NEUROSCIENCE QUARTERLY

SPRING 2006

"We are not just asking for more money. We are asking that it be spent efficiently and wisely by supporting the funding of the most promising research ideas vetted through a rigorous peer review process."

– SfN President Stephen Heinemann on NIH funding

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IN THIS ISSUE

SOCIETY FOR NEUROSCIENCE

SfN Moves into New DC Headquarters

The staff of the Society for Neuroscience moved into their new offices Feb. 21, successfully capping off the Society's three-year effort to build a new headquarters building in Washington, DC.

On Feb. 1, SfN became the official owner of 1121 Fourteenth Street. The 11-story, 84,000 square feet building was completed on schedule and on budget at a total acquisition cost of approximately $32 million.

The Society's staff now occupies the top three floors of the building, and a leasing agent is currently in negotiations with several interested building tenants.

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 SfN staff and visitors. The SfN offices also feature space for SfN Council and committees to hold meetings and events.

The Society's new headquarters building at 1121 14th Street, NW, Washington, DC

The building purchase was financed with a combination of a standard commercial mortgage through Bank of America locked in at last year's record-low interest rates and $12 million in tax-exempt bonds issued by the District of Columbia government on behalf of SfN. ■

The "Dendrite" conference room. The new space will host Council and committee meetings.

Message from the President

Tight Funding Climate Creates Urgent Need for Advocacy

Stephen Heinemann, SfN President

The Bush administration's $28.6 billion proposed FY2007 budget for the National Institutes of Health (see article on page 13) represents a hard freeze for the agency. New grants funded by NIH have already dropped by nearly 15 percent, from 10,393 in FY2003 to 9,062 estimated for FY2006.

This means that the progress made by the recent doubling of the NIH budget is now in jeopardy. At no time in recent memory has the outlook been so grim or the need so great for neuroscientists to act as individual citizen-scientists to better position biomedical research on the federal agenda. The future of the nation's health depends on it.

SfN's newly adopted strategic plan notes that "the research community must improve the effectiveness of its advocacy efforts on behalf of funding for biomedical research based upon the principles of investigator-initiated research and peer review." The action plan includes forming partnerships with key political and business leaders to help advance the cause of biomedical research, and training interested neuroscientists how to effectively educate the public and advocate to policymakers on behalf of neuroscience.

In this column, I want to highlight two main points — what you as a neuroscientist and SfN member can do about this problem, and some of the arguments you can make for increased NIH funding. We are not just asking for more money. We are asking that it be spent efficiently and wisely by supporting the funding of the most promising research ideas vetted through a rigorous peer review process.

What You Can Do

To change the prevailing atmosphere in Washington, here's how you can advocate *locally* for increased NIH funding:

- Visit your representatives in their home offices to discuss the importance of NIH funding.
- Invite your representative into your lab and show him or her what you do and why it is so important. Show them how you advance research goals and create local jobs.
- Write to your elected representatives and your newspaper's editorial page.
- During this fall's elections, become active in local and national politics. Tell candidates across the political spectrum that NIH funding must be a high priority, and ask them where they stand on this issue.

"I want to highlight two main points — what you as a neuroscientist and SfN member can do about this problem, and some of the arguments you can make for increased NIH funding."

– SfN President Stephen Heinemann

- Work for those candidates who promise their support for federal biomedical research funding. And then hold them accountable when elected.
- Take advantage of advocacy training offered to your local SfN chapter or university neuroscience program. For details, please contact SfN Director of Government & Public Affairs Allison Kupferman at allison@sfn.org.

SfN's updated *Guide to Public Advocacy*, at www.sfn.org/guide, is a valuable tool to help you get started. It covers the process from writing a letter to a representative and setting up an appointment to maintaining the relationship and involving the public. Keep an eye out for SfN legislative alerts throughout the year. These alerts direct you to CapWiz, an online action center that SfN provides so that you can easily send letters to policymakers. CapWiz can be accessed at www.sfn.org/capwiz.

