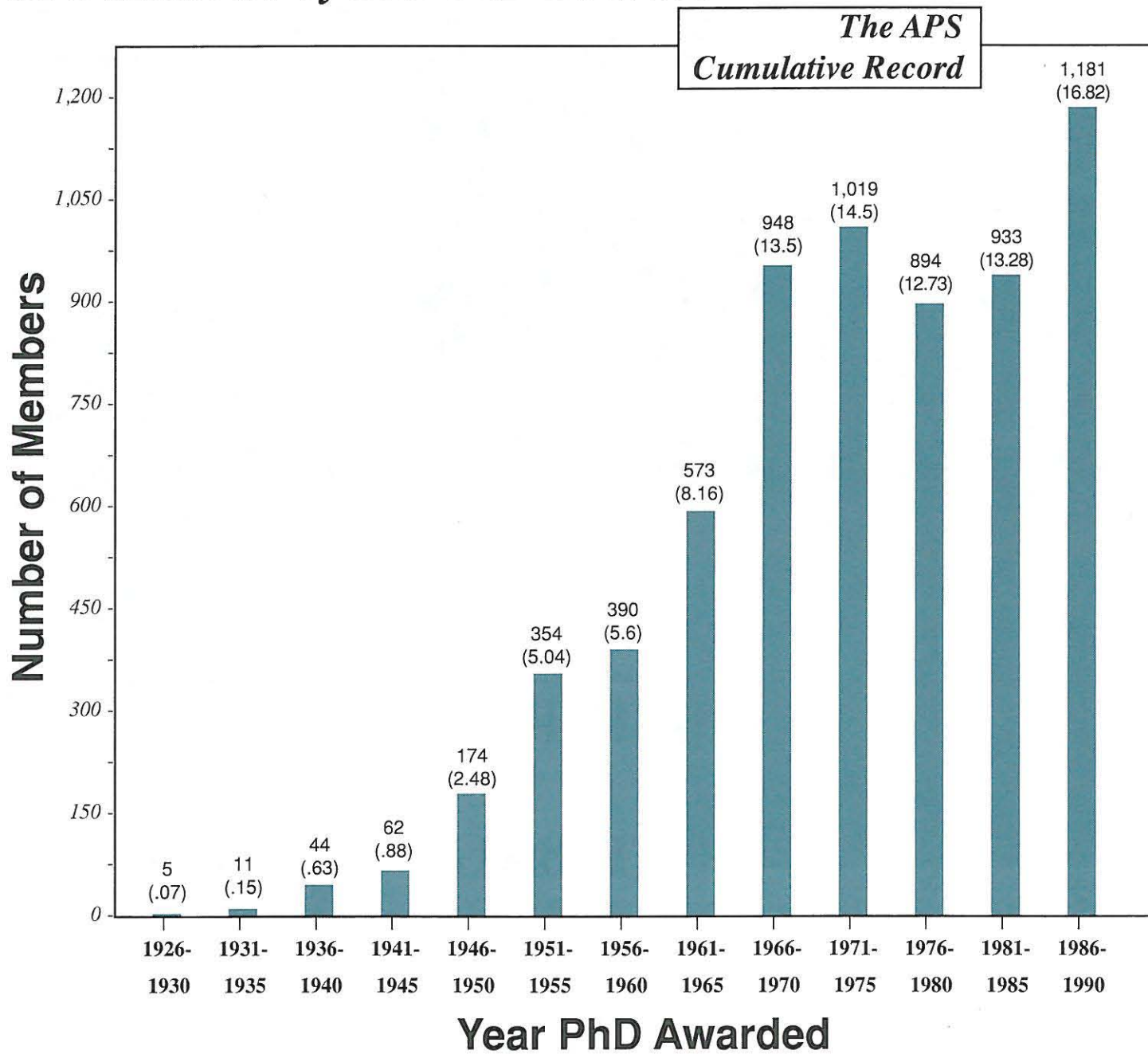
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APS Members by Year PhD Awarded *



* Includes only full members residing in the United States.

Percentages are shown in parentheses. They do not add to 100 due to rounding and because 6% of the domestic full members did not report the year in which they received their degree. These members, while included in the membership total, are not included in the graph bars above.

