NEUROSCIENCE QUARTERLY

FALL 2006

"We now risk losing our leadership role in science and technology, which has in the past set the example for other nations to follow."

– SfN President Stephen Heinemann

IN THIS ISSUE

SOCIETY FOR NEUROSCIENCE

SEE INSIDE FOR THE
FY 2006 ANNUAL PROGRESS REPORT

Message from the President

Neuroscientists Must Take Responsibility for Educating the Public, Advocacy

The coming months provide an extraordinary chance for Society for Neuroscience members to educate the public about the importance of neuroscience and biomedical research. We have three important opportunities: the weeks leading up to the mid-term Congressional and other elections on November 7, 2006; Brain Awareness Week next March; and fulfilling a mandate to enlist business leaders in support of federal funding for National Institutes of Health (NIH) and National Science Foundation budgets early in the new year.

As you know, the need for public education about neuroscience and science in general has never been more urgent. The United States now ranks 16 of 17 nations in the proportion of 24-year-olds who earn degrees in science and engineering, according to

Continued on page 2. . .

In SfN Interview, Raynard Kington, Deputy Director, National Institutes of Health, Discusses Key Issues

***NQ:* Some in the scientific community worry that the NIH roadmap is taking money away from R01 grants. You and Dr. Zerhouni have said this is not the case. Specifically, what would you like our members to know that explains how the Roadmap is not taking money from R01s?**

Kington: We want to emphasize that the NIH Roadmap for Medical Research represented less than 1 percent of our fiscal year 2005 budget. In addition, the Roadmap will grow progressively to no more than 1.7 percent of the budget until the NIH budget again has significant growth. It is important to remember that the Road-map is not a single large project, but a series of initiatives that emerged from a dynamic process involving extensive consultations with the scientific community.

Continued on page 5. . .

Message from the President, *continued from page 1*

Stephen Heinemann, SfN President

the 2006 National Academy of Sciences report *Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future*.

"The danger exists that Americans may not know enough about science, technology, or mathematics to significantly contribute to, or fully benefit from, the knowledge-based society that is already taking shape around us," the report says. "Moreover, most of us do not have enough understanding of the importance of those skills to encourage our children to study those subjects – both for their career opportunities and for their general benefit as citizens in a democratic society. Other nations have learned from our history, however, and are boosting their investments in science and engineering education because doing so pays immense economic and social dividends."

My own experiences have convinced me how serious China is about staking its future on science and technology. When I visited four years ago, it was a nation in the early stages of developing a scientific research infrastructure. But when I returned late last fall, things had changed dramatically. I saw new, well-equipped laboratories, which are attracting well educated scientists who have been trained in the best laboratories in the US or Europe and then recruited back to China. And China is only one example. Singapore, South Korea, India, and Japan also are making a strong commitment to research.

This comes at a time when America's most important research agency for health and biomedicine is being repeatedly flat-funded. The doubling of the NIH budget ended in 2003 with the misconception among some policymakers that the agency has been "taken care of." Increases for the past three years have been below the rate of medical research inflation. This trend is dangerous to the future health of the American people and economy. We now risk losing our leadership role in science and technology, which has in the past set the example for other nations to follow.

Here is an outline of what Society members can do to educate key public audiences about the importance of neuroscience research and to help reverse the grim funding situation.

Reaching Out to Elected Officials

Our new strategic plan specifically calls for the Society to "form strategic relationships with key political leaders who could and will help advance the cause of biomedical research."

To reverse the prevailing atmosphere in Washington, we must advocate *locally* in non-partisan ways for increased NIH funding. The best way to do this is to develop long-term relationships with your elected officials in your home district. Visit your representatives in their local office to discuss the importance of NIH funding. Invite them into your lab and show them what you do and why it is so important, how you advance research goals and

"The doubling of the NIH budget ended in 2003 with the misconception among some policymakers that the agency has been "taken care of."

create local jobs. During this fall's elections, tell candidates across the political spectrum that NIH funding must be a high priority, and ask them where they stand on this issue. Work for candidates who promise strong support for federal biomedical research funding. Then hold them accountable when elected. For more details on key issues and talking points, see my Spring NQ column (online at www.sfn.org/index.cfm?pagename=neuroscienceQuarterly_06spring_message.

To familiarize yourself with the political process, take advantage of advocacy training offered by your local SfN chapter or university neuroscience program. In

2005, SfN chapters in three states hosted SfN legislative advisors Cavarocchi-Ruscio-Dennis Associates as part of a local advocacy training initiative developed by SfN's Government & Public Affairs Committee. This initiative educates Society members about advocating at a grassroots level, and provides easy "how-to's" for meeting with your elected officials. For details, please e-mail SfN Director of Government & Public Affairs Allison Kupferman at allison@sfn.org.

For more tips, see SfN's updated *Guide to Public Advocacy*, which outlines the most effective methods for communicating with elected officials. It provides tools and information for how to be a strong public advocate. And it helps members advance issues, such as the importance of biomedical research funding and support for the responsible use of animals in research. The *Guide* can be found on the Web at: www.sfn.org/guide.

Educating the Public

SfN's new strategic plan notes that "at a time when neuroscience research is yielding dynamic achievements, the public has insufficient awareness of this information. The Society's efforts to translate and transmit information to educators and others will result in improved public understanding about health and basic scientific processes". The plan goes on to emphasize the need for "a shift . . . in the professional culture of SfN members to embrace and actively participate in public communication, outreach, and education about neuroscience". Neuroscience departments and programs need to change their culture as well and recognize the importance of education and advocacy activities.

Educational outreach by neuroscientists to key audiences can occur at any time of the year and in many settings, including going into schools, community centers, and assisted living facilities to explain your work. All Americans benefit from your research. They should know more about neuroscience and about your work.

On March 14, 2006, I spoke with students at Alice Deal Junior High School in northwest Washington, DC, about my research. These students and their teachers are clearly interested in the brain and want to learn much more. Talking to this age group about the brain is always an enormously rewarding experience for me. I encourage every SfN member to consider this activity as part of their duty to the field.

To enhance the quality of neuroscience information in schools and elsewhere, the Society has recently embarked on several initiatives to improve neuroscience literacy, with a primary focus on teachers. One includes improving and expanding Brain Awareness Week activities; another encourages participation in our Neuroscientist Teacher Partner Program, www.sfn.org/ntp, which provides an opportunity for members to work with K-12 teachers. SfN's Neuroscience Resources for the Classroom CD is an invaluable aide in this regard. So too, is the journal *Cell Biology*'s special issue on neuroscience education at www.lifescied.org/current.dtl.

Each year, the Society maintains a booth and organizes workshops and lectures at annual meetings of the National Science Teachers Association and at the National Association of Biology Teachers. The booth is staffed by members of SfN's Public Education & Communication Committee (PECC) who answer questions and distribute publications such as *Brain Facts*, *Brain Briefings*, *Brain Research Success Stories*, and SfN's Neuroscience Resources for the Classroom CD.

While the Society's PECC is the official representative in many of these areas, individual neuroscientists can make major contributions. This is an ambitious charge and one that we all need to take very seriously. I encourage you to strongly consider participating in one or more of these programs. For more information and to participate, see the educational resources posted on SfN's Web site.

Courting Industry Leaders as Advocates

A long-term goal of the Society's Council is to enlist the active support of science and health industry leaders in a coalition to advocate for strong support for the NIH. This is aligned with our new strategic plan, which calls for the Society to continue existing coalitions and "build stronger relationships with a broader array of

Continued on page 4. . .

Message from the President, *continued from page 3*

organizations and individuals that support biomedical research." The plan calls for us to specifically "reach out to industry leaders who exert considerable influence in Washington, DC, based on a shared agenda in support of the economic importance of research in the US and global economy."

Because NIH funds much of the research that provides building blocks for pharmaceutical, biotech, and medical instrument companies to develop new medicines and technologies to treat patients, the NIH funding crisis is urgent for the entire biomedical research enterprise. Without this research foundation, development of future products that save lives and improve the quality of life will be in jeopardy. Progress made during the doubling in understanding many diseases can come

"Educational outreach by neuroscientists to key audiences can occur at any time of the year and in many settings, including going into schools, community centers, and assisted living facilities to explain your work."

to fruition only with consistently strong federal support. Millions of patients worldwide are in desperate need of new therapies to help alleviate or cure the most devastating neurological and psychiatric disorders. The American standard of living and tens of thousands of jobs in America's pharma and bio industries and in academia also are at stake.

One SfN coalition—the Campaign for Medical Research, with its new Chair G. Steven Burrill, CEO of the biotech venture capital firm Burrill & Co.—is making a determined effort to bring science corporate executives onto its governing board. Burrill already has attracted Greg Lucier, CEO of Invitrogen Corp., and is actively recruiting others. SfN's leadership supports these efforts.

In addition, our Council has become increasingly frustrated with flat funding for NIH, and has come to realize the need for changing minds and votes on Capitol Hill with new messengers and arguments. To help achieve this, Council decided to join the Center for Health Transformation (CHT), a collaboration of businesses and health advocacy groups founded by former House Speaker Newt Gingrich. CHT is "dedicated to the creation of a 21st century health system in which knowledge saves lives and saves money."