Important Talking Points

When you visit your representative or invite them into your labs, here are some strong arguments you can use in support of increased NIH funding:

- ***Improved health***. The Society's 24 *Brain Research Success Stories*, at www.sfn.org/brss, document how the doubling of the NIH budget has led to identifiable advances in the understanding and treatment of neurological and psychiatric disorders. In depression, for example, researchers have discovered a new generation of medications called selective serotonin reuptake inhibitors that help more people and produce fewer side effects than earlier drugs. In Parkinson's disease, surgical treatment and deep brain stimulation have recently been found to improve symptoms for many patients. Multiple sclerosis now can be diagnosed earlier and better, and new drugs decrease the severity of the disease. In other areas of medicine, seven out of 10 children who develop cancer are alive five years after diagnosis, as compared with the 1970s when the number of such cases was one in 10. During the early 1990s, one in four HIV-infected mothers passed the infection on their babies; now with antiretroviral drugs, the transmission rate has dropped dramatically. These successes have come about as a direct result of funded research.

- ***Global competitiveness***. The scientific and technical building blocks of our economic progress are eroding, according to the 2005 National Academy of Sciences report "Rising Above the Gathering Storm." It made several important points: 1) Strengthen the nation's commitment to basic research by increasing federal investment 10 percent a year over each of the next seven years; 2) Create a balanced portfolio in all fields of science and engineering research; and 3) Because basic research is important to preserving homeland and economic security, maintaining America's leadership position within a strong and growing global science and technology research community demands nothing less.

- ***Economic impact***. Research drives innovation and productivity, creates jobs, and fuels local and regional economies. As examples, a recent survey shows that biotechnology already accounts for 98 of 1,000 jobs in Colorado — nearly 10 percent — and is expected to generate about 100,000 more jobs in the technical fields over the next five years. At the University of Texas Medical Branch, the proposed Galveston National Laboratory, with significant funding from NIH, is expected to bring $1.4 billion to the state during 20 years of operation. Since it was created in 2000 with $10.7 million from NIH, the Nebraska Center for Virology in Lincoln has attracted $39 million in additional funding. This pattern is repeated across the nation both in "red" states and "blue" states.

- ***Lower health care costs***. The potential for lowered cost in health care through research is enormous. For instance, treatments that delay the onset and progression of Alzheimer's disease by five years could save $50 billion annually. Already, NIH-funded researchers have developed therapies that delay or prevent diabetic retinopathy, saving $1.6 billion a year. Realizing these savings will require continued investment in research, an investment that is only a fraction of the potential savings.

"Many times young 'amateurs' entering the field make important breakthrough discoveries. This is why funding young researchers is so important."

– SfN President Stephen Heinemann

- ***Ensuring that the best and brightest young people continue to enter science***. As we all know, science works like a series of building blocks, with each discovery being built on the previous one. And only with a solid foundation can you build higher levels. Or science may be looked at as a relay race. If you don't have the next person to pass the baton to, it's not going to work. Many times young "amateurs" entering the field make important breakthrough discoveries. This is why funding young researchers is so important. Yet the recent trends recently have been alarming. The average age for first-time research project grants has risen steadily from age 35 in 1951 to age 43 in 2004. That's a very late age to start a career, and without more grant money available, science will lose the best minds to other fields.

Your visits to local representatives are our best hope to reverse the perception that NIH "has been taken care of" by the doubling. Given what is at stake, a full assault is necessary. Experts in the advocacy community are convinced that researchers themselves are among the best messengers. I am calling upon you to play a role in meeting that challenge. Our future and the future of science depend on it. ■

SfN Council Adopts New Strategic Plan to Renew Focus on Changing Needs, Ensuring to Serve Members Better

SfN's Council has formally adopted a new strategic plan 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 last such plan was created under the leadership of then-president Fred Gage: advancing the understanding of the brain and the 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.

Past President Carol Barnes made the development of a new plan a priority during her tenure as president. "It was vital that the Society's leadership address important issues that have arisen and evolved since 2002," says Barnes. "We identified the key issues and opportunities to watch, plan for, take advantage of, protect against, and adapt to in the coming years."

Stating Our Values

The new plan affirms SfN's dedication to identifying and serving the changing needs of its members and, more broadly, the field of neuroscience. The plan also constructs a platform to explicitly spell out its organizational values, formally cementing its commitment to promoting diversity; exploiting new technologies; 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.