The Student Notebook

by Michael Patterson

University Chapters Update: Chapter Roundup

Below is a list of the current APS Student Caucus chapters along with their Faculty Sponsors. In just two years, 30 chapters have been established nationwide. You can read about some of these chapters in recent past issues of the Student Notebook. If you are interested in learning about how to start a new chapter at your school, please contact Dianna Newbern, Chapter Recruitment Coordinator.

Call for Ideas!

If you have any comments or suggestions with how to facilitate conversion from student member status to professional member status we would like to hear from you, please contact Kathleen Morgan at the Dept. of Psychology, Wheaton College, Norton, MA 02766.

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STUDENT NOTEBOOK
CONTINUED ON NEXT PAGE

Interview with APSSC President Carolyn Roecker



Photo by David Hathcox

Carolyn Roecker

Q: In general, what is the APS Student Caucus (APSSC)?

Roecker: The APSSC is a service organization which acts as the representative body of the student affiliates of the APS. The Caucus was founded in 1989 at the first APS convention in Alexandria, VA. At that time, the APSSC consisted of approximately 20 students, graduate and undergraduate. In two years, our membership has grown to 4,805 students, 1,613 of whom are new for the year 1991.

The purpose of the APSSC is threefold. First, it is a forum for graduate and undergraduate student issues. Our hope is that we represent the interests of all student affiliates. We also serve as a voice for the students to communicate with other professional members and the APS Board. Second, the APSSC acts as an advocacy group in APS's policy making process.

The APS Student Caucus represents all the Society's student affiliates. It is not an honor society. All chapter chairs are additionally recognized as members of the APSSC national Advisory Committee. Students or faculty wanting information about APSSC school chapter applications should contact:

Dianna Newbern
Department of Psychology
Texas Christian University
Fort Worth, TX 76129
Tel.: 817-921-7415

When applying, student chapter founders are asked to provide information about the institution, department, and students, and to designate a faculty sponsor.

Two of the APSSC executive board positions, the graduate and undergraduate advocates, are devoted to this goal. Third, the APSSC acts as a national networking and informational resource of the student affiliates. Ongoing projects such as the mentorship program and the informational resources project are examples of our work in these areas.

Q: How do you think students benefit from joining APS and becoming involved in the Student Caucus?

Roecker: APS's organizational goal is to advance the scientific discipline of psychology. By joining APS, students become part of a body of scientific researchers. The APSSC ideally consists of students who are serious about their development as scientists.

Several benefits result from becoming involved in the APSSC. As I stated before, we are a service organization. We wish to serve the educational and professional development of the students we represent. As a result, several programs and projects address student needs.

Our primary concern is the development and support of APS student chapters. Student chapters allow students to become involved in APS at a local level. Our goal in the APSSC is to provide support in information, networking, logistics, and any other areas in which we may be useful to the chapters. One present project is to develop a list of students, possibly advanced graduate students, who may be willing to speak at nearby schools either about their research, issues surrounding

application to graduate school, or any other relevant subjects. This may be particularly useful to chapters at smaller liberal arts colleges with few or no graduate students.

The APSSC is also involved in raising and distributing funds to support student research and student travel. This past year, the APSSC awarded four student research awards and over 25 cash travel awards. In addition to providing financial support, awards such as the research awards provide students the opportunity to present their work to a large professional audience.

For those in the midst of a job search, the APSSC provides the job bank at the national convention. The job bank serves students, professionals, universities, and businesses in providing information about applicants and position openings. Universities and fortune 500 companies are contacted who in turn send recruiters to the convention. In addition, rooms are made available for interviews.

Educational and career development are also major concerns of the APSSC. We have several projects addressing these areas. One ongoing project is the mentorship program. Through the mentorship program, students will be able to interact with professionals — in their area of research — who will provide personal interest and investment in the student's professional development.

The APSSC is also beginning work on a new information resource project. The goal is to compile a small library of

CONTINUED ON NEXT PAGE

reprints, pamphlets, and bibliographies which address issues such as applying to graduate programs, writing a curriculum vitae, giving a job talk, and other relevant topics. Copies of these will then be made available upon request to student affiliates and their chapters.

Another new project we have been discussing is a possible "people meeting people" section in the student notebook. Through this section, students would be able to contact other students with like research interests. Such a service could aid in networking and possibly result in collaborative efforts.