SfN, with the active participation of CHT, will host a gathering of key top executives from pharmaceutical, biotech, and science instrument firms to enlist their advocacy support and develop new arguments on behalf of NIH. One goal is to send a group of business leaders to the White House and Congress during the next budget cycle to use new and effective arguments for a robust budget for NIH. Another goal is to develop a white paper outlining the economic benefits of biomedical research. This is part of a broader effort that includes other science societies and advocacy groups to create a new, permanent partnership with top business leaders.

I urge you to think about the science and health business leaders you know who might be effective in the effort to support strong NIH budgets. Please send your ideas to SfN's government affairs director Allison Kupferman, allison@sfn.org, at the Society's office.

As you can see, the task ahead in these three broad education areas is formidable and will involve much work from the neuroscience community. Only the active engagement of scientists in public education will ensure the future of our field, the entire biomedical research enterprise, the improved health of patients everywhere, and economic prosperity. At no time in recent history have the stakes been so high and the need more urgent for you to join in this effort. ■

Interview with Raynard Kington, *continued from page 1*

Raynard Kington, NIH Deputy Director

In fact, the *total* number of funded R01s grew between fiscal years 1998 to 2003 from about 20,000 to about 28,000 or 40 percent. The average cost of grants, meanwhile, grew by over 30 percent. In fiscal year 2005, the number of *new* awards was 5 percent greater than the number in fiscal year 1998. Although these data may appear discouraging at first glance, it reflects in part the natural budget cycles of NIH in which the average length of an award is four years. Therefore, in 2005, we are "recycling" funds from grants that started in 2000 and 2001, when the doubling had not reached its peak. As we recycle budgets further, we will be able to increase the available pool. For example, in 2007 we plan to increase the number of new and competing Research Program Grants by 3 percent because we will be recycling the 2002-2003 budget dollars. In addition, we want to reassure the community that our commitment to the R01 mechanism remains intact. Despite the great increase in demand, we have been able to preserve a success rate of about 20 percent for applications and about 25 percent per applicant in 2006.

NQ: **In what ways does the Roadmap invigorate the NIH research enterprise?**

Kington: The Roadmap is a way to promote synergy across all of the NIH. It enables the NIH to address proactively emerging scientific opportunity; to fund high-risk, high-impact science, and to incubate and launch pilot efforts that have the potential to transform science. Building on the success of the first version of the Roadmap for Medical Research, NIH is beginning a process to identify ideas for a new cohort of Roadmap Initiatives to be funded within the existing roadmap budget for fiscal year 2008. To date, Roadmap has issued 379 new awards—56 of them to investigators new to the NIH—at 134 institutions in 33 states. These awards—40 percent basic, 40 percent clinical, and 20 percent high-risk—afford investigators the opportunity to conduct interdisciplinary research addressing complex scientific questions.

NQ: **What opportunities are provided by the Roadmap, and how can scientists best take advantage of these opportunities?**

Kington: The Roadmap offers many opportunities to clearly promote interdisciplinary research, both basic and clinical, as well as to support high-risk and interdisciplinary pilot projects, such as the Director's Award.

"The Roadmap offers many opportunities to clearly promote interdisciplinary research, both basic and clinical, as well as to support high-risk and inter-disciplinary pilot projects"

For enterprising scientists and research organizations, the potential opportunities are substantial. For example, under the Roadmap's New Pathways to Discovery theme, our Molecular Libraries and Imaging (MLI) initiative is constantly seeking new collaborators who have promising assays that may benefit from our high-throughput screening (HTS) processes. This is an example not only of the high-risk research, but also of the high-impact science that the Roadmap enables. It also demonstrates the uniqueness of the Roadmap, which was developed to capitalize on research issues that cut across disciplines as well as institutes. And the MLI is just one example under one part of the Roadmap.

More information on Roadmap current and future funding opportunities can be found at http://nihroadmap.nih.gov/grants/index.asp

NQ: **Investigator initiated grants have long been the source for much of the innovative and ground breaking work funded by NIH. What percentage of new grants are investigator-initiated**

Continued on page 6. . .

Interview with Raynard Kington, *continued from page 5*

compared with the trend over the last five years? More importantly, what trends do you see for the future?

Kington: All grants applications are investigator-initiated, even those in response to a Request for Application (RFA) or Program Announcement (PA). If you are wondering about the percentage of grants that are solicited versus unsolicited, that has actually remained pretty constant. Although there was a modest increase in targeted research funded during the period of the budget doubling, approximately 90 percent of the Research Program Grants (RPG) competing awards continue to be unsolicited. In addition, the absolute number of RPGs awarded increased from 27,621 in FY 1998 to 37, 270 in FY 2005.

NQ: **Since first grants are so important in launch-ing careers in science, what steps is NIH taking to encourage and eventually fund grant applications from young scientists seeking their first awards?**

Kington: New investigators are asked to self identify on NIH applications. These new investigator applications are given special consideration at both review and at the time of funding at each NIH IC (institute or center). Funding policies for new investigators are specific to NIH ICs. The proportion of competing grants going to new investigators is increasing with 30 percent of new RPGs being awarded to new investigators in FY 2005. http://grants1.nih.gov/grants/new_investigators/index.htm

NQ: How can young scientists best position themselves to write first grants that are likely to be funded? Are there specific opportunities or fields that are of interest to NIH?

Kington: Each funding NIH IC sets its own strategic goals for scientific discovery. I strongly encourage new investigators to be in touch with program directors at the ICs that share the scientific interests of the new investigator. The program directors can discuss with the applicant the research question, the current NIH portfolio on a particular topic, and the gaps in research that the IC has identified. The program director can also speak to the strategic goals of the institute in addressing the research gaps. From these conversations, the investigator should get a good sense of how their research interests fit the research goals of the IC.

NQ: **The average age at which an investigator gets a first award has now risen to 43 years. An NIH committee was charged with determining ways to ensure that the careers of young researchers flourish. By late 2005, this committee was scheduled to propose programs to support that goal. What did the committee recommend?**

An NIH New Investigator Committee, co-chaired by Dr. Norka Ruiz-Bravo, Director, Office of Extramural Research and Dr. Story Landis, Director, NINDS was formed and one of its main recommendations was the implementation of the NIH career transition award, The Pathway to Independence Award. This award, which was initiated on January 27, 2006, is designed to facilitate receiving an R01 award earlier in an investigator's research career. The primary, long-term goal of the PI Award Program is to increase and maintain a strong cohort of new and talented, NIH-supported independent investigators. The Pathway to Independence Award provides up to five years of support consisting of two phases. The initial phase will provide 1-2 years of mentored support for highly promising, postdoctoral research scientists. This phase will be followed by up to 3 years of independent support contingent on securing an independent research position. Award recipients will be expected to compete successfully for independent R01 support from the NIH during the career transition award period. The PI Award is limited to postdoctoral trainees who propose research relevant to the mission of one or more of the participating NIH Institutes and Centers http://www.nih.gov/. Our initial plans include funding 150 to 200 grants a year. Additional information about the Pathways to Independence Award can be found at http://grants.nih.gov/grants/guide/pa-files/PA-06-133.html.

***NQ:* Some basic scientists worry that NIH funding is biased toward translational research and is focused only on curing disease rather than basic science, creating tension between basic and clinical research. Do you agree with that? If this is not the case, please explain why.**

Kington: No I don't agree with this assessment. A myth that we continually try to dispel is that basic science is somehow being overshadowed by larger, more directed applied sciences. In fact, the relative percentage of funding for basic and applied science has remained relatively constant since 1998. The percentage of basic and applied science funding at NIH is at 55.2 percent and 41 percent respectively in 2005, as compared to 53.9 percent and 41 percent in 1998. A temporary dip in basic science funding occurred in 2003, due mainly to the large biodefense commitment for BSL-3 and 4 laboratory construction occurring that year and in 2004. Clinical research, an important component of both basic and applied research, has doubled since 1998, growing from $4.3 billion in 1998 to $8.7 billion in 2005, demonstrating NIH's continued commitment to accelerating translation of research findings into practice. In 2007, we estimate that basic science will reach 56.1 percent and applied science (which includes clinical trials) will reach 40.8 percent. Basic research is stronger than ever at NIH and continues to receive significant support.

***NQ:* A recent National Science Foundation report found that after two decades of steady increases, industry funding for US academic research declined by five percent from 2002 and 2004. This, coupled with flat NIH funding is worrisome news for young researchers and to those who hope to get grant extensions? What can you tell the science community to encourage them about continued future support opportunities?**

Kington: In a time of increased competition for grants, we share the general anxiety and concern about seeing good ideas going unfunded. Scientists, nevertheless, should not be discouraged. NIH has already taken steps to soften the impact of increased numbers of applicants and applications in an era of flat budgets. For example, in FY 2007 we anticipate that we will be able to award 9,337 RPGs, an increase of 275 awards over FY 2006 (from the President's budget request.) And we will continue to identify ways to prioritize and make more efficient use of the dollars available to maintain vital and innovative science and scientists.