These values will continue to be inherent in SfN's annual scientific meeting, peer-reviewed journal, and other established programs responsible for the Society's growth and success. Building on these successes, new programs as outlined in the strategic plan represent a renewed focus on changing member needs, and the recognition that SfN and the field of neuroscience are closely linked.

Responding to an Evolving Membership

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 in many ways. This has resulted in different member expectations and affiliations. Going forward, the challenge is to develop and adopt strategies that are responsive to member needs. This will be guided by the idea that the Society's goal is not growth for the sake of growth or financial gain, but for the sake of better accomplishing its mission.

The changing face of membership directly informs the Society's international and diversity strategies. 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 those societies and other partners to positively influence the political, financial, and ethical factors in the US and around the world that enhance scientific exchange. It also seeks to help promising graduate students from developing nations gain extended lab experience by initiating a lab placement pilot program.

The diversity strategy aims to increase the number of females and minorities in the field by charging a committee to propose activities, programs, and endeavors (including training grants). The strategy also calls for greater efforts to enhance diversity within SfN's leadership and governance structures, its membership, and its training activities.

Responding to interests expressed by its members, SfN will work to facilitate the sharing of research findings to include more instructional opportunities that reach beyond the annual meeting — by exploring, for example, additional mentoring programs. This professional development strategy will continue to be responsive to member needs as determined by ongoing research and eliminating initiatives deemed ineffective.

Energetic Advocacy and Public Education

The current political environment in Washington makes it difficult in the short term to change legislative outcomes with respect to funding science research. 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. Specifically, the plan

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SfN Council Approves Committee Realignment, Adds Clusters

After an extensive review and consultation process, the SfN Council voted to modify the Society's committee structure. "The new alignment eliminates redundant responsibilities, accounts for Society activities not previously reflected in its committee structure, better supports the goals of SfN as outlined in its new strategic plan, and increases the opportunity for committee interaction with Council," said Irwin Levitan, SfN secretary and chair of the Society's Committee on Committees (CoC). "Just as importantly, it should help to maximize the effectiveness of volunteer committee members."

At Council's direction, the CoC reviewed committee mandates for nearly a year, and solicited comments from chairs in August 2005. At SfN's annual meeting in November, the CoC presented a realignment proposal to Council and committee chairs. After receiving general concurrence from Council, the CoC solicited additional comments and suggestions from chairs in early December. Using this feedback, the CoC revised the proposal and presented it to the Executive Committee, which, after making a few additional modifications, 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.

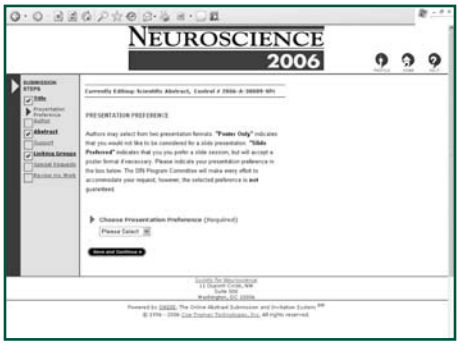
A steering group consisting of committee chairs within each cluster will coordinate the activities of their cluster as a whole, and report to Council as a group with a self-determined spokesperson. Council will provide each committee or cluster with a set of initial expectations and specific goals as outlined by SfN's new strategic plan (see page 4 for details).

The Financial Management Cluster consists of the Finance, Investment, and Audit committees. The Information Cluster consists of the Information Technology and Neuroinformatics committees. The Membership Development and Benefits Cluster consists of the Membership and Chapters, and International Affairs committees. The Professional Development, Mentoring, and Diversity Cluster consists of the International Affairs; Minority Education, Training and Professional Advancement; and Women in Neuroscience committees. The Public Outreach Cluster consists of the Public Education and Communication, Animals in Research, and Government and Public Affairs committees. Because of the diverse nature of its responsibilities, the International Affairs Committee participates in two clusters.

Merging will initially create several large committees, but their sizes will decrease in coming years as members conclude their terms and rotate off. In some cases, merged committees will have co-chairs.