Q: What are your goals as President of the APSSC?

Roecker: I see my primary role as liaison between the APSSC and the professional members of APS. I have been encouraged by the quality of the communication which has been established and maintained between these two groups in the past two years. My foremost goal is to continue clear communications.

Another goal nearly as important as communication is service. I take seriously our description as a "service organization" and believe that we need to continue the work begun in this area. Established programs such as the student research awards competition and the travel awards work to serve financial needs of the

student affiliates, but we also must address needs other than financial.

I would like to see the APSSC provide more and varied services to its student affiliates. We are working to do so by providing more services through new projects such as chapter support, informational resources, and the mentorship program. My goal is to work with the committee chairpersons to continue to improve our established programs and to see our new projects to completion.

Q: What would you like to say to APS student members?

Roecker: Get involved! I see the APSSC as an excellent opportunity for students to get involved in an organization at the national level. You can make an impact. If you have ideas for projects at the national level, please contact an APSSC executive board member. If your chapter has been active and successful with some project, submit an article to the notebook editor. If you need help organizing a regional conference, call us. If your school does not have an APS student chapter, establish one. If you have any questions or comments about the APSSC itself, starting a student chapter, or any of our ongoing projects, please contact myself or any of the other executive board members.

Convention Job Bank Was A Success

The Student Caucus once again operated the APS Job Bank during the Society's annual conference in June. Over thirty employers and 66 job applicants were able to get together through the service. Kenn White oversaw the operations of the Job Bank. Student Caucus officers even heard from individuals who had previously gotten jobs through the Job Bank in the past.

Clarification

In the May, 1991, *Observer* (pg. 36, under "Drive and Lodge for Less") we publicized a discount hotel rate for APS members, especially APS student affiliates, at various Choice hotels (i.e., **Quality, Clarion, Econo Lodge, Rodeway, Friendship Inns**). We ask that when you make a reservation at a Choice hotel, be sure to identify **Travel Escape** as the official APS travel agency, and give **Travel Escape's** A.R.C. number (#09872262), as cited in the May newsletter, in order to receive the corporate rate. All APS student affiliates are entitled to the corporate rate.

APSSC Officers

Executive Council 1991-1992

All the officers welcome students and others who wish to contact them about concerns particular to their own offices. Contact Secretary Paul Reber for general inquiries, regional student conference information, and other requests. Correspondence, inquiries, and submissions to the Student Notebook should be directed to Editor Michael Patterson.

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Student Chapter Recruitment

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Fort Worth, TX 76129
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Travel Awards

Lisa Fournier
University of Illinois

MEDAL FROM PAGE 1

ematical psychology and the quantification and computation of psychological phenomena. In the 1950s he helped spark the flowering of experimental psycholinguistics, collaborating at times with Noam Chomsky. He also helped lay foundations for modern cognitive science with such works as *Plans in the Structure of Behavior*, written with Eugene Galanter and Karl Pribram in 1960. He founded Harvard's Center for Cognitive Studies with Jerome Bruner in 1960.

Later, in his laboratory at Rockefeller University, Miller was one of the first to argue for language acquisition as a significant research area, and to set foundations for a computer science of natural language. Recently Miller has lent support to the emerging field of cognitive neuroscience, culminating in his present role heading the McDonnell-Pew research program in that field at Princeton.

Current Human Vocabulary Research

His current major research pursuit at Princeton is WordNet — a novel interactive computerized dictionary now containing about 50,000 nouns, verbs, adjectives, and adverbs. This is a lexical reference system with potential applications in computational linguistics and information retrieval, explained Chipman. The main goal is to have the computer distinguish among various concepts and meanings of each word as the human mind does. It has been described as a computer simulation of human semantic memory applied to a significant portion of the vocabulary of the English language. WordNet's potential applications to learning and multilingual communication are broad. The U.S. Navy has been a principal funder of the project.

An APS William James Fellow, Miller was the keynote speaker at APS's first annual convention in 1989. Speaking on the place of language in scientific psychology, Miller explored the crucial problems that speech poses for psychology, since no other human activity gives the same sort of insight into another person as does their language. He concluded that no general theory of psychology would be

adequate if it did not take language into account. The address was published in the first issue of *Psychological Science*, January 1990.