"A myth that we continually try to dispel is that basic science is somehow being overshadowed by larger, more directed applied sciences. In fact, the relative percentage of funding for basic and applied science has remained relatively constant since 1998."

***NQ:* You have been directly involved in the development of a new Office of Portfolio Analysis and Strategic Initiatives (OPASI) to evaluate and help plan and prioritize the NIH research portfolio. The office is intended help NIH leadership stimulate new NIH initiatives and facilitate coordination at the NIH level. The OPASI could also serve as a repository, using new technologies to collect information, manage knowledge, and classify research. Where is this office in development and how will it be of help to investigators in developing and targeting their grant applications?**

Kington: Formally launched with an announcement in the September 28, 2005 Federal Register, a national search for the OPASI director is underway. In the mean time, functions and staff positions have been transferred to each of the divisions in the new office. A governance body, the OPASI Workgroup, has been established to help oversee OPASI's activities. In the

Continued on page 14. . .

Society for Neuroscience 2006 Election Results

The Society congratulates its newly elected officers and councilors. The Society elected Eve Marder, Brandeis University, as the incoming president-elect; S. Murray Sherman, University of Chicago, as the incoming treasurer-elect; and Moses Chao, New York University, as the incoming secretary. Incoming councilors are Marie Filbin, Hunter College; Robert Malenka, Stanford University; Leslie Tolbert, University of Arizona; and Gina Turrigiano, Brandeis University.

Eve Marder is a Victor and Gwendolyn Beinfield Professor of Neuroscience at the Volen Center and Biology Department of Brandeis University. She has previously served as a councilor, chair of the SfN Program Committee, member of the Committee on Committees, and as reviewing editor of *The Journal of Neuroscience*. Her research focuses on central pattern generators and the complex role of stability in neural circuits.

S. Murray Sherman is the Maurice Goldblatt Professor and chair of neurobiology, pharmacology, and physiology at the University of Chicago. He has served as a member of the Society's Social Issues and Program Committees, as well as an associate editor of *The Journal of Neuroscience*. Sherman's research focuses on issues of cell and circuit properties of the thalamus and thalamocortical interactions.

Moses Chao is a professor of cell biology, physiology, and neuroscience; and co-coordinator of the molecular neurobiology program at the Skirball Institute, New York University School of Medicine. He has previously served as chair of the SfN Program Committee; and as section editor, reviewing (and is currently a senior) editor of *The Journal of Neuroscience*. Chao's research focuses on the mechanism of action of neurotrophins and their receptors during neurodegenerative conditions and synaptic transmission.

Marie Filbin is a distinguished professor at the City University of New York and a director of the specialized neuroscience research program at Hunter College. She has been an associate, reviewing (and is currently a senior) editor of *The Journal of Neuroscience*. Filbin's work focuses on identifying an agent or agents that will promote axonal regeneration and functional recovery after injury to the spinal cord or brain as well as in patients with neurological diseases.

Robert Malenka is a Pritzker Professor of Psychiatry and Behavioral Sciences at the Stanford School of Medicine. He has previously served as chair of the Society's Program Committee. His research focuses on elucidating the mechanisms underlying neurotransmitter action in the mammalian brain and the molecular mechanisms by which neural circuits are reorganized by experience.

Leslie Tolbert is regents professor of neurobiology, and of cell biology and anatomy; as well as vice president for research, graduate education, and economic development at the University of Arizona. She has previously served as chair of the SfN Program Committee and as a member of the Society's Committee on Neuroscience Literacy. Her research focuses on the development and functional organization of olfactory systems, studied in convenient model organisms, the moth *Manduca sexta* and the fruitfly *Drosphila melanogaster.*

Gina Turrigiano is a professor of biology at Brandeis University. She has previously served the Society as a member of the Program Committee and as an associate editor of *The Journal of Neuroscience*. Her research examines the activity-dependent plasticity of neocortical synapses, and how the plasticity contributes to generating functional cortical microcircuits during development.

The incoming officers and councilors will begin their terms during the SfN members' business meeting at Neuroscience 2006 in Atlanta, Ga. on Tuesday, Oct. 17, 2006, in Room B310 of the Georgia World Congress Center. The Society thanks those who participated in the election. ■

Letters to the Editor

NQ welcomes reader responses to articles that appear in the newsletter. If you would like to respond to an article or idea appearing in NQ, please send an e-mail to nqletters@sfn.org. The editors of NQ reserve the right to select letters for publication and will edit them for style, length, and content.

— The Editors

FY 2006 Annual Progress Report

This *Progress Report* outlines the Society for Neuroscience's activities for the just-concluded fiscal year, as well as its plans for the year ahead. Society members are encouraged to provide feedback regarding the programs, initiatives, and strategies detailed herein. For more information, please look for the *Annual Report*, which will be posted at www.sfn.org in October 2006.

SOCIETY FOR NEUROSCIENCE

Introduction

Dear Society Member:

Throughout this past year, our leadership focused on new ways to strengthen neuroscience in accord with our mission while adjusting to a constantly changing landscape for science and the Society for Neuroscience.

As our annual meeting continued to grow, the Society began to identify new opportunities to ensure that we serve our members effectively. In an era of open access that impacts the traditional subscription revenue model and may provide new avenues for publishing, we are considering several possibilities to maintain the excellence and viability of *The Journal of Neuroscience*. At a time of very difficult funding, especially for new investigators, we are developing new ways to strengthen professional development opportunities and new arguments for increasing biomedical research budgets. We are testing better methods to educate the public, Congress and policymakers about the benefits and promise of neuroscience research. These efforts will have a direct impact on our ability to do neuroscience and to make the advances in medical knowledge so important for patients.

Several major developments occurred during the past 12 months that will contribute to meeting the challenges ahead. They include a new approach to our advocacy efforts which we hope will help improve prospects for robust federal funding of biomedical research and help ensure the future of the field. New emphasis was placed on the importance of science education aimed at high school teachers. The dedication of our new headquarters building near Capitol Hill in Washington, DC, will facilitate these initiatives, as will as the continued updating of our strategic plan.

These developments point to the centrality of science in all of SfN's programs, a theme echoed anew during the past year as Society leaders crafted an updated strategic plan. It continues to emphasize our core mission areas of scientific excellence, professional development, science advocacy and public education.

Maintaining the excellence and viability of *The Journal of Neuroscience* is a key element of the Society's scientific mission. In keeping with current trends in scientific publishing, in January 2006, the Society changed *The Journal*'s policy to allow unrestricted access to articles six months after publication. A group of experienced SfN members was appointed by Council to explore several initiatives to raise awareness about the implications of open access and other publishing challenges.

In March, Rep. Patrick Kennedy (D-RI), a longtime advocate for the Society and mental health research, made a statement on the floor of the House of Representatives acknowledging the importance of neuroscience research, and recognizing Brain Awareness Week and SfN's publication *Brain Research Success Stories*. Throughout the year, SfN leaders made trips to Capitol Hill to make the case for stronger NIH funding. The difficult funding climate also highlighted the need for neuroscientists to develop long-term grass roots efforts to personally lobby their respective congresspersons in their home office in a

non-partisan way to educate them about biomedical research, peer review (which is under attack) and the importance of neuroscience to the health of Americans and the economy.

The Society's Council in May voted to explore enlisting the support of top executives of pharmaceutical, biotechnology and scientific instrument firms on behalf of robust NIH and National Science Foundation budgets. One goal is to encourage a group of business leaders to advocate in the Bush Administration, Congress, and public during the next budget cycle to use new and effective arguments for stronger budgets for these agencies. Another is to develop a white paper outlining the benefits of biomedical research.

To enhance the quality of information in schools and elsewhere, the Society embarked on several initiatives that will educate the public about neuroscience. One includes improving and expanding Brain Awareness Week activities; another encourages participation in our Neuroscientist Teacher Partner Program, which provides an opportunity for members to work with K-12 teachers.

I invite you to examine this report, and the hard work carried out by the SfN Council, committees, and staff. We hope that you will actively participate with your ideas and energy to further the mission of SfN, and make neuroscience a successful endeavor in our society. All of us are excited about the promise of neuroscience, and we are determined to successfully meet the challenges faced by the field as we work towards achieving advances in human health that are clearly within reach.

Sincerely,

Stephen Heinemann, President
Society for Neuroscience

The New Strategic Plan

SfN's Council formally adopted a new strategic plan in February identifying the Society's key future challenges and strategies to achieve its goals. The overall framework of the new strategic plan is consistent with the four mission areas identified in 2002, when the Society's first strategic plan was created. These include advancing the understanding of the brain and nervous system; providing professional development activities, information, and educational resources for neuroscientists; promoting public information and general education about the nature of neuroscience discoveries and their implications; and conveying to legislators and other policymakers the scientific and societal value of neuroscience research.

