In this issue of the Newsletter, I would like to discuss some issues relevant to the study of learning. Before I do, however, I would like to acknowledge the hard work of both our Council Representative (Mary-Lou Cheal) and our Secretary-Treasurer (Nancy Dess). Over the last few months, they have fielded dozens of communications regarding the proposed new division on “Human-Animal Studies”. They did an outstanding job representing our concerns and I am pleased to report that Council voted against the proposal (see MaryLou’s column on page 4).

Returning to the topic of learning, a quick scan of our membership suggests that a large proportion have interests in the area of learning and memory. Indeed, many of the leading figures in the area of learning are members of Division 6. Over the last 30 years, we have witnessed a major change in our understanding of learning mechanisms, especially the underlying neurobiology. The question I would like to pose to our readership is this: Have we effectively brought these changes back to psychology? (Continued on Page 2)
Do our colleagues understand how the field has changed? Do students hear of the newest developments when they take a course on learning?

I am worried that the answer to these questions is no. Anyone who has gone to the Society for Neuroscience Convention knows that there is aisle after aisle of cutting-edge research being done in the field of learning and memory. In 2004, a keyword search of the Itinerary Planner pulled up over 1,800 presentations on learning. If this number of presentations were made at the Annual APA Convention, learning would be the dominant theme. But my impression is that our colleagues within psychology see learning as a dying field. Indeed, I recently sat through a meeting where someone sought an example of an area that had died. The area of learning was suggested with little delay.

What I will suggest will likely ruffle a few feathers, but perhaps that is what is needed to stimulate change. My suggestion is that the blame for our perceived death lies at the feet of those (like myself) who study and teach learning. The arguments I will go through are gleaned from a recent set of papers in the International Journal of Comparative Psychology (2005, volume 18, pages 1-59). Robin Joynes and I initiated the debate by raising some questions regarding the way in which material in the field of learning is organized and taught. Our proposal was that we should shift our focus from methodology to mechanisms, that environmental puzzles could be solved in multiple ways, that too much attention has been focused on the mechanism of associative learning, and that our current approach to teaching the topic of learning does not accurately reflect current developments within the field. The Editor (Mauricio Papini) invited comments, and A. Blaisdell, A. Machado, S. Reilly & T. Schachtman, G. Sokoloff & J. Steinmetz, and J. Staddon, offered their thoughts on...
these issues, followed by our response. It was clear that we had touched some nerves and this elicited a spirited exchange that I believe helps to make the set of articles an interesting read.

This is not the place to review all of the details that went into our proposal. Instead, I would like simply to raise some questions that might stimulate a desire to read more.

The first question concerns the issue of methodology versus mechanism. The traditional presentation of material within a learning course is based on some distinctions rooted in methodology (e.g., Pavlovian versus instrumental conditioning). But current studies on learning generally focus on mechanisms, both functional and neurobiological. Content in other courses (e.g., perception or cognitive) is generally organized by mechanism, not methodology. Is it time to restructure the way in which we organize and present material within learning, grouping material on the basis of similarity in mechanism rather than similarity in methodology?

Another concern stems from the emphasis on associative learning. The notion that we are studying the formation of new associations is often difficult to defend, because in many cases our conditioned stimuli have some capacity to elicit a conditioned-like response prior to training. Detailed analyses of the underlying neurobiological mechanisms by Kandel and his colleagues suggest that conditioning often involves a mechanism (alpha conditioning) once viewed as an annoying complication to the study of associative learning. These observations suggest (to some) that Pavlovian relations can be encoded in a variety of ways and that there is no reason to suppose that just one mechanism (associative learning) is superior to the rest.

Finally, let's consider the material presented in the classroom. Is it up-to-date? Many of the most exciting findings within the last 25 years concern the neurobiology of learning. Are students exposed to this material? Some might suggest that a course in learning should remain focused on behavioral topics. A similar argument might have been made 40 years ago about a course in perception, which at that time was slanted more towards psychophysics than neurobiology. But over the last few decades, we have learned a tremendous amount about the neurobiology of perception and this material has been moving into the textbooks and classrooms. Psychophysics remains a cornerstone, but students also learn about the neurobiology of perception. I would argue that courses in perception have evolved in a way that learning courses have not, and that this is hurting the field of learning. Our colleagues see that the presentation of material on learning has changed little since they took a course in learning 30 years ago, and this fuels the impression that the field is stagnant and heading toward extinction. It also hurts the field by providing future graduate students with a limited view of an exciting and flourishing field.