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

New Abstract Submission System to Open in April



The Society's new and improved abstract submission system will launch April 24 and will close May 15. OASIS will use the latest software technologies to make the process easier for meeting presenters and attendees. New features include "research groups" of linked abstracts—allowing submitters to request that the Program Committee schedule their abstract in the same session as related poster or slide presentations—and a more user-friendly abstract viewer.

The new software also allows attendees to search by three different methods; "simple search," "advanced search" and "Boolean search." Once the user receives their search results, they can view the session as a whole or drill down into the individual presentations, viewing the abstract text.

As the meeting draws closer, attendees can take advantage of the OASIS itinerary planner, which allows users to search the entire meeting's educational content, add presentations into an itinerary, and download the itinerary to a PDA device. Once attendees download the itinerary planner/abstract viewer to their personal computer, the software can periodically check the Web for changes and updates.

Beginning April 24, members will be able to access the abstract submission system through the SfN Annual Meeting website, www.sfn.org/am2006. ■

Brain Awareness Week 2006 a Success

SfN President Stephen Heinemann interacts with ninth-grade biology students in Washington, DC.

Brain Awareness Week was celebrated around the world March 13 – 19, as scientists 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 its new and improved resources Web site at www.sfn.org/bawresources.

SfN participated in several DC area events coinciding with BAW, including co-sponsoring the National Capital Area Brain Bee Feb. 8, and assisting with the International Brain Bee (IBB) held March 17 and 18 in Baltimore. This year's IBB winner, Jong Park of Toronto, received $3,000, a trip for two to Atlanta to attend Neuroscience 2006, and an opportunity to work for a summer in the lab of a famous neuroscientist. SfN president Stephen Heinemann presented lectures to students at Alice Deal Junior High School in northwest Washington on March 14. ■

International Brain Bee winner Jong Park

Rep. Kennedy Advocates for Neuroscience, BAW on House Floor

Rep. Kennedy; Joseph Coyle, a past president of SfN; and Rep. Jim Ramstad (R-MN) discuss mental health issues on March 16.

Rep. Patrick Kennedy (D-RI) has been a longtime advocate for the Society and mental health research, and in 2001 received the SfN Public Service Award. On Thursday, March 16, he made a statement on the floor of the House of Representatives acknowledging the importance of neuroscience research and recognizing Brain Awareness Week. A video of the statement can be viewed on Rep. Kennedy's Web site at http://patrickkennedy.house.gov. The text of his statement follows:

Madam Speaker, today I rise to acknowledge Brain Awareness Week, which reminds us that neuroscience research is critical to the health of US global competitiveness and much of this research is done by the National Institutes of Health.

As Members of Congress, many of us from both sides of the aisle made a commitment to doubling the NIH budget, and many of us now wonder what do we get for what we paid for.

Some are asking this and I have asked them to look at www.sfn.org, which stands for the Society of Neuroscience which has produced 24 separate brain research success stories. Behind me here you see some of the incredible technology that is giving rise to research in the brain by helping us through PET scans and FMRIs, looking into the brain as we have never been able to do before.

These discoveries have allowed us to develop treatments that reduce the severity of symptoms for those suffering from Parkinson's, those suffering from affective disorders. We have seen a whole new class of antidepressants that produce fewer sides effects than their predecessors. We have also seen great breakthroughs in the identification of new stroke treatment and prevention methods, and we have seen the creation of ways to help prevent epileptic seizures, as well as expansion of treatments for psychotic symptoms and schizophrenia. Research brings hope and improves the lives of millions of Americans.

Madam Speaker, in this country mental illnesses comprise the second leading cause of lost work days in our country. Suicide in this country is twice the rate of homicide. We lose 34,000 people a year to suicide. The fact of the matter is we have 1,300 young people every single day who try to take their lives in this country. And yet we can reach into this brain science, find and discover ways to help reduce the severity of mental illness and address the needs that people have that cause them to suffer so greatly.

Madam Speaker, I would just point once again to the fact that we have had technology thanks to the National Institutes of Mental Health, the National Institute of Drug Addiction, the National Institute of Alcoholism that has demonstrated to us that we are going to see great promise. But we need the American people to call their Members of Congress and say to their Members of Congress, we want full funding for mental health research and neuroscience.