In the plan, SfN spells out its organizational values, formally cementing its commitment to promoting diversity; exploiting new technologies to benefit members; nurturing strategic relationships with external partners; building a model of governance that incorporates regular evaluation of Society initiatives; and fulfilling its mission in a socially, economically, and environmentally responsible way.

While these values will continue to be inherent in SfN's annual meeting, peer-reviewed journal, and other established programs, new initiatives represent a renewed focus on changing member needs. To monitor such changing needs, the Society, with the guidance of Council, maintains a "radar screen" of issues, opportunities, and challenges for the coming years. These strategic issues are concise statements that outline an issue demanding the Society's attention, and are the first step in the planning process. The goal is to first agree on what needs to be addressed and then on the best way to do it.

The Society's new membership growth and satisfaction strategy is based on the observation that accelerated growth in recent years has changed the face of membership, resulting in different member expectations and affiliations. The Society will engage in efforts to develop and adopt strategies responsive to member needs in order to better accomplish its mission.

The growing number of members from around the world increases the urgency for SfN to develop a coherent approach to its international initiatives, particularly neuroscience training in developing countries. The international strategy aims to enhance collaborative relationships with international neuroscience societies, and to join with these and other partners to influence the political, financial, and ethical factors in the US and around the world that enhance scientific exchange.

The diversity strategy aims to increase both the number of and the opportunities for females and minorities in the field through targeted activities and programs. The strategy also calls for greater efforts to enhance diversity within SfN's leadership and governance structures, its membership, and its training activities.

SfN will work to facilitate the sharing of research findings to include more instructional opportunities that reach beyond the annual meeting. This professional development strategy will continue to be responsive to member needs as determined by ongoing research and to eliminate initiatives deemed ineffective.

At a time of unprecedented questioning of the legitimacy, priority, and value of basic research, the Society must strongly advocate on behalf of funding for investigator-initiated research based upon the principles of peer review. As such, the strategic plan's NIH funding strategy looks at ways to maintain existing coalitions and build stronger relationships with patient advocacy groups and business leaders. The science policy strategy includes an action-oriented plan to prevent further erosion of research prerogatives due to restrictive laws and regulations. These policy efforts are closely tied to the plan's public education strategy. The Society will focus its public education efforts on science teachers who are in a position to convey neuroscience-related subjects as a part of their curriculum.

The Society reevaluated its committee structure and determined that it was not optimized to oversee the current and planned set of programs and activities. A new structure approved by the SfN Council seeks to provide committees with clearer expectations and mandates, less redundancy, and a reasonable scope of work.

Members are invited to provide feedback that might contribute to a fine-tuning of these strategies as SfN's leadership revisits them over the next few years. The Society believes that iterative and continuous planning will help ensure that the benefits and potential of neuroscience research are realized for people the world over.

Neuroscience 2005, the Society's 35th Annual Meeting, was its largest ever. It was also the most widely attended convention ever held in Washington, DC. The city's new convention center welcomed nearly 35,000 registered attendees from November 12-16. More than 16,500 abstracts—up from 16,054 in 2004—focused on the latest findings in neuroscience.

The most widely attended of the meeting's events, heard by a crowd of approximately 14,000, was the Dalai Lama's lecture, "The Neuroscience of Meditation." It was the first in a series of "Dialogues between Neuroscience and Society," talks which foster an exchange between the public and the neuroscience community. The Dalai Lama spoke about commonalities between eastern contemplative practices and contemporary science, about areas of engagement between the two disciplines, and about the importance of recognizing the relationship between ethics and science.

Another addition to the annual meeting lineup was a "Meet the Expert" series of workshops, which provided participants a behind-the-scenes look at factors influencing an expert's work. Each of the three 90-minute breakfast sessions featured an informal, informative dialogue between expert and audience. Due to the success of the program in its pilot year, the lineup of experts will be expanded to five for Neuroscience 2006.

The Public Lecture was given by Marilyn Albert of Johns Hopkins University. Titled "The Aging Brain: Predictors of Optimal Function," Albert's lecture described studies identifying lifestyle factors than can predict a person's mental acuity, physical activity, and social involvement during the aging process. She also showed an SfN video featuring her mother as an example of healthy brain aging.

Mahlon DeLong of Emory University, Paula Tallal of Rutgers University, and Andrew Schwartz of University of Pittsburgh presented the presidential symposium, "From Discoveries in Neural Circuit and Plasticity Mechanisms to Innovative Treatment Strategies." DeLong discussed the basis and surgical treatments for Parkinson's disease, dystonia, and other movement disorders. Tallal spoke about intervention for learning and language problems. Schwartz discussed approaches for developing neural prosthetics for spinal cord-impaired patients.

The presidential special lectures featured neuroscientists from around the world. Yasushi

Miyashita of the University of Tokyo spoke about the neural mechanisms of cognitive memory. Edvard Moser of the Norwegian University of Science and Technology discussed how spatial information is computed in topographically organized neuronal networks in the parahippocampal cortices. Ranulfo Romo of Universidad Nacional Autonoma de Mexico shared recent studies providing valuable insights into how cortical areas integrate efforts to solve vibrotactile discrimination tasks.

Beverly Davidson of the University of Iowa organized a short course about vectors and RNA interference for neuroscience applications. A second short course, organized by Tyrone Cannon of the University of California, Los Angeles, addressed the genetics of cognitive neuroscience phenotypes.

A special reunion celebration honored 25 successful years of the Neurobiology of Disease Workshop (NDW). Past faculty, organizers, and attendees gathered to celebrate the accomplishments and advances that have resulted from their work. Ed Kravitz, the founder and initial catalyst behind NDW, was honored for his contributions.

The 2005 NDW, organized by Emanuel DiCicco-Bloom of Robert Wood Johnson Medical School, focused on autism. In a full day of workshops, speakers used live patient presentations and patient videos to show basic scientists the range and early manifestations of autism spectrum disorders. Experts then discussed the neuropathology and abnormalities in brain growth and functional networks. The final session considered the challenges of creating animal models of this uniquely human behavioral condition. NDW participants formed smaller discussion groups in which they explored current and future research strategies. Autism and neuroscience investigators joined the discussions.

The Social Issues Roundtable, moderated by Stephanie Bird, focused on the use of stem cells in neuroscience research. Marie Csete of Emory University, Fred Gage of The Salk Institute, Mahendra Rao of the National Institute on Aging, Patrick Taylor of Children's Hospital Boston, and William Hurlbut of Stanford University and the President's Council on Bioethics talked about the ethical, legal, and policy implications of this issue, and offered advice on discussing it with journalists and the public.

The annual meeting generated 254 original news stories and almost 3,200 reprints in print and electronic publications. This is a marked increase from the 591 reprints generated by Neuroscience 2004. Syndicated articles featured research findings on the placebo effect, the influence of childhood maltreatment on adult mental health, a test for Alzheimer's disease, autism, and the link between sugar and stress.

The Society is committed to supporting scientific excellence through its annual meeting. And while Neuroscience 2005 was a clear success in this regard, SfN is instituting changes for 2006 to make further improvements. For Neuroscience 2006, SfN used the Online Abstract Submission and Invitation System developed by Coe-Truman Technologies to facilitate the abstract submission, sessioning, and itinerary planning processes for the meeting. This new system incorporates advanced software technologies and approaches to make the processes easier for presenters and attendees.

Further, the schedule for Neuroscience 2006 eliminates evening lectures. This change represents an effort to encourage and facilitate more opportunities for socializing and networking. SfN's Program Committee recommended the change based on member feedback. Though all scientific content will be complete by 6:15 p.m. each day, this new scheduling maintains the usual number of lectures and events. In the past, SfN-sponsored socials were scheduled only on Mondays and Tuesdays. This year, Sunday evening will also be given over to these events.

By making the annual meeting a showcase of the best neuroscience research and findings, the Society contributes to the rapid translation of research to improve health and cure disease, and to enhance our basic understanding of human behavior and cognition.

The Journal of Neuroscience

Reflecting growth in the field of neuroscience, the number of submissions to *The Journal of Neuroscience* continued to increase in FY2006 under the leadership of Editor-in-Chief Gary Westbrook. Submitted manuscripts numbered 5,492 in 2005, compared with 5,133 in 2004, an increase of about seven percent.

Published weekly since July 2003, *The Journal* publishes more research than the next four leading neuroscience journals combined. Its 2005 Institute for Scientific Information impact factor was 7.51, and it ranked first in the neurosciences category in total number of citations. The Society recognizes that it must continue to preserve and improve this important resource, and think carefully about how to best serve the needs of authors, members, the scientific community at large, and the public in a changing publishing environment.

On January 1, 2006, the Society changed *The Journal*'s publishing policy to allow unrestricted access for all readers to articles six months after publication. Previously, *The Journal*'s access control policy allowed non-subscribers to view articles 12 months after publication. This new access policy is consistent with current trends in scientific publishing toward opening access to published scientific research, which is supported by Congress, patient advocacy groups, and NIH.