Miller has extended his lifelong concern for effective communication to a wide range of problems of literacy and education that have nationwide and even worldwide ramifications. He played a central role in developing the initial research agenda for the National Institute of Education. And this, said Chipman "turned the talents of many of the nation's outstanding cognitive researchers to the problem of reading comprehension and other educational problems." This essentially laid the foundation for effective teaching innovations now in development, according to Chipman. Recently invited to write an article for *Science*, he chose as his topic the problems of universal literacy.

Miller Is Seventh Psychologist to Receive National Medal Award

Miller is the seventh psychologist to have received the prestigious National Medal of Science. The other six include Neal Miller, Harry Harlow, B. F. Skinner, Herbert Simon, Anne Anastasi, Roger Sperry, and Patrick Suppes [see *Observer*, March 1990 and May 1991].

Nominees for the national award are judged for the total impact of their work on the present state of the sciences — behavioral, social, physical, biological, mathematical, or engineering — and the potential effects of their achievements on the development of scientific thought.

The Competition

The medal was established in 1961 by President John F. Kennedy as the nation's highest scientific honor. Since 1962 there have been 284 medals awarded, with about 20 awarded each year. Awardees are selected by a committee of the National Science Foundation from about 150 new nominations received each year from universities, colleges, and scientific societies.

Miller came to psychology as a career somewhat indirectly after doing a double undergraduate major in history and speech at the University of Alabama in 1940 and a Masters in speech there in 1941.

He must be one of very few university instructors ever to have taught introductory psychology without having had any formal graduate courses at all in the field. That happened when the University of Alabama, apparently divining in him the outstanding psychologist he was to become, offered him the job as instructor in psychology which he held for two years, according to a biographic note prepared by the Princeton psychology department. He then went on to Harvard for his PhD, this time in psychology.

His doctoral thesis at Harvard was classified Top Secret, as its topic had to do with spot jamming of voice communication systems, a subject that interested the Armed Services of the United States and perhaps other countries as well in those Second World War years. And, at the relatively young age of 42 he was recognized for his achievements by his election to the National Academy of Sciences.



Photo by John T. Miller, 1988

National Medal of Science winner, Professor George A. Miller, of Princeton University, is a pioneer in mathematical and cognitive psychology as well as psycholinguistics.

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He became assistant professor of psychology at Harvard in 1948 and developed a course that became the basis of his first book, *Language and Communication*, published in 1951. That year he moved to the Massachusetts Institute of Technology to teach and work on problems of voice communications and human engineering. He experimented with what might be called truncated spoken output, focusing on how well listeners' could judge or discern the meaning of what had been said; the goal was to identify minimal phonetic features that had to be preserved to make the sounds recognizable to the listener. An offshoot of this work was his paper "The Magical Number Seven, Plus or Minus Two," which became one of the landmark publications of cognitive psychology.

Miller returned to Harvard in 1955 and was promoted to full professor in 1958. At this time his work in voice communication broadened into an interest in the effects of language on cognition.

Cognitive Science Pioneer

After a move to Rockefeller University his research after 1967 focused on the storage of lexical memory. During the 1970s, he became a leading advocate for cognitive science, and his book *Language and Perception*, published in 1976 with Philip Johnson-Laird, helped set the agenda for that field.

He moved to Princeton in 1979 and was named James S. McDonnell Distinguished Professor of Psychology in 1982. He worked there also with scholars in philosophy, computer science, and linguistics. In 1986 he helped establish the Cognitive Science Laboratory at Princeton, where he is currently Professor Emeritus and Senior Research Psychologist as well as Director of the McDonnell-Pew Program in Cognitive Science. Its goal is expansion of cognitive neuroscience research.

Miller is the author of more than 180 articles and books, and he is the recipient of numerous honors and awards. He has received honorary doctorates from Columbia, Yale, the Catholic University of Louvain, and the University of Sussex. He was President of the American Psychological Association in 1969. **D.K.**

Call for Convention Reviewers

APS's Convention Poster Committee seeks APS members to serve as volunteer reviewers of posters submitted for the 1992 APS annual convention. Depending on the volume of volunteers, the Committee may not be able to utilize all reviewers. If you wish to lend your time and expertise to reviewing poster submissions, please **submit your vita along with a completed copy of this form by Nov. 1, 1991**, to: APS, 1010 Vermont Ave., NW, Suite 1100, Washington, DC 20005-4907. Fax: 202-783-2083; Email (BITNET): APS2@UMUC

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Subliminal Advertising, Messages, and Conspiracy

Using Science to Discern Fact and Fraud and to Educate the Public about Enhancing Human Performance

"Complete scams" are the words Philip Merikle and Timothy E. Moore use to characterize subliminal self-help audiotapes. Merikle and Moore have uncovered the scam independently through objective methodology. And the National Academy of Sciences (NAS) agrees, according to a report released this month which draws on the findings of Merikle and others. [See box on next page.]