We have come too far to step back now. Anybody watching this program needs to call their Members of Congress, their Senator and their Representative, and say we do not want to take a step backward in brain research. We want us to go forward to help solve the many mysteries of the brain and the suffering that is going out around this country from those who are suffering from mental illness.

Madam Speaker, we also need them to ask for parity for mental health coverage, which means equal insurance coverage for mental illness as every other physical illness. You cannot look at these poster boards and not tell me that mental illness is physical illness.

It is not a sign of a character defect if they are depressed, if they are suffering from mental illness. It is a sign that they need the kind of attention to the organ, which is their brain, the organ which is their brain that too often has been associated with stigma and stereotype that has guided our policymaking too much of the time; and as a result we spend less than four of every 100 of your dollars at NIH studying brain diseases even though they comprise the second leading cause of lost days in this country.

Madam Speaker, I ask that my colleagues join me in recognizing Brain Awareness Week and join me in helping to continue the research, the very promising work that is going on in our institutes of health that help us find the discoveries that we need in order to relieve the suffering of millions of Americans. ■

An Interview with Thomas R. Insel, Director of the National Institute of Mental Health, on Mission and Funding

Thomas R. Insel

***NQ:* In this era of flat funding for NIH institutes, is NIMH still committed to funding basic neuroscience research?**

Insel: While anxiety about budgets and potentially reduced pay lines is widespread and understandable, there is one issue that the field can bank on — NIMH has been, is, and will remain committed to supporting basic neuroscience research. Our mission is to reduce the public health burden of mental disorders through research on mind, brain, and behavior. It is clear that each of the mental illnesses, from autism to anxiety disorders, is a brain disorder and therefore, understanding brain development, degeneration, plasticity, and function is critical for us to make progress. Accordingly, we invest about 34 percent of our extramural funds in the Division of Neuroscience and Basic Behavioral Science (DNBBS), supporting more than 1,400 research grants at a cost of nearly $380 million annually. In terms of an investment in neuroscience, NIMH is second only to NINDS at NIH, and in areas such as systems and behavioral neuroscience, NIMH has been and will continue to be the nation's leading source of support.

***NQ:* Has NIMH changed its mission or focus of the type of research it funds?**

Insel: NIMH has been sharpening the focus and impact of the basic science portfolio to better serve the mission of the Institute. A recent National Mental Health Advisory Council workgroup report, *Setting Priorities for the Basic Science of Brain and Behavior* (www.nimh.nih.gov/council/brainbehavioralscience.cfm), recommended priority areas for the basic behavioral and neuroscience portfolios. The overarching principles that guided this report provide a frame of reference for advancing basic science in mental health. These include: 1) basic brain and behavioral research should be undertaken in the service of the public health mission of NIMH; 2) basic research that integrates or translates across levels of analysis — from genetic, to molecular, to cellular, to systems, to complex overt behaviors and situations — should be given high priority; 3) research and training that is interdisciplinary should be more heavily emphasized in the basic portfolio; and 4) the time is right to invest more in the emerging field of epigenetics by developing tools that will allow intensive study of how complex social environmental processes interact with integrative systems, proteomics, and genomics.

Using these recommendations, in conjunction with input from our various stakeholders — scientists, physicians, and their professional societies; patients, and their advocates; Congress; and the NIMH's advisory council, which includes public members — NIMH has revised priorities for the research portfolio. The Institute now uses three key factors to evaluate new applications submitted for funding: traction for making rapid progress, innovation, and relevance to the mission.

"Continued support for basic neuroscience is the foundation from which NIMH will be able to translate discoveries into new interventions that will relieve the suffering of people with mental disorders."

– Thomas R. Insel

***NQ:* Is this a fundamental change in the way NIMH funds grants?**

Insel: These changes reflect our belief that the opportunities for fundamental discoveries in the study of brain and behavior have never been greater. With high-throughput chips for genotyping and RNA profiling, new tools for manipulating gene expression, and powerful techniques for imaging cells and systems, we have unprecedented traction in neuroscience. Examples of additional high priority areas for neuroscience are listed on our Web site in the description of DNBBS and its affiliated programs (www.nimh.nih.gov/dnbbs/dnbbs.cfm). Of course, these new opportunities come at a time when funds for new awards are proportionately less than in preceding years. In FY2006, we plan to pay all new research grants through the 10th percentile and at least half of those between the 10th and 20th percentile based on Institute priorities. This means that grants between the 10th and 20th percentile are treated as equivalent in terms of scientific merit, with funding decisions based on traction, innovation, and relevance. Even beyond the 20th percentile, Council and program staff may selectively recommend

the payment of grants that are out of priority-score order based on Institute priorities and to maintain a diverse and balanced portfolio. (Visit www.nimh.nih.gov/grants/fypolicy.cfm for further details on the NIMH FY2006 Funding Strategy).