In May 2005, NIH implemented a public access policy that encourages NIH-funded investigators to make peer-reviewed final manuscripts available through the National Library of Medicine's free digital archive of journal articles, PubMed Central, within 12 months of publication. Soon after *The Journal* changed its publishing policy, SfN President Stephen Heinemann announced in the winter 2006 edition of *Neuroscience Quarterly* the availability of an online forum (accessible at http://forums.sfn.org) allowing members to discuss the change and voice thoughts about SfN's future publishing activities.

Further initiatives to raise awareness among and seek input from SfN members and journal authors are being explored by SfN's Publishing Open Access Group (POAG). An eight-member working group appointed by Council to examine the issue of open access publishing, POAG is taking a three-pronged approach. First, *The Journal* is publishing commentaries by several leaders in the scientific and medical publishing community about the future of electronic journals.

Second, an online survey conducted in June 2006 asked members questions about planning the future of *The Journal*, including the advisability of continuing the print edition and the interest of adopting an open access business model. Consultants with the Kaufman-Wills Group analyzed the findings and POAG will be making recommendations to Council about future actions.

Third, a roundtable discussion at Neuroscience 2006 titled "(R)evolution in Scientific Publishing: How will it affect you?" will feature panelists from the world of science and scholarly publishing to discuss the current challenges facing the field. Following the panelists' presentations will be an open discussion with questions and commentary from the audience.

Ample evidence suggests *The Journal* serves a tech-savvy audience that will provide SfN valuable feedback in charting a forward-thinking publishing strategy. In 2005, *The Journal*'s Web site, www.jneurosci.org, received 14 million hits. Visitors to the site downloaded more than five million full-text files and more than three million PDF files.

The Society intends to be at the forefront of discussions about the future of scientific publishing. New technologies and trends are reshaping the field, and *The Journal*, while maintaining its scientific excellence, will take full advantage of the opportunities these changes afford.

In FY2006, the Society made great strides toward promoting public education about the implications of the latest neuroscience research. While continuing to reach out to the general public, SfN made special efforts to give K-12 teachers the resources needed to inspire the next generation of neuroscientists. In addition, the Society provided professional development activities, information, and educational resources to today's neuroscientists to support them at all stages of their careers, and to encourage gender, cultural, and geographic diversity in the field.

The fifth edition of *Brain Facts*, a 64-page primer on the brain and nervous system, has been in high demand from both members and the public. Within six months, demand for this new edition—which updates all sections and includes new information on brain development, addiction, neurological and psychiatric illnesses and potential therapies—exceeded an initial printing of 15,000 copies and necessitated another printing. *Brain Facts* may also be downloaded from the SfN Web site as a PDF file.

The Society's popular lay language series *Brain Briefings* and *Brain Research Success Stories* are distributed to high school educators and the public with news of important neuroscience advances. The CD *Neuroscience Resources for the Classroom* combines these two resources, *Brain Facts*, and additional neuroscience materials appropriate for every grade. Now available for download through the SfN Web site, this CD gives teachers easy access to accurate information translated into classroom-appropriate activities.

To best reach science teachers who are in a position to convey neuroscience-related subjects as a part of their curriculum, SfN invests considerable resources to organize events and workshops at the National Science Teachers Association and the National Association of Biology Teachers annual conferences. Science teachers are also the primary audience for the Neuroscience Education Portal, which is in the preliminary stages of development. The portal will build on existing resources to offer educators a Web-accessible information hub and to serve as a gateway to neuroscience education materials.

Brain Awareness Week (BAW) was celebrated worldwide March 13-19. Scientists in 28 of the United States and in countries as distant as Colombia, Egypt, Nigeria, Poland, and Turkey joined with the public in a series of events to increase awareness about the brain. SfN provided resources

to individuals and groups sponsoring BAW events through a new and improved resources Web site (www.sfn.org/baw). The Society participated in several BAW events in the Washington, DC area, including the National Capital Area Brain Bee. SfN President Stephen Heinemann conducted presentations at Alice Deal Junior High School in Washington, DC. At the annual meeting, Nobel Laureate Eric Kandel and Colin Blakemore joined SfN's then-president Carol Barnes and past president Bruce McEwan to present "Brain Awareness Week: The Next Decade," which included a meeting to explore the responsibility of scientists as public educators and was followed by a poster session. Also at the meeting, NIH hosted a "Building Neuroscientist-Teacher Partnerships" workshop, in which attendees shared ideas on how to forge more effective relationships between researchers and K-12 teachers, students, and schools.

These many public education efforts are helping to foster an informed, pro-research environment in classrooms, and to nurture public interest in neuroscience. The Society has also invested considerable efforts in assisting its members through an expanded program of professional development activities.

In October 2005, SfN launched NeuroJobs, a year-round online job bank to which SfN members may post their resumes at no cost. The Web site connects members with potential employers, and serves neuroscientists at all stages of their careers. NeuroJobs supplements the career center at SfN's annual meeting.

The Society recognizes the importance of encouraging diversity in the field, and also the challenges of doing so as the global neuroscience community expands. The Committee on Diversity in Neuroscience (C-DIN), the Committee on Women in Neuroscience (C-WIN), and the International Affairs Committee (IAC) work closely to ensure representation of women, minorities, and international candidates in SfN's programs, activities, and awards.

In FY2006, eight new scholars were selected for the Neuroscience Scholars Program (NSP). The NSP is overseen by C-DIN and funded through the National Institute of Neurological Disorders and Stroke. It is a three-year fellowship program providing SfN membership benefits, mentoring, career enrichment, and networking opportunities for pre- and postdoctoral minority students in neuroscience. It also provides travel awards for these students to attend the Society's annual meeting.

The Ricardo Miledi Program for Neuroscience Training, in its second year, offered a four-week course to 15 top neuroscience students from Latin America. This year's course, "Analytical and Integrative Neurobiology," illustrated principles and approaches to the study of neurotransmission, and was held August 8 through September 6, 2005, at the National Autonomous University of Mexico, Juriquilla, Queretaro, Mexico. More than 90 students applied for the program, which is funded by The Grass Foundation.

Working together, the International Brain Research Organization (IBRO) Latin American Regional Committee and the joint International Affairs Committee /US National Committee to IBRO organized a two-week neuroscience school in Venezuela. Twenty-five students from six South and Central American countries participated in the course, "Brain-Environment Interactions." The first week of the course was held at the University of Zulia, Maracaibo, and the second week at the University of Merida, in the Venezuelan Andes. In July 2006, a similar course focusing on neural systems and behavior was held in Cape Town, South Africa.

The Society also offered special travel awards to support the participation of American, Canadian, and Mexican graduate students in the fifth Federation of European Neuroscience Societies Forum of European Neuroscience in Vienna, Austria. The awards honored outstanding graduate students nominated by their local chapters.

At a time when federal funding failed to keep pace with biomedical inflation, the Society engaged in vigorous advocacy efforts to make policymakers clearly understand the benefits and potential of neuroscience research. In person, online, and in print, and with the help of like-minded organizations and groups, SfN engaged in an array of activities to ensure continued scientific progress and improved public health.

SfN leaders maintained a strong presence on Capitol Hill. Caravocchi Ruscio Dennis, the Society's legislative advisory firm, helped to navigate policy issues affecting biomedical research. Meetings with key legislators continue to be a critical part of SfN's advocacy strategy.

On March 15, 2006, SfN President Stephen Heinemann met with staffers of Rep. Susan Davis (D-CA), and Senators Diane Feinstein (D-CA) and Barbara Boxer (D-CA). He spoke about the importance of the peer review system and its merits for rewarding only the best and brightest. He also discussed the particular difficulty younger scientists might face in securing federal funding.

Joseph Coyle, an SfN past president and former chair of the Society's Government and Public Affairs Committee, met with Rep. Patrick Kennedy (D-RI) on March 16 to discuss mental illness and the developing brain. Kennedy is interested in improving the connection between mental health services and primary care, FDA approval for medications that treat mental illness, and recent research in the field. During the course of the meeting, Kennedy introduced Coyle to Rep. Jim Ramstad (R-MN), who is involved with mental health parity legislation; Rep. David Obey (D-WI), ranking member of the House Subcommittee on Labor, Health and Human Services, Education and Related Agencies (L-HHS); and Ireland's Prime Minister Bertie Ahern, who encouraged collaboration on a project to reduce teen suicide rates in the US and Ireland. Kennedy also introduced Coyle to President George Bush, who was in the Capitol for a St. Patrick's Day event with the Prime Minister.

That evening, Kennedy made a statement on the floor of the House of Representatives acknowledging the importance of neuroscience research and recognizing Brain Awareness Week. A longtime advocate for the Society and a 2002 recipient of the SfN Public Service Award, Kennedy called attention to SfN's Web page and to *Brain Research Success Stories*.

On March 29, Heinemann testified before the L-HHS subcommittee to ask for a five percent funding increase for the National Institutes of Health in FY07. He talked about the public health benefit resulting from federal funding of NIH research. As an example, he noted that delaying the onset of Alzheimer's disease by five years would save the US $50 billion. Heinemann also raised concerns about the impact that reduced funding would have on young scientists, arguing that dwindling funds and late career starts will mean that neuroscience will lose innovative young minds to other fields. After his testimony, Heinemann met briefly with Rep. Ralph Regula (R-OH), chairman of the subcommittee.