I have taken these criticisms to heart and have been working to modify the way in which I present material in my learning courses (see http://graulab.tamu.edu/J-Grau/Psy606.html). One painful question I have had to face concerns what constitutes material of “historical” interest. When I began teaching 20 years ago, anything that happened before 1960 was (to me) history. Moving the window of time forward, history would be similarly defined as work prior to 1980. I recognize that, for many of us, the thought that it is time to move topics such as the Kamin blocking effect, preparedness and the Rescorla-Wagner model, to the historical section with Pavlov, Hull and Tolman is an alarming realization. Yet, it is a worthwhile exercise to ask, “how much of the material included in my course is based on experiments performed before 1980?” I suspect that for many of us, history is defined by when we began graduate school rather than in terms of absolute years.

So, perhaps I have ruffled a few feathers. If so, please take a look at the articles referenced above.

What our colleagues and students may not realize is that the field of learning has not died, but has been reborn and it is now more neurobiological, comparative, and relevant, than ever.
1. The item of most interest to Division 6 happened in the last two minutes of the Council meeting. At 11:58 a.m. on February 19, 2005, Council voted to reject the new proposed division of Human-Animal Studies. The vote was 66 in favor of the division, 56 opposed, and 2 abstaining, with the requirement that 2/3 of those voting were needed for the motion to pass. It was good to know that the proposal was defeated, but it was also sad to have such divisiveness among Council members.

2. The new division issue was only one of the emotional topics at Council this year. Another agenda item asked Council to receive the report of the APA Delegation to the United Nations World Conference received by APA and, on the other hand, the Council representatives who were sensitive to the anti-Semitic nature of the World Conference Report. Representatives of the two groups met outside of the floor of Council and revised the agenda item so that both groups could accept it. This revision includes the receipt (not the endorsement) of the report with annotations to the sections that were of concern. The motion that was passed stated, “That Council receives in principle the UN Declaration in the Appendix of the APA Delegation report. Accordingly, the Council directs the Task Force to create an annotated version of the UN Declaration…”

This conciliation is an important endorsement of APA’s goal to increase and accept diversity among its members, and to condemn prejudice and discrimination in all of its forms. This goal is expressed with the continued financial support of minority representatives to Council.

3. My meeting was busier than usual this time. As a member of the Committee on Structure and Function of Council (CSFC), I participated in the orientation of new members. This training included a two-hour session on Thursday, February 17th, two one-hour training sessions (Friday and Saturday), a dinner for new members, and a reception at APA headquarters in honor of new members.

There were two CASAP (the Coalition for Academic, Scientific, & Applied-research Psychology) Executive Committee meetings and the CASAP business meeting of members. The main emphasis of these meetings was on strategies for increasing the representation of scientists and academics in APA governance. During the Plenary Session of Council we heard talks by or about the three people running for president of APA: Sharon Brehm, Katherine Nordal, and Paul Lloyd. CASAP strongly encourages support of Sharon Brehm.

At this time, there are several people hoping to be on the ballot for Board of Directors. Two of them are on the CASAP Executive Committee: Michael Wertheimer and Susan Whitbourne. Of the others who are presently running, CASAP will support Doug Haldeman as number three. Any of these three will make a good friend for science on the Board.

In addition, CASAP listed people to support for the ballots for Boards and Committees. We also wish to encourage anyone who is placed on the ballot and would like support from CASAP to send a form to us for consideration. This form can be (continued on page 5)
obtained by writing to the Elections Chair, Emanuel Donchin at donchin@shell.cas.usf.edu or to me at cheal@asu.edu.