Continued support for basic neuroscience is the foundation from which NIMH will be able to translate discoveries into new interventions that will relieve the suffering of people with mental disorders. We encourage developmental, molecular, cellular, systems, behavioral, cognitive, and social neuroscience research as all are vital for NIMH and will continue to be supported by the Institute.

NQ: Are there changes in the way NIMH funds research training?

Insel: NIMH is committed to research training that prepares junior and early- to mid-career scientists to conduct innovative multidisciplinary and interdisciplinary research in areas of program relevance. Given the lower rate of increase in the research budget compared to recent years, it is important to strike a strategic balance between building the pipeline of potential new investigators and maintaining a viable pay line to support research projects. NIMH will continue to invest significant funds to train investigators in areas highly relevant to the Institute's mission. Over the next few years, however, the NIMH will strategically decrease the percentage of the NIMH budget invested in training from roughly 10 percent to about 8.6 percent. If the number of incoming applications remains stable in FY2006, the success rate for institutional training grants (T32) and career development awards (K-awards) will decrease notably. The success rate for individual fellowships (F30, F31, F32), however, will remain about the same as in FY2005. (Visit www.nimh.nih.gov/researchfunding/training.cfm for further details about NIMH Research Training and Funding.)

NQ: In a constrained funding environment, what impact will the NIH Roadmap and NIH Blueprint have on support for basic neuroscience research?

Insel: The objectives of the NIH Roadmap and the NIH Blueprint, while distinct, share a common goal: to identify opportunities and gaps in biomedical research that no single Institute at NIH could tackle alone, that must be addressed to make the biggest impact on progress. As such, both sets of initiatives provide even more options for NIH funding of research and research training than are offered through the individual Institutes. What is important is for all segments of the research community to know about these initiatives and to work with Institute staff to help identify those that provide specific opportunities for given researchers.

Briefly, the NIH Roadmap is an integrated vision to deepen understanding of biology through support of new pathways to discovery, to stimulate interdisciplinary research teams, and to reshape clinical research to accelerate medical discovery and improve people's health. Within this architecture, there are numerous opportunities for basic researchers. Of note is the molecular libraries and molecular imaging initiative that supports research on biological assay implementation, high throughput screening to identify active compounds, synthetic chemistry and probe development, and informatics. (Visit http://nihroadmap.nih.gov for further details on the NIH Roadmap.)

"Basic science now provides us with unprecedented opportunities to define the pathophysiology of mental disorders and to develop new interventions. Continued support is, therefore, among our highest priorities."

– Thomas R. Insel

The NIH Neuroscience Blueprint is a collaborative effort among 15 NIH Institutes and Centers, including NIMH, to promote the development of tools and resources that will best advance research on three linked processes that underlie health and disorders of the nervous system. These processes are: 1) neurodevelopment through the lifespan; 2) neurodegeneration — loss of connections or cell death from disease and normal aging; and 3) plasticity — the ability to change and adapt in response to environmental cues, experience, injury, and disease.

The Blueprint will accelerate the translation of basic neuroscience discoveries into better ways to treat and prevent nervous system diseases. (Visit http://neuroscienceblueprint.nih.gov for further details on the NIH Blueprint.)

In short, this is an extraordinary point in time for basic neuroscience research. NIMH is committed to support for basic research through the NIH Roadmap, NIH Blueprint, and our own Institute-specific initiatives. Basic science now provides us with unprecedented opportunities to define the pathophysiology of mental disorders and to develop new interventions. Continued support is, therefore, among our highest priorities. ■

SfN Takes Steps to Reduce Its Environmental Impact

The Society's new strategic plan (see article on page 4) formally identifies its core organizational values, including a commitment to minimizing its environmental footprint. In constructing and furnishing its office space in its new headquarters building (see article on page 1) according to the tenets of "green design," the Society illustrated this commitment. But this is just one initiative among many that SfN hopes will conserve energy and valuable natural resources.