Throughout the year, the Society distributed *Brain Research Success Stories*, two-sided newsletters highlighting neuroscience research conducted at NIH that has led to important health breakthroughs, to every member of Congress, more than 400 patient advocacy groups, and to leaders of other scientific societies. The series covers the spectrum of neurological and mental health disorders, including autism, depression, dyslexia, addiction, stroke, and traumatic brain injury. By describing the many important advances brought about by doubling the NIH budget, the series illustrates the good that would come from continued adequate funding.

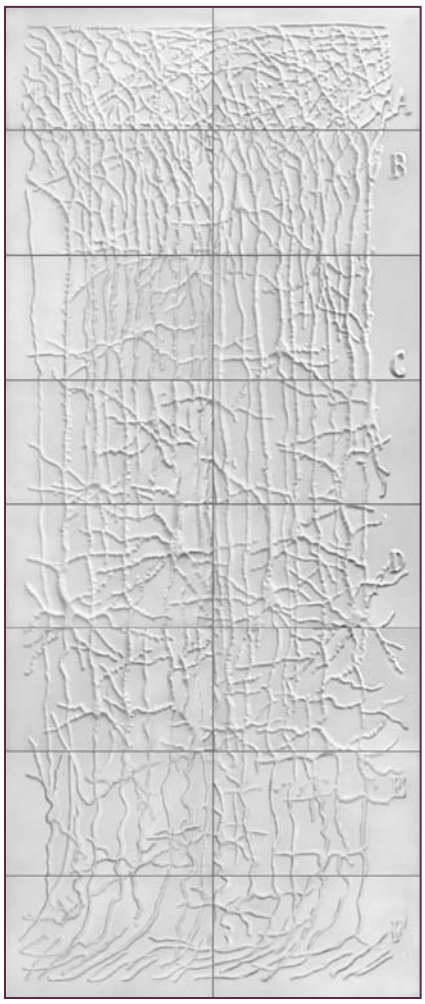
SfN continued its participation in like-minded coalitions such as the Joint Steering Committee for Public Policy (JSC) and the Campaign for Medical Research (CMR). Once a month, JSC hosted science briefings on Capitol Hill to educate legislators about hot-button research topics. CMR met with congressional leaders about how best to

advocate for NIH funding. SfN leadership met with G. Steven Burrill, a leading biotech venture capitalist and the new chair of CMR, who hopes to increase involvement of biomedical industry leaders in the coalition's efforts.

As the animal rights movement continued its attempts to increase "personhood" rights for animals, the Society joined with influential partners to advance public understanding of the benefits of responsible animal research. In May 2006, the Coalition for Animal Research Education (CARE) met in Washington, DC to discuss outreach strategies and ideas. Attendees considered different approaches to research advocacy, including a public relations campaign, symposia at science teacher meetings, and letter-writing campaigns to the media. Organizations participating in CARE include SfN, States United for Biomedical Research, the Federation of American Societies for Experimental Biology, Society on Toxicology, American Physiological Society, and the American Association for the Advancement of Science. The meeting took place in conjunction with the National Association for Biomedical Research (NABR) Leadership Conference, also in Washington. NABR oversees projects raising awareness in the legal community about the serious risks to medical research presented by efforts to bestow animals with human legal rights.

The American Brain Coalition (ABC), which the Society launched with the American Academy of Neurology a few years ago, is an alliance of nearly 50 neurological and psychiatric organizations that represent patients, families, and professionals. SfN continued to provide staffing for the coalition's government and public affairs function. ABC is currently focused on NIH funding, animal research, chronic care, mental health parity, stem cell research, and access to care.

Advocating for neuroscience research is a cornerstone of the Society's mission. Sustained government funding will ensure continued breakthroughs that can help to improve the health of people everywhere.



On February 1, SfN became the official owner of 1121 14th Street in northwest Washington, DC. On February 21, SfN staff moved into their offices on the top three floors of the 11-story building, successfully capping off an effort to build a new headquarters in the nation's capital. SfN and its architects, Envision Design, worked to ensure that the design of the building's interior creates a welcoming and comfortable environment for the Society's employees and visitors. The new offices feature space for SfN Council and committees to hold meeting and events.

The Society's new headquarters building, as SfN President Stephen Heinemann said during his remarks at its dedication ceremony, "represents many things to the Society. Among the most important is that it embodies the vision and mission shared by all of SfN's leaders."

The design of the office space incorporates ecologically friendly building materials, such as those that are rapidly renewable, contain recycled content, and are locally manufactured. The space also is energy efficient. Because of the considered choices made in the planning and construction of the building, the Society will be able to minimize its environmental impact on an ongoing basis.

SfN celebrated its new headquarters on May 5 with an opening gala attended by approximately 150 guests, including past presidents, representatives from the Spanish and Italian embassies, SfN committee chairs, NIH institute directors, and other leaders in the sciences. The evening's events began in the building lobby, where Heinemann welcomed attendees, telling them that the building represents the Society's long-term commitment to supporting neuroscience. Past President Carol Barnes, head of the Society's real estate committee, spoke about the environmentally responsible strategies behind the building's construction. Heinemann and Edward Perl, SfN's first president in 1969, then cut a ribbon, formally opening the building.

Attendees toured the ninth through eleventh floors during a reception in SfN's office space, and were able to see and learn about the three-story, three-dimensional mural hanging in the space's central stairwell. The mural, which Heinemann dedicated at the gala, is based on a

drawing of the mouse neocortex by Santiago Ramon y Cajal, who shared with Camillo Golgi the Nobel Prize for Physiology or Medicine in 1906. The centennial of the Cajal-Golgi Nobel Prize was commemorated at the opening gala.

The festivities then moved two blocks away for a dinner at the Madison Hotel, where SfN President-Elect David Van Essen toasted the Society and the field of neuroscience. Dr. Teresa Ramon y Cajal Asensio, great granddaughter of Santiago Ramon y Cajal, spoke about her great grandfather's legacy, and thanked the Society on behalf of her family. Dr. Cajal Asensio, who is an oncologist and the fifth generation of physicians in the Cajal family, was joined at the event by her father, Santiago Ramon y Cajal Junquera, a professor of pathological anatomy in Madrid.

The Society's purchase of its own building is indicative of its vitality, which is shared by the field it represents. Neuroscience's dynamism has resulted in SfN's explosive growth—unmatched by many associations in any field. In 2005, SfN attracted 5,512 new members for a total of 37,562—marking the fourth year in a row that membership has reached an all-time high. Membership is up more than 32 percent since 2001. Several changes in membership policies have contributed to the increase, including rolling application deadlines, online applications, bylaws revisions that eliminated disparities between North American and international members, and reduced dues for underrepresented membership segments such as those in developing countries. With these changes, membership has also changed, and is now reflective of the global nature of neuroscience research. The Society is represented by 117 chapters, including 16 outside the United States, in Australia, Canada, Chile, Mexico, Turkey, the United Kingdom, and elsewhere.

Recognizing the need to understand new member expectations and affiliations, the Society, in its new strategic plan, calls for the creation of a five-year membership growth and member services plan to ensure that the Society can support future growth without negatively impacting member satisfaction and engagement. In short, after a period of unprecedented growth, it is time for SfN to reexamine how it can continue to most effectively serve its growing and increasingly diverse membership.

It is with this in mind that SfN Council voted to modify the Society's committee structure. The new committee alignment eliminates redundant responsibilities, improves oversight of programs not reflected by the previous alignment, better supports the new strategic plan, and provides for more effective committee interaction with Council. At Council's direction, SfN's Committee on Committees (CoC) reviewed committee mandates for nearly a year, and solicited comments from committee chairs in August 2005. At Neuroscience 2005, the CoC presented a realignment proposal to Council and committee chairs. After receiving additional comments and suggestions from Council and chairs in November and early December, the CoC revised the proposal and presented it to the Executive Committee, which approved the realignment in January 2006.

Under the new structure, which created some new committees while eliminating or merging others, committees have been grouped into "clusters" in an effort to increase their communication and coordination of activities. A steering group consisting of committee chairs within each cluster will coordinate the activities of their cluster as a whole, and report to Council as a group. Merging has created several large committees, but their sizes will decrease in coming years as members conclude their terms and rotate off. In some cases, merged committees have co-chairs.

The new structure is a work in progress, meant to evolve along with the goals of the Society, and the CoC and Council will continue to seek feedback from committees and their chairs. To further this process, an annual goal-setting session between committee chairs and Council will take place each year at SfN's annual meeting.

The strong fiscal position enjoyed by the Society for Neuroscience is due to continuing vigilant internal oversight of, and improvement in, its financial controls and systems to ensure they adhere to current best practices for nonprofit financial management. This year, the Society moved into its new headquarters building in Washington, DC—an 11-story testament to past prudent financial planning and management by successive generations of Society Leadership. The new headquarters building provides an entirely new revenue stream that will help protect Society programs in this era of budget deficits and frozen funding for biomedical research.