Moore has equally blunt terms for people who promote a subliminal effects conspiracy theory — the notion that advertisers and others are placing millions of invisible stimuli in images on American television and movie screens and in magazines. With this subliminal technology the advertisers and evil-doers are said to be manipulating the public in compelling ways that it cannot resist because people are not even aware it is happening.

Money Talks

Merikle has long been trying to persuade publications not to carry ads for subliminal audiotapes. He started a decade ago when he approached *Psychology Today* and the *Science 80's* magazine of the American Association for the Advancement of Science. Both needed advertising revenues to make ends meet, and they paid little attention to his pleas.

Acceptance by such magazines of the subliminal industry's advertising was important to subliminal cassette distributors, because the appearance of the ads in these publications lent a certain credibility to the products and helped validate the claims made by the industry.

Science Speaks

Meanwhile, extensive laboratory research by Merikle was helping to demolish those claims, as he discovered upon investigating a broad selection of

subliminal cassettes available on the market. In June he summed up this research in a symposium on the Psychological Unconscious at the third annual APS convention.

And this spring, Moore began a new phase in his 10-year effort to educate the public about bogus claims of subliminal perception in particular and about how scientists distinguish fact from fancy and fraud in general. He was invited to serve as scientific adviser to an advertising campaign and media tour spoofing and satirizing the claims about subliminal perception. The campaign was for Seagrams Gin, and it was organized by the advertising agency Olgivy and Mather. After reflecting and receiving some professional advice, Moore accepted. He says he is glad he did.

The peg of the campaign was a series of nationwide, full-page ads that are now appearing in news and sports magazines like *Golf Digest* and *Tennis*. One ad shows a large glass of tonic water with a large-letter caption saying: "Q. Can you find the hidden pleasure in refreshing Seagrams Gin?" Below, in much smaller characters, it reads: "A. If you think this is just a bubble, look again." An arrow points to a tiny woman in a bathing suit floating in an inner-tube near one of the ice cubes at the top of the glass. Another ad has to be folded in the middle for the woman to become visible. The intent of these ads is first to promote sales, of course, but the twist is that of poking fun at the subliminal advertising concept in clever ways that make for a lasting impression.

Opportunity for Scientists to Inform Public

"Olgivy and Mather were also doing a survey of public attitudes with regard to subliminal advertising," Moore said.



Philip Merikle is a professor of psychology at the University of Waterloo in Ontario.

"They wanted to use the results of the survey — in launching the advertising campaign — to attract media attention. I would be free to mention anything and everything I thought relevant to the topic of subliminal effects, and would be free to field questions of reporters and interviewers in any way I saw fit," he explained.

"There was quite a wide range of topics, angles and issues that came into it. It was an opportunity to say things about science and scientific methods that my colleagues and I have been saying and thinking for years, except that we were just communicating with each other. Here was a chance to say it to vast numbers of lay people. The media training I got beforehand, and the media opportunities arranged by the ad agency were something no individual could ever have orchestrated on their own."

Moore traveled to Detroit, Charlotte, Washington, Baltimore, Tampa, West Palm Beach, Miami and Sarasota with the media team. "Typically we had five or six spots in each city — TV news, radio documentaries or print interviews, and some radio call-in programs," he said. "In a Charlotte call-in program, one of the callers was either a manufacturer or

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retailer of subliminal audio self-help tapes. His intent was to try to take some steam out of my criticism. But I plugged away at the question of who is the most appropriate type of person to provide an objective evaluation of subliminal cassettes? Someone with a personal and financial stake in selling the project? Or someone who is providing an objective appraisal on the basis of the research evidence?" Moore said.

Subliminal Perception Is Real, But ...