4. Council approved two changes in Bylaws to be voted on by the membership of APA:
   a. To provide a policy on removing members of boards and committees for reasonable cause. This item was written by CSFC and the Policy & Planning Committee (P & P) because of an obvious need. I recommend that you approve the change when you receive the ballot.
   b. To add gender identity as a prohibited basis for discrimination to the APA Bill of Rights for Members.

5. Some items passed by Council:
   a. Because of considerable concern over membership recruitment and retention, Council voted to include $100,000 in the 2005 Final Budget for this work.
   b. Approved in principle the statement, Health Care for the Whole Person, with the goal that health includes mental state, and body/mind are indivisible.
   c. Received and adopted the report of the Task Force on Mental Disability and the Death Penalty, which describes conditions of defendants that would make death sentences or executions unacceptable.
   d. Voted to make an annual contribution of $60,000 to the Archives of the History of American Psychology.
   e. Voted to establish a task force to examine and make recommendations regarding the development and implementation of Zero Tolerance policies in elementary and secondary schools.
   f. Voted to increase reimbursement for Council Representatives to pay all costs for the February meeting and to reimburse hotel for two nights stay at the Convention Council meeting starting in 2006. This change will relieve the division of paying for the hotel as they do presently for the February meeting. However, the division is encouraged to share the responsibility of funding costs of their representative to the summer meeting. Presently, the division only pays for Convention registration. Perhaps the division will want to consider picking up additional costs, such as transportation, or the additional nights needed to be at Council. For instance, if Council meets on Wednesday and Sunday, one must be at the hotel for five nights. I recommend that the division consider this; note, I will not be on Council in 2006.
   g. Supported a meeting of a Task Force to identify student-learning outcomes at the lower division of the undergraduate psychology curriculum.
   h. Voted to instruct staff to seek members expertise on policies and issues whenever possible.
   i. Adopted the Resolution in Favor of Empirically Supported Sex Education and HIV Prevention Programs for Adolescents.
   j. Voted to support the Working Group on Psychoactive Medications for Children and Adolescents.

6. Another important event was the presentation of P & P’s 5-year Report. It includes a lot of suggestions for Council and APA, which I will send along if and when they come up for action.

7. Following the confirmation of four leadership conferences (division, education, practice, and science) each year (approved by Council last year), the first Science Leadership Conference will be held in early December. If you have ideas of what you think should be included, contact the Executive Director of the Science Directorate, Stephen Breckler, SBreckler@apa.org.

In the meantime, you are needed in APA governance and I hope you will consider running for office… division offices, boards and/or
In November, I attended the annual meeting of the Governing Board of the Psychonomic Society. In January, I attended the American Psychological Association’s annual Division Leadership Conference. Two common concerns were raised at these meetings. First, more comparative psychologists and behavioral neuroscientists are leaving these groups than are joining them, thereby yielding fewer individuals in these venerable organizations. Second, the annual meetings of these organizations are attracting fewer attendees from our Division, largely because other meetings are deemed to be more attractive venues for sharing the results of our scientific research.

If comparative psychologists and behavioral neuroscientists are to continue to participate in these organizations, then the case for such participation is going to have to be made much more clearly and forcefully than in the past. Let us try to do so: first, for the Psychonomic Society and second, for the American Psychological Association.

The Psychonomic Society remains the foremost organization dedicated to experimental psychology. It is an inexpensive society whose prime benefits are high quality scientific journals and an annual meeting that is routinely held in November. At present, this society is dominated by cognitive psychology. However, research in comparative psychology and behavioral neuroscience is welcomed to the program. And, symposia on cross-cutting themes are enthusiastically received by the Governing Board. There are no topical constraints to any submissions to the meeting. Both spoken presentations and poster presentations can be submitted.

The American Psychological Association is a much larger, more complex association with higher dues and fees. Given the greater costs of joining and sustaining membership, the obvious question is: “Why should comparative psychologists and behavioral neuroscientists do so?” Here is one striking and compelling answer: We are not Golden hamsters.