On February 1, SfN became the official owner of 1121 14th Street, NW, near Thomas Circle. SfN occupies the top three floors and will rent out the remaining eight. Already, two tenants have signed leases, and SfN's leasing team is in active talks with several other interested parties. The building was completed on time and on budget at a total acquisition cost of about $32 million. The purchase was financed with a combination of a standard commercial mortgage through Bank of America locked in at record-low interest rates and $12 million in tax-exempt bonds issues by the District of Columbia on behalf of SfN.

According to projections, the building is expected to begin generating a positive cash flow within two years. Owning a building in one of the nation's strongest and most stable commercial real estate markets will put the Society in a better position to manage existing programs and initiate new ones, and to control the long-term cost to members for annual dues, annual meeting fees, and *The Journal of Neuroscience*.

Membership dues are a major revenue source for the Society. SfN's incredible growth in recent years has created a loyal membership that stands as the organization's greatest strength. Another crucial revenue stream is the annual meeting, which continues to draw significant attendance. Neuroscience 2005 in Washington, DC, was SfN's largest meeting ever, attracting almost 35,000 attendees. Registration fees, exhibitor fees, and other annual meeting fees, such as those for abstract

submission, provide somewhat independent revenue streams even within the annual meeting revenues. The Society also generates revenue through *The Journal*, primarily from institutional subscriptions and author submission, publication, and reprint charges. In January 2006, in conjunction with *The Journal*'s adoption of a six-month open access policy, submission fees rose and page fees were changed to flat publication fees. The Society's new reserve strategy calls for using current and future reserves to generate income that could be dedicated to supporting *The Journal* during a period when all publishers' business models are facing change and experiencing challenges due to unfolding opportunities and risks associated with online publishing.

SfN maintains investment reserves to protect itself from the volatile economic climate currently facing the nonprofit community as a whole. Augmentation of the reserves based on new financial risks is planned in coming years. The Society's current investment strategy is flexible and sector-based, allowing for the highs and lows of the economic landscape. To further protect its interests, the Society took steps in FY2006 to update its Business Continuity Plan to account for the new headquarters building and office space. Developed last year, this comprehensive plan ensures continued business operations and member services in the event of a disaster or disruption affecting the Society's office, the Washington, DC, metropolitan area, or any annual meeting venue.

The Society continued its strong relationship with public, private, and corporate organizations. NINDS, for instance, awarded the Society a new five-year Research Education Grant to support the Neurobiology of Disease Teaching Workshop through 2010. NINDS has supported the workshop, which occurs prior to SfN's annual meeting, since its inception in 1980. Funding from private foundations and corporations has increased each of the past four years, and in that time has gone from just under $134,000 in 2001 to nearly $372,000 in 2005. The Society has entered agreements with several corporations and nonprofit organizations to sponsor educational programs at the annual meeting. This sponsorship adheres to the standards of the Accreditation Council for Continuing Medical Education.

Tools, Resources, And Training from the NIH's Blueprint For Neuroscience Research are Planned Through 2009

The NIH Blueprint for Neuroscience Research is a collaborative effort among the 15 Institutes and Centers (ICs) that fund research on the nervous system to develop new research tools, train a new generation of cross-disciplinary investigators, and create central research resources that can be shared by the entire neuroscience community (http://neuroscienceblueprint.nih.gov). By pooling funding and expertise from the ICs, Blueprint initiatives tackle research challenges common to all the ICs, reduce redundancies and overlaps in programs, and pursue other strategies that enable research dollars to go further.

With a modest investment of 0.6 percent of the neuroscience funding among the participating Institutes and Centers (approximately $25M per year), the Blueprint develops initiatives with broad input from the neuroscience community. Soon after announcing the creation at the Blueprint at the Society for Neuroscience (SfN) annual meeting in 2004, the NIH launched its first set of initiatives, which mainly leveraged existing resources for a greater impact. For example, the Blueprint expanded the NIH Neuroscience Microarray Consortium (http://arrayconsortium.tgen.org) to give grantees from all Blueprint ICs access to state of the art microarray facilities, training, data analysis, and shared data.

The Blueprint also launched the Neuroscience Information Framework (NIF) in FY 2005 to provide a repository of neuroscience-related material for the research community. The NIF combines resources of the Blueprint ICs and SFN to provide access to neuroscience information in the public domain, such as website content, reports of national and international research activities, research resources, and databases--all searchable by content and usage. NIF is now inviting registered users to catalog electronic and non-electronic neuroscience research resources at www.neurogateway.org.

By aiding the development of new research tools and by making research resources more widely available, Blueprint initiatives relieve individual researchers from the time and financial burden of developing tools on their own. From this perspective a particularly important resource is recombinase-expressing "driver" mouse lines for the study of gene function and gene expression in distinct cell types in the mouse CNS. In FY 2006 the Blueprint is supporting four projects to produce and distribute new driver mouse lines. Additional Blueprint funds are supporting the distribution of mouse lines through the Mutant Mouse Regional Resource Centers (www.mmrrc.org) at UC Davis and the University of Missouri/Harlan. This project will make 220 well-characterized transgenic mouse lines available to the neuroscience community. Mouse lines with cell-type-specific gene expression from the GenSAT project (http://www.ncbi.nlm.nih.gov/projects/gensat/) are also being distributed through the MMRRC. Other resource related initiatives include interdisciplinary center core grants, a clearinghouse for neuroimaging tools and databases, new techniques for imaging neural activity, and tools for neurological and behavioral assessment.

The Blueprint has now announced a series of broad scientific themes that will guide initiatives for the next three years. In FY 2007, the focus will be on neurodegeneration; in FY 2008, neurodevelopment; and FY 2009, plasticity. A Blueprint workshop in March 2006 brought together approximately thirty scientists from a broad range of disciplines and perspectives to consider research tools, resources, and training activities that could accelerate progress in neurodegeneration research. For the neurodevelopment initiatives, a similar workshop is planned for November 2006, and recently released a Request for Information (RFI) (http://grants.nih.gov/grants/guide/notice-files/NOT-MH-06-114.html).

Training initiatives supported by the Blueprint have focused on multidisciplinary areas such the neurobiology of disease, translational research, neuroimaging, and computational neuroscience.

Investigators are encouraged to visit the Blueprint website (http://neuroscienceblueprint.nih.gov) for updates on current Blueprint initiatives and announcements of upcoming projects. The FY 2007 neurodegeneration initiatives can be accessed through the website.

Stop by the NIH booth at Neuroscience 2006 for a folder of information about the NIH Blueprint for Neuroscience Research and to talk to NIH program directors who can tell you more about the Blueprint and ongoing and upcoming initiatives. ■

Results of Member Survey Indicate Comfort with Open Access, Online Publishing; 92 Percent Read Electronically

The Society for Neuroscience has received a report on the results of a June membership survey regarding the future of scholarly publications and its impact on *The Journal of Neuroscience*. Of the 34,481 members surveyed, 8,676 responded – an impressive response rate overall. Their responses were analyzed in terms of authors—members who have published in *The Journal* during the past five years—and non-authors. Authors accounted for 42 percent of respondents.

The survey found that only 21 percent of respondents frequently or occasionally access the print version of *The Journal*, whereas 92 percent frequently or occasionally access the online version. Comments reveal that respondents like the convenience of online access and search features.

Two-thirds, 67 percent, of respondents supported discontinuing *The Journal*'s print edition; 13 percent were opposed; and 20 percent said "maybe." Those supporting an online-only publication did so because of its cost, resource, and space savings; ease of use; and environmental friendliness. Those who opposed discontinuing the print edition did so because of concerns about the lack of universal internet access, archiving, and comparative ease of browsing.

A majority of respondents indicated that if the print version were discontinued, *The Journal* would be perceived as a leader in the field, and that it would remain adequately accessible to researchers. A quarter of respondents, however, expressed concern that *The Journal* might become less prestigious if such a decision were made.

More than half of respondents said they would support SfN adopting an open access business model, citing the broader access and free content it would bring. Those opposed to such a switch cited unfair author charges. About 85 percent of respondents indicated they would submit more or about the same number of manuscripts to *The Journal* if SfN adopted the open access model. Six percent said they would submit fewer.

Just 14 percent of those who took the survey are older than 55, while 34 percent are under 35. This younger demographic was neither more nor less supportive of discontinuing print or adopting open access than the population of respondents as a whole.

A majority of respondents indicated that if the print version were discontinued, The Journal would be perceived as a leader in the field, and that it would remain adequately accessible to researchers.

This short online research survey was conducted as part of the three-pronged approach by the Society's Publishing Open Access Group (POAG) to raise awareness among and seek input from SfN members about the implications of open access and other publishing challenges. This eight-member working group was appointed by Council to examine these issues as they may affect the Society, *The Journal*, and the world of science publishing in the next few years.

SfN hired publishing consultants at Kaufman-Wills Group to design, develop, and analyze the survey, which was emailed to all SfN members in mid-June.