Part of the problem of knocking down bogus subliminal claims stems from the fact that most scientists now agree that some sort of subliminal perception or



Timothy Moore is an associate professor of psychology at York University's Glendon College in Toronto.

perception without awareness *does* occur. Merikle and Moore are among the psychologists taking this position. People know more than they know they know, Moore points out. Amnesia patients show persistent effects of past events they cannot remember. But that doesn't mean the versions of subliminal products now available on the market are, in fact, valid or worthwhile. Moore's extensive research on such audiotapes has revealed that subjects cannot discriminate (consciously or unconsciously) between tapes purported to have different and specific effects (e.g., weight loss, improved self-esteem, smoking cessation). The tapes are ineffective, in other words.

Some of these so-called self-help tapes

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National Academy of Sciences

Issues Report on

Human Performance-Improvement Techniques

The National Academy of Sciences report, *In the Minds Eye: Enhancing Human Performance*,¹ released September 24, 1991, is the latest in a series of NAS reports initiated in 1987 with the National Academy Press report, *Enhancing Human Performance: Issues, Theories, and Techniques*. The 1987 report was commissioned by the U.S. Army to investigate a wide variety of purported performance-improving technologies [see the article in *Psychological Science*, March 1990, by John Swets and Robert Bjork, pp. 85-96]. The National Research Council (the research arm of the NAS) had designated a second phase of committee work to investigate eight areas not initially reviewed (e.g., "subliminal" methods to enhance mental states, "long-term retention of skills and knowledge") in the 1987 report. The latest report completes that second phase.

The chapter, in the latest report, pertaining to subliminal self-help audiotapes concludes that there is no evidence the tapes are useful for the stated purposes. It includes a thorough review of Philip Merikle's research [see story on this page]. The subcommittee that examined the subliminal self-help tape issue was chaired by psychologist Eric Eich of the University of British Columbia.

The umbrella report was edited by Daniel Druckman, the National Research Council study director, and Committee Chair Robert A. Bjork of the Psychology Department at the University of California-Los Angeles. "The actual areas investigated follow very closely those eight areas described in the [March 1990] *Psychological Science* article," said Bjork. "The report is composed of essentially three sections: several chapters are devoted to training issues; there are several chapters on the topic of altering mental states, including references to pain, meditation, and avoiding detection of deception; and a good deal of work on preparing to perform under pressure," explained Bjork.

It remains to be seen just how receptive the public is to these latest findings and to what extent the Army (and perhaps other military services) implement policies that incorporate the scientific findings. But to use an analogy, these subliminal audiotape products are like investigational new drugs that have failed FDA acceptance criteria for treating ailments: the products are neither effective nor necessarily safe.

1 *In the Minds Eye: Enhancing Human Performance* is available for \$29.95 plus \$3.00 shipping from the National Academy Press, 2101 Constitution Ave., NW, PO Box 285, Washington, DC 20055, Tel: 202-334-3313.

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could even be dangerous, says Moore. One in particular had a "subliminal" message on one side and an explicit audible message on the other that sexual abuse victims are *responsible* for their own victimization, he said.

In addition, Merikle's spectrographic tests show that some of the tapes now being marketed contain no message whatsoever, either subliminal or supra-liminal, only surface noise. When he tests subjects with other tapes that have identical audible surface sounds, they are unable to discriminate between cassettes that contain embedded messages, according to the manufacturer, and cassettes with no embedded messages.

Merikle summed up his APS presentation with these remarks: "What I have basically been saying is that perception without awareness occurs when information is perceived in the absence of the normal phenomenal experiences associated with seeing or hearing. We can reveal perception without awareness by forcing subjects to guess concerning what they have seen or heard. When we do it this way we can show that perception with awareness and perceptions without awareness can and do have qualitatively different consequences. And finally, we have just shown that the subliminal audiocassettes are fraudulent in the sense that no information is perceived from these cassettes either with or without awareness."

"The signals or messages are perceptually indistinguishable from one another. From an empirical point of view it becomes an extraordinary claim to say that they could nevertheless somehow influence behavior," Moore said.

"Some have accelerated messages that would sound like cloth ripping if they were audible," Moore said. "There is no reason to think that a signal that is unintelligible, if clearly audible, would somehow become intelligible if you turned down the volume or masked it so that the listener is not even aware of its presence."