True, Mesocricetus auratus has much in common with comparative psychologists and behavioral neuroscientists, including bilateral symmetry, hair/fur, and omnivory. But, Golden hamsters differ from our ilk in many ways. For one thing, Golden hamsters are much smaller. For another, all captive Golden hamsters originate from a single female with 12 youngsters dug from a burrow in Syria in 1930; we do not. For present purposes, the most important difference concerns sociality: Whereas Golden hamsters are fiercely solitary animals, we are highly social creatures. We depend on each other in myriad ways to survive and to thrive. And, this interdependency is at the heart of why comparative psychologists and behavioral neuroscientists should join, support, and actively participate in APA.

Politics is an aspect of sociality that directly affects the health and well-being of our enterprise. APA speaks for psychological science in Washington, D.C. more forcefully and effectively than any other organization to which we, as individual scientists, can belong. The Public Policy Office staff write language that gets incorporated into laws and it recruits and trains academics to advocate for psychological science on Capitol Hill. APA members on the Committee on Animal Research and Ethics (CARE) have submitted commentary to the U.S. Department of Agriculture concerning the best means of assuring humane care and use of laboratory rodents and birds; CARE also participated in a successful campaign to influence relevant portions of the Animal Welfare Act. Federal laws, policies, and appropriations are directly affected by staff and member activities coordinated by APA. (continued on page 7)
Any academic discipline exists at the behest of the public. The public expresses its values and priorities via the officials it elects and the organizations and institutions it supports. APA engages in an enormous amount of public outreach, such as public Smithsonian Institution lectures organized by the Science Directorate (e.g., Sally Boysen speaking about ape cognition), the Behavior Matters booklet explaining the value of basic research, CARE videos on the importance of work with laboratory animals (and free distribution to high school teachers), and the tireless work of the Education Directorate to foster an emphasis on science in the teaching of psychology at all levels.

Much of APA's work on our behalf is invisible to most academics. In the rarefied air of academe, it is easy to forget the forces in our society that oppose what we do. In 1999, for instance, we took for granted the evolutionary reasoning that is foundational to our work and to public school education. However, at that time, a well-known member of Congress attributed the Columbine school massacre to teaching children "that they are nothing but glorified apes who are evolutionized out of some primordial soup of mud." We comfort ourselves that this individual is an extremist, but he remains a powerful political figure. Moreover, in a 2001 Gallup poll, 45% of the adult U.S. sample endorsed the statement that, "God created human beings pretty much in their present form at one time within the last 10,000 years or so." We should not take for granted APA's critical role in advocating for our work in political and lay arenas.

Organizations like APA face ideological problems when it comes to attracting and keeping individual members: individualism and specialization. Academics, want a great deal, by way of individual benefits for the taxes – and dues – that they pay. It's the "American way." Individualism is reinforced in academic institutions through, for example, the high regard for first- or single-authored papers in faculty review. The value placed on specialization over breadth and integration also makes specialty meetings particularly attractive and reduces the appreciation of the unparalleled opportunities for exchange with scholars from other subdisciplines that the APA convention provides.

It is not surprising, then, when academics want to know, "How will I personally benefit from my APA dues?" This is a fair question and APA offers a reasonable answer: free and discounted journal subscriptions, online access to journals, a conference as a context for whatever programming its members conjure, assorted financial discounts, and NIMH-subsidized advanced training institutes on fMRI, advanced statistical analysis, and other topics.

A complete answer to the question "What's in it for me?" has two other parts, however. The first part refers back to all of the behind-the-scenes work that APA does on behalf of its members, including, specifically and disproportionately to their membership, behavioral neuroscientists and comparative psychologists. The second part is the observation that "What's in it for me?" is not the only question worth asking. We also should ask how supporting an organization like APA benefits the field and society generally—not just now, but in the future. One needs only to spend a few minutes browsing the APA website (www.apa.org) to appreciate the richness of its mission and accomplishments. All of that work takes money, and member dues account for less than 20% of APA's budget. APA earns the rest through investments and publications. Considering the individual benefits and the very unhamster-like collective stewardship provided by a healthy APA, membership is a real bargain.