The Society's Real Estate Committee chose Envision Design, a 21-person firm in Washington, DC, to design its space in the new headquarters building. The firm specializes in sustainable architecture that incorporates environmentally responsible principles and materials.

The design of the space incorporates eco-friendly building materials, such as those that are rapidly renewable, contain recycled content, and are locally manufactured. The use of these rapidly renewable materials, which are made from plants with a harvest cycle of 10 or fewer years, stems the depletion of finite raw resources; recycled content reduces the extraction and processing of virgin materials; and locally manufactured materials minimize the environmental impact of transportation. Recycled rubber flooring material was used in the lunchroom, copy room, and storage rooms.

Although the base building was already designed when SfN agreed to purchase it, several energy-efficient changes were incorporated during construction at SfN's request. These include the installation of separate electric meters for each floor to encourage tenants to save electricity, water-saving automatic faucets and flush devices in the restrooms, and a light-colored reflective roofing material to reduce heat absorption in the summer.

The office space also is energy efficient. The lighting fixtures are linked to dimmer sensors that react to natural light, which is maximized by glass corridor walls. Motion sensors in offices, common areas, and storage rooms ensure that fluorescent lights are off when those spaces are unoccupied. Energy efficiency also informed the choice of supplemental cooling systems. A cleaning company was hired that specializes in the use of environmentally safe cleaning products.

Even features such as the carpet, wall paint, and cabinetry are environmentally friendly. The locally manufactured carpet is durable and contains 50-percent recycled content. Its nylon fibers can be recycled when the time comes for use in other products. Wall paints contain zero volatile organic compounds (VOCs), which deplete ozone. The office's custom cabinetry is made from wheatboard, a light, strong material made from agricultural waste. The conference room credenzas, office doors, and paneling in the reception area and conference room are made from wood from sustainable forests certified by the Forest Stewardship Council (FSC). The office furniture is GREENGUARD Certified, meaning that it was constructed according to environmentally responsible principles and standards of the GREENGUARD Environmental Institute.

Because of the considered choices made in the planning and construction of the new headquarters building, each day in the new space furthers the Society's ongoing effort to minimize its environmental impact through high standards of sustainability, water savings, and energy efficiency.

Lessening the Impact of Printing

The environmental impact of printing is substantial. More than 100 million tons of paper is used in the United States every year, and although the US represents less than five percent of the world's population, it consumes more than a quarter of the world's paper and printed products. In addition to depleting resources, paper is often bleached with chlorine, a process increasingly linked to cancer-causing water contaminants.

The methods by which the Society chooses to print its many publications can make a difference. For example, by printing *Neuroscience Quarterly* on New Leaf Reincarnation Matte, a processed-chlorine-free paper made with 100 percent recycled fiber and 50 percent post-consumer waste, SfN saves nearly 16 full-grown trees, nearly 3,140 gallons of water, nearly 688 pounds of solid waste, and almost 1160 pounds of hazardous effluents per year.

Last year, by printing the annual meeting's *Preliminary Program* on New Leaf paper, the Society saved 429 full-grown trees, almost 185,000 gallons of water, more than 20,000 pounds of solid waste, and more than 40,000 pounds of greenhouse gases.

SfN specifies vegetable-based inks for most of its publications. This alternative to petroleum-based inks uses oil that is naturally low in VOCs, which, in addition to hurting air quality, have been tied to cancer and birth defects. These toxins can leach into the soil when printed papers end up in landfills, and can be released into the air as fresh inks dry.