POAG will discuss the survey findings in depth over the summer, and will report its recommendations to Council in October at Neuroscience 2006. Also at the annual meeting, POAG will sponsor a roundtable discussion, "(R)evolution in Scientific Publishing: How will it affect you?" Moderated by SfN President-Elect David Van Essen, a past editor-in-chief of *The Journal*, the discussion will be held 9:30 – 11 a.m. on Monday, Oct. 16. Panelists from the world of science publishing will address the current challenges facing the field, after which attendees can share questions and comments. Members are encouraged to attend and discuss the future of open access. ■

Fifth FENS Forum a Success, Attracting Record Numbers

The fifth Forum of European Neuroscience, organized by the Federation of European Neuroscience Societies (FENS), took place July 8-12, 2006, in Vienna, Austria. The largest neuroscience meeting in Europe, the FENS forum has been held every two years since 1998.

"The FENS Forum in Vienna was a great success and set several records," said Alois Saria, one of the forum's organizers. "The number of attendees was greater than at any preceding forum, and since 2004 the number of student attendees increased by a quarter and the number of participating countries rose from 55 to 70. This forum reflected the growing strength of the European neuroscience community and was an important step in the development of FENS." Approximately 5,200 scientists and students from around the world participated in this year's forum.

Symposia topics included the achievements in raising support for brain research in Europe, and strategiesfor raising public awareness of neuroscience. Lectures, special events and satellite symposia rounded out the scientific program, which was complemented by poster sessions and exhibits. The next FENS forum will take place July 12-16, 2008, in Geneva, Switzerland. ■

Navigation Tips for Neuroscience 2006 in Atlanta

Making your way around Neuroscience 2006's variety of programming choices will be easy using information and services provided by the Society and the Georgia World Congress Center (GWCC), including three full-service information booths.

GWCC was the first state-owned and operated major convention center in the United States. At approximately 3.9 million square feet, with 105 meeting rooms, two grand ballrooms, the Georgia Dome, and Centennial Olympic Park, the exhibit halls are nearly twice the length of Atlanta's highest skyscraper, allowing ample room for attendees to enjoy their time at the meeting.

When inside the convention center, be sure to pay attention to signs that will direct you quickly to your destinations. Each session room entrance will be clearly marked with a daily session sign. In addition, a sign will be at each entrance to the exhibit hall indicating which exhibit booths and poster boards are easily accessible from that entrance. At the Society for Neuroscience Booth, located in Hall B4, at Booth 1302, you'll be able to pick up a copy of the *Annual Report*, meet with editorial board members and staff of *The Journal of Neuroscience*, speak with a representative of the Membership and Chapters Department, or meet for a discussion with your new mentor or mentee.

Internet access will again be easy at Neuroscience 2006. Free wireless Internet access will be available in the convention center lobbies and meeting rooms so that you can conveniently check your e-mail or use the Internet. Meeting attendees who wish to use this service should bring their own laptop computer or PDA with a built-in wireless card or external card that is 802.11b or 802.11g compatible. Wireless Internet access will not be available in the poster and exhibit halls. For further information, please visit www.sfn.org/wireless.

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is Atlanta's public transportation system. Atlanta's MARTA Web site, www.itsmarta.com, has a comprehensive collection of maps, fares, and schedules for you to browse through before you make the trip. The Georgia World Congress Center is located at W1 on Rail Line West. A MARTA rail station also is located at the north end of the airport, near baggage claim, as well as at the west entrance near the Ground Transportation Center.

Remember to download the new Neuroscience Meeting Planner to your personal computer. This allows you to search for abstracts and meeting events and add them to a personal itinerary.

As in the past, free shuttles will be running from SfN hotels to the convention center. Shuttles will be running every 10 to 20 minutes. Specific routes and schedules are listed in your final Program and on the SfN Web site at www.sfn.org/shuttle.

Also, remember to download the new Neuroscience Meeting Planner (NMP) to your personal computer. This allows you to search for abstracts and meeting events and add them to a personal itinerary. The new software program will allow attendees to download any updates or changes to the meeting program since the time the application was installed, as well as to "sync" an itinerary created using the online planner to an itinerary created using the downloadable version. Participants may also use the online version of the NMP which always contains the latest, updated information. The NMP can be found at www.sfn.org/am2006. If you would like to request a CD-ROM copy of the downloadable version, visit www.sfn.org/requests, and a copy will be mailed to you.

We look forward to your participation in the 36th Annual Meeting. ■

Society for Neuroscience Products

Find these things at the SfN Booth: T-Shirts, Laser Pointers, Poster Tubes, etc...

C-WIN T-Shirt
$16.00 (Adult Size)
$11.00 (Children's Size)

SfN Golf Shirt
$26.00

SfN Travel Mug
$11.00

SOCIETY FOR NEUROSCIENCE

Society for Neuroscience Booth 1302

Interview with Raynard Kington, *continued from page 7*

future, we hope OPASI will provide the analytic resources to quickly identify important public health challenges and scientific opportunities to determine if current efforts are effective and, if appropriate, to facilitate the coordination of efforts of multiple ICs to address the problems. Research areas that cut across or fall between IC missions will go through an open and defined process to determine if they are appropriate for incubation in OPASI. Once established, OPASI will, in effect, be constantly scanning the horizon to identify the "next big things."

Researchers must check the usual sources announcing NIH funding opportunities. Funding opportunities are announced in many places, including the OPASI web site http://opasi.nih.gov/. New and established investigators should regularly consult the NIH Guide to Grants and Contracts (http://grants.nih.gov/grants/index.cfm) and www.grants.gov. Investigators should also look at the funding opportunities of ICs that have a mission related to the research interests of the investigator.

NQ: **The neuroscience research community supports the Neuroscience Blueprint and believes that it has contributed to funding important research objectives. What role will OPASI play in overseeing the Blueprint? How does the Blueprint relate to the Roadmap?**

Kington: Thanks for the opportunity to clarify this point for you: OPASI does not oversee the Neuroscience Blueprint. The NIH Blueprint for Neuroscience Research, an initiative of 15 institutes and centers, aims to develop new tools, resources, and training opportunities to accelerate the pace of discovery in

neuroscience research. Information about the blue-print can be found http://neuroscienceblueprint.nih.gov/

The Neuroscience blueprint is a terrific example of ICs pulling together to take advantage of economies of scale, confront challenges, and develop research tools and infrastructure that will serve the entire neuroscience community. Just as the NIH Roadmap addresses the roadblocks that hamper progress across all of medical science, the Blueprint can take on challenges in neuroscience that are best met collectively.

***NQ:* What kind of input would you like to see from the neuroscience community to the Blueprint, the Roadmap and the OPASI prioritization process? How can SfN be supportive of this effort?**

Kington: SfN and the neuroscience community have been highly supportive to date of the NIH neuroscience research efforts. I hope SfN remains involved as you have been with the ICs that are conducting the Neuroscience Blueprint.

There will be many opportunities for key stakeholders – including the scientific community, patient advocacy groups, the lay public, and others – to help shape the work of the Roadmap. For example, through a web-based Request for Information (RFI) the broad science community and lay public will be invited to comment on candidate initiatives and suggest new areas of potential research for consideration.

Furthermore, NIH is creating a "Council of Councils" to help evaluate initiatives that may be funded by OPASI. This new group will include representatives from each Institute and Center's Advisory Council, as well as the Advisory Committees of the Office of the Director, program offices and the NIH Council of Public Representatives. Both scientific and lay members will be on the Council of Councils, to ensure a broad range of disciplines and perspectives is represented.

From the beginning, Dr. Zerhouni and I have been clear that the work of OPASI must be as inclusive and transparent as possible. As a public health agency, NIH is committed to meeting its research and training mission as effectively and efficiently as possible—OPASI will provide key expertise and tools to do this better. ■

NEUROSCIENCE QUARTERLY

Published quarterly by the Society for Neuroscience

Circulation: 39,000

Neuroscience Quarterly is printed on New Leaf Reincarnation Matte, made with 100% recycled fiber, 50% post-consumer waste, and processed chlorine free. By using this environmental paper, SfN saved the following resources ...

40	trees
7,490	gallons of water
1,971	pounds of solid waste
2,906	pounds of hazardous effluent

Visit SfN Booth 1302 to Renew Year 2007 SfN Membership!

Membership dues renewals for year 2007 are due by December 31, 2006. Annual Meeting attendees may visit SfN Booth 1302 in the exhibit hall of the Georgia World Congress Center, in Atlanta, Ga., to renew and receive a printed receipt onsite. The exhibit hall will be open from Sunday, October 15 thru Wednesday, October 18 from 9:30 a.m. - 5 p.m. Members may also renew online when the site opens for 2007 payments in October by visiting www.sfn.org/paydues.

For questions regarding membership contact the Membership & Chapters Department at(202)962-4000 or membership@sfn.org.

SOCIETY FOR NEUROSCIENCE

1121 14th Street, NW
Suite 1010
Washington, DC 20005

First Class Pst
U.S. Postage Paid
Permit No. 161
Harrisonburg, VA