An Invitation from the Taiwan Psychology Network

Taiwan Psychology Network (TPN) was established in 2001. Members include professors, students, and practitioners in Psychology who are currently living in the United States or Taiwan. TPN's mission is to promote collaboration and networking among members and to assist their professional development in training, education, research, and practice.

Currently TPN has 89 members and is still growing. The discussion group at http://health.groups.yahoo.com/group/Taiwan_Psychology_Network/ has become a place where members exchange information, experience, opportunities, etc. Membership is free! We warmly welcome all professionals and students who are interested in Taiwanese/Taiwanese American psychology to join us. For membership application, please contact our Membership Officer, Ms. Hsin-Ya Liao at hsin_99@yahoo.com
Mark your calendars for the 2005 APA Annual Convention!

*August 18-21, Washington, D.C.*

Interim report from the 2005 Program Chair

Division 6 has an excellent program to look forward to for the 2005 Annual Convention. We managed to use all of our available “substantive” programming hours and have a mix of invited symposia, conversation hour, poster presentations, Fellow addresses, invited addresses, Presidential Lecture, and a submitted symposium. We also were co-listed for a number of events sponsored by other Divisions. Although we do not yet have the scheduling information for the August meeting (should be available for the next Newsletter issue), it is likely that our programming will be distributed throughout the 4-day period (August 18-21) as requested by APA. The following are the events sponsored by Division 6. Those events for which we are co-listed will be featured in the next Newsletter issue.

I look forward to seeing all of you here in D.C. in August!

Molly Wagster
2005 Division 6 Program Chair

**Symposia**

**Successful Aging I: Brain Change can be Good**
Chair: John Disterhoft
Michela Gallagher – When Lab Rats Age Well, Their Brains Age Differently
Roberto Cabeza – Aging Gracefully: Compensatory Brain Activity in Older Adults
Randy Buckner – The Malleable Aging Brain

**Successful Aging II: Maintaining Your Brain**
Chair: Molly Wagster
Yaakov Stern – Cognitive Reserve: What is It? How Do I Get It?
Arthur Kramer – Enhancing Cognitive Plasticity: Fitness and Cognitive Training
Marilyn Albert – Lifestyle Predictors of Maintenance of Cognitive Function

**The Intimate Interaction Between Sex and Cognition**
Michael Domjan – Pavlovian Conception
Gerianne Alexander – Boys, Toys, and the Brain

**Sex Differences in Sensation and Perception**
Chair: Leonard Sax
Richard Doty – Sex Differences in Sensation and Perception: Olfactory
Pamela Dalton – Sex Differences in Sensation and Perception: Olfactory
Edwin Lephart - Sex Differences in Sensation and Perception: Visual
Janice Juraska - Sex Differences in Sensation and Perception: Visual

(continued on page 9)
Invited Address
Pauline Maki - Remembrance of Things Past: Estrogen and the Aging Brain

Fellows Address
Mark Blumberg – Unraveling the Mystery of Infant Sleep
Steve Reilly – Gustatory Thalamus and Incentive Relativity

Conversation Hour
Ethel Tobach – Comparative Psychology: Human, Animal, and Planetary Issues

Presidential Lecture
James Grau – Evolving Perspectives on Learning: Implications for Treatment and Teaching

Poster Session
Behavioral Neuroscience/Comparative Psychology


Stahl JM, Gonzalez FA & Askew A – Sharing vs. Competing Among Rats in a Food Competition Paradigm

McMurray JC & Katz GS – Binaural Beats Enhance EEG Activity and Attention in ADHD Individuals

Gilger JW, Sanchez-Bloom J, Hynd G & Craggs J – Brain Morphology of Family Members with Superior PIQs and Dyslexia

Cumba R, Holmes K & Zarate CA – Performance of Depressed Patients on the Virtual Morris Water Maze

Robbins RN, Bernstein DP & McKay D – Individual Differences in the Effects of Emotional Arousal on Memory


Smith LN, Chrosniak LD, Kumar S, Zijerdi A, McDonald CG & Flinn JM – The Effects of Enhanced Zinc on Fear Conditioning and Extinction
Call for Submissions:  
Journal of Undergraduate Neuroscience Education (JUNE)