"These claims, if they had any validity to them, would raise serious questions about our scientific understanding of basic sensory physiology and models of speech perception. A logical requirement behind

any of the claims is not only that the subliminal stimuli are perceived or registered but also that they have some compelling impact to alter motivation or influence behavior," he emphasized.

Educating the Public

"There is no established evidence to support those kinds of claims. When you look for the rationale you get what I think is confusion between unconscious perceptual processes and the psychodynamic unconscious — a hodge-podge of Freudian terms and subliminal perception jargon all thrown together with no thoughtfulness or care — and out of the other end comes a claim that an invisible stimulus is going to influence your motives or behavior."

Yet, in spite of, or perhaps because of this, millions of Americans buy the tapes in hope of changing their behavior, personality, reading speed, and even their body size in important ways, all without pain or effort. And, an unknown but apparently significant number of Americans also subscribe to the notion that the media use embedded messages to manipulate the public.

In the face of such persistent gullibility, Moore believes psychologists have an important mission to perform in educating and informing the public. "Our scientific training leads us to be much more tentative and more passive than we need to be or should be in talking to the public about our research and the methods of science in general," Moore said. "If you sit back and wait for the ideal question to occur, the opportunity may never arise. Media training can provide you with practice in getting your ideas across without waiting for the ideal question: you reword the question for the interviewer or rework it, or answer their question and then say: And furthermore Then you answer the question that wasn't asked but should have been," he said. **D.K.**

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PHILIP MERIKLE

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TIMOTHY MOORE

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TIMOTHY MOORE

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expressed continued concern that NIMH's existing mandate "is being narrowed from within the Institute to deal mainly with biomedical research on mental illness, whereas social and behavioral basic research as well as social and behavioral aspects of prevention, divorce rural mental health, unemployment, child abuse, the mental health concerns of special populations, and others are not being given serious attention." The Senate directed NIMH to take steps to reverse this trend. APS worked closely with the Committee on this aspect of the report.

NIH Supports Behavioral Research

Some have expressed reservations about the NIMH transfer to NIH, fearing a deleterious effect on behavioral research at NIMH because of the biomedical orientation of the NIH. But several factors indicate that behavioral research will fare as well if not better in the new setting. Although inadequate in terms of proposal success rates, NIH already funds over \$250 million in behavioral and social science research. Further, the new NIH Director, Bernadine Healy, has expressed strong support for the transfer, and under her leadership it is anticipated that the climate for behavioral and social science research will be improved.

Receiving direct assurances from Healy in an August meeting with her, APS Past President James McGaugh and APS Executive Director Alan Kraut were pleased with her reception of their message concerning the importance of behavioral research in the nation's health research agenda. "In fact," said McGaugh, "Healy took the initiative during our meeting to emphasize the importance of behavioral research in *all* NIH Institutes." And, "she spoke knowledgeably and articulately about the very issues we had planned to raise ourselves. She appears to understand and support this research as though it were her own," McGaugh concluded.

Whence Peer Review?

The Senate bill also provides that the existing NIMH peer review system will be transferred intact to NIH, a point for



National Institutes of Health Director, Bernadine Healy, met with APS Past President James McGaugh and APS Executive Director Alan Kraut in August.

which APS lobbied strongly in the development of the legislation, and which will remain in place for a transition period of three years.

Services Research

A second point of concern for APS in the bill was to see that services research also moved with NIMH to NIH. Separating the research programs of ADAMHA from its services activities raises questions about the location of services research. The Senate Labor and Human Resources Committee, in its report accompanying S. 1306, provides NIMH with the authority to conduct services research, concluding that "research on mental ... disorders is a continuum that should not be artificially severed."

At the same time, however, the Committee provides the new services agency with the authority to conduct evaluations of the programs it funds. Acknowledging this overlap, the Committee report states that "there is not a bright line between services research and evaluation" and leaves it to the Secretary of Health and Human Services to "divide responsibility ... in a common sense manner designed to foster collaboration, not competition" between research and services agencies.

The Senate Committee also indicated that "existing ADAMHA programs which

may have been placed under the heading of services research but which have come to be relied on by the field as services programs" will remain with the new agency, which will be called the Alcohol, Drug Abuse and Mental Health *Services* [emphasis added] Agency.