JUNE is an electronic journal that publishes peer-reviewed reports of innovations in any area of undergraduate neuroscience education related to the mission of advancing undergraduate neuroscience on topics such as novel pedagogy and original laboratory exercises. All articles should be written for an audience of college faculty and include references to relevant literature, supplies, and/or supplemental materials such as animations, websites, etc. Figures and qualitative or quantitative assessment of pedagogical outcomes are also encouraged wherever appropriate. JUNE also invites submissions as letters to the editor and reviews of textbook, curricular, equipment, or media.

JUNE is a publication of Faculty for Undergraduate Neuroscience (FUN) and is free to read and download. Visit JUNE today at [www.funjournal.org/default.asp] or follow the links from the FUN website, [funfaculty.org]. Inquiries regarding submissions should be directed to Barbara Lom at any stage in the writing process. balom@davidson.edu; 704-894-2338 (phone); 704-894-2512 (fax), Box 7118, Davidson College, Davidson NC, 28035-7118.

2006 APA SCIENTIFIC AWARDS PROGRAM: 
CALL FOR NOMINATIONS

The APA Board of Scientific Affairs (BSA) invites nominations for its 2006 scientific awards program. The Distinguished Scientific Contribution Award honors psychologists who have made distinguished theoretical or empirical contributions to basic research in psychology. The Distinguished Scientific Award for the Applications of Psychology honors psychologists who have made distinguished theoretical or empirical advances in psychology leading to the understanding or amelioration of important practical problems.

To submit a nomination for the Distinguished Scientific Contribution Award and the Distinguished Scientific Contribution Award for the Applications of Psychology, you should provide a letter of nomination; the nominee’s current vita with list of publications; the names and addresses of several scientists who are familiar with the nominee’s work; and a list of ten most significant and representative publications, and at least five reprints representative of the nominee’s contribution (reprints, preferably in electronic form).

The Distinguished Scientific Award for Early Career Contribution to Psychology recognizes excellent young psychologists. For the 2006 program, nominations of persons who received doctoral degrees during and since 1996 are being sought in the areas of:
animal learning and behavior, comparative psychopathology
health developmental
 cognition/human learning

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

To obtain nomination forms and more information, you can go to the Science Directorate web page (www.apa.org/science/sciaward.html) or you can contact Suzanne Wandersman, Science Directorate, American Psychological Association, 750 First Street, NE, Washington, DC 20002-4242; by phone, (202) 336-6000; by fax, (202) 336-5953; or by E-mail, swandersman@apa.org.

The deadline for all award nominations is June 1, 2005.
Project Kaleidoscope, in partnership with Faculty for Undergraduate Neuroscience, has sponsored three previous workshops focused on helping faculty develop and sustain neuroscience programs at undergraduate colleges and universities. We are happy to announce that a new workshop is planned for July 15-17, 2005 that will be held at Macalester College, St. Paul, Minnesota.

At the Davidson College workshop in 1995, participants developed four blueprints to guide faculty in their efforts to enrich the undergraduate science curriculum of their institutions by developing courses and programs in an interdisciplinary and marvelously fertile young science: Neuroscience. Building from this foundation, participants at the 1998 Oberlin College workshop and at the 2001 Trinity College workshop explored cutting-edge laboratory exercises designed to serve as the basis for the development of investigative, discovery-based laboratory experiences as well as simulations of synaptic transmission and the steps involved in launching regional meetings emphasizing undergraduate neuroscience research.

In the 2005 PKAL/FUN workshop at Macalester College, the participants will also explore new laboratory experiences emphasizing discovery-based learning. The participants will also revisit the blueprints that served as curricular models in neuroscience since 1995 to address the directions that neuroscience is headed in the coming decade. Finally, participants will explore issues focusing on the development of leadership skills to ensure that undergraduate education in neuroscience remains vibrant well into the future.

For further information about the workshop including how to register, contact Eric Wiertelak at (Wiertelak@Macalester.edu). We hope to see you at the Macalester meeting!