View from the House

Although it's just across the Hill from the Senate, you would think that the House Energy and Commerce Committee is much further away, given the signals it is sending out on this legislation. In truth, however, the substantive differences will probably turn out to be far fewer than the political differences between the Committee and the Bush Administration that appear to be fueling the pending standoff.

House Committee members have been somewhat critical of the Senate's relative speed in acting on S. 1306, saying that the reorganization of ADAMHA needs greater study. Committee staff previously indicated that they were waiting for the results of a study by the Institute of Medicine (IOM) on the co-administration of research and services within a single agency. The study, which focuses on NIH, ADAMHA, and other health agencies within HHS, in essence says that there is not scientific justification for combining research and services, nor is there scientific justification for *not* having both under one administrative structure.

"If reorganization of current agency structure is considered," the IOM panel

... [Healy] appears to understand and support [behavioral] research as though it were her own.

JAMES MCGAUGH

told Congress, "it should be justified purely on policy grounds." What bearing this recommendation will have on the House Committee's

consideration of S. 1306 is not known at this time.

It is generally believed that there are deeper reasons for the Energy and Commerce Committee's resistance to the ADAMHA reorganization bill, having to do with the Committee's opposition to several existing health research policies of the Bush Administration, most notably the ban on fetal tissue research. ♦

Organizational Profile

Society for Industrial and Organizational Psychology

GOALS AND PURPOSES

The goal of the Society for Industrial and Organizational Psychology (SIOP) is to promote human welfare through the various applications of psychology to all types of organizations providing goods and services, such as manufacturing concerns, commercial enterprises, labor unions or trade associations, and public agencies. The purposes of the Society are scientific, professional, and educational and not for financial gain.

MEMBERSHIP

Current membership is nearly 3,500, including 2,160 Members, 196 Associate Members, 198 Retiree Members, 829 Student Affiliates, and 94 Foreign Affiliates. Members are employed in a variety of settings, including academic (36%), consulting (29%), private organizations (21%), public organizations (7%), and other (8%).

The "Organizational Profile," a fairly regular feature of the *APS Observer*, informs the research community about organizations devoted primarily 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.

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BACKGROUND

SIOP welcomes members of the American Psychological Society who are involved in research or practice in the field of I-O psychology. Dues of \$32 include a subscription to the quarterly newsletter and discounts on SIOP publications and activities.

SIOP began as the Industrial Psychology section of the Association for the Advancement of Applied Psychology (AAAP), formed in 1937. When AAAP united with the American Psychological Association (APA) in 1945, the section became Division 14 of APA. "Organizational" was added to "Industrial" as the division's identification and title in 1970. Independent incorporation took place in 1982. Bylaws were revised in 1989 to allow members of either APA or APS to qualify for membership in SIOP.

The Society's 3-day annual conference on current scientific and professional issues in I-O psychology is preceded by a day of concurrent workshops, which provide more in-depth treatment of current topics in the field. The seventh such conference will be held April 30 - May 3, 1992, in Montreal. Future conferences will be held in San Francisco, Nashville, Orlando, and San Diego.

SIOP members actively participate in the annual APS convention, and SIOP supports a program at the annual APA convention.

A quarterly newsletter, *The Industrial-Organizational Psychologist* (TIP), is free to members. Two continuing series of edited books offer up-to-date information about I-O psychology. The *Frontiers of Industrial and Organizational Psychology* series focuses on scientific developments of the field. In print are volumes on career development, productivity, training and development, and organizational climate and culture. The *Professional Practice* series addresses the application of psychological knowledge in modern organizations.

SIOP develops policies, principles, and guidelines for the sound and ethical practice of I-O psychology and the educational preparation of its practitioners and makes available publications on such. These include the *Principles for the Validation and Use*

of Personnel Selection Procedures (3rd ed.), a *Casebook on Ethics and Standards in the Practice of Psychology in Organizations*, guidelines for doctoral training, and a survey of graduate training programs in I-O psychology and organizational behavior.

FOR MORE INFORMATION:

A brief brochure, *The Science and Practice of Industrial and Organizational Psychology*, provides an overview of the field. *The Multiple Facets of Industrial-Organizational Psychology* offers in-depth information on the background, specialties, and professional activities of SIOP members. Both are available from the Administrative Office, as is other information about SIOP and its activities.

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