Going forward, the Society plans to investigate the possibility of switching to more environmentally friendly print-

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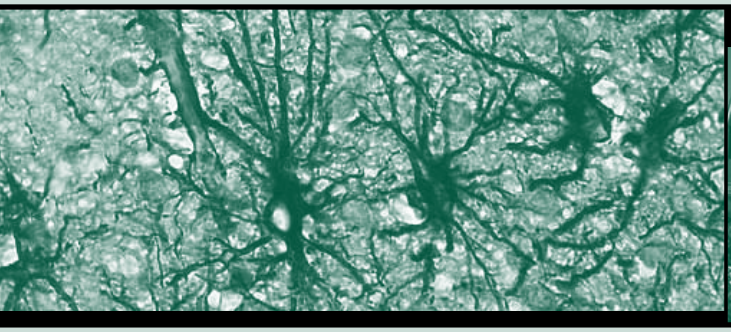

SEE YOU IN Atlanta!

SOCIETY FOR NEUROSCIENCE

Team Begins Work on Neuroscience Information Framework

A team of noted neuroscientists has begun the process of gathering data that will become the Neuroscience Information Framework (NIH).

As a part of the NIH's Neuroscience Blueprint announced at Neuroscience 2004 in San Diego, the NIF will be a repository of neuroscience-related material in the public domain, online items, reports of national and international research activities, research resources, and databases.

"Our goal is to make data and findings available to researchers and other interested parties in order to promote a greater understanding of brain function and disease," says Daniel Gardner of Weill Cornell Medical College, principal investigator on the project.

During the first phase of the project, the team will be responsible for compiling a global inventory of current neuroscience tools and assessing their availability to both neuroscientists and the general public. The NIF will then be built to give neuroscientists access to the array of resources available. The framework will also aid in introducing non-neuroscientists to the field and serve as an educational source for students.

"The structure of the inventory will be such that users will be able to locate, access, analyze, and integrate the resources to determine which are most relevant for their purposes," said NIMH Director Thomas Insel at a 2004 SfN Council meeting.

Weill Cornell Medical College and its Laboratory of Neuroinformatics, led by Gardner, are the primary contractors that NIH has selected to run the project, which is classified as a Neuroscience Blueprint Initiative conducted by the National Institute of Drug Abuse (NIDA). Subcontracts have been awarded to University of California at San Diego, California Institute of Technology, George Mason University, and Yale University.

Gardner's team will use SfN's Neuroscience Database Gateway (http://big.sfn.org/NDG), the current online neuroscience resource, as the Network's model. The first phase of this project is scheduled to take about 15 months.

For more information about the Neuroscience Information Framework and the NIH Blueprint, visit www.neuroscience-blueprint.nih.gov. ■

Funding Plateaus for NIH, Increases for NSF in Proposed 2007 Federal Budget Submitted by President Bush

SfN will advocate for increased funding on Capitol Hill

President Bush sent Congress his $2.7 trillion budget proposal for FY07 on Feb. 5, a budget, he says, that would cut the deficit in half by 2009. The budget for NIH would be flat-funded at $28.6 billion.

In it, the president calls for holding government spending for all discretionary programs — other than defense and homeland security — a proposal for eliminating or substantially reducing 140 federal programs, producing savings amounting to $14.5 billion, or about 0.005 percent of the budget. For the programs that make up the Labor-Health and Human Services-Education appropriations bill, the president's budget proposes $138.3 billion, a decrease of $3.8 billion, or 2.7 percent below current funding levels. Consistent with the president's goal to cut the deficit in half by 2009, that portion of the budget administered by the Department of Health and Human Services (HHS) totals $61.2 billion, a reduction of $1.5 billion, all of which is drawn from discretionary programs.

For NIH, the president's $28.6 billion proposal nominally freezes the budget at the FY06 funding level and about $63 million below the FY05 level. Taking into account that biomedical research inflation is at 4.1 percent in FY06 and is projected to be 3.8 percent in FY07, the reduction runs even deeper.

Of the total requested, $1.9 billion is proposed for biodefense research, a net increase of $110 million, or 6.2 percent, more than FY06 funding. NIH proposes to create a $160 million fund within the Office of the Director to devote to the advanced development of biodefense measures that are priority Project BioShield acquisition targets. Also included in the request is $35 million to expand international and domestic pandemic flu research; $443 million to continue support for the NIH Roadmap; $15 million to foster support for new research investigators; and $361 million for a new clinical and translational science award program. The proposed budget will support 37,671 research project grants, or 656 fewer grants than currently estimated for this year. NIH estimates the budget will fund 9,337 new and competing grants, or 275 more than this year, at an average cost of $350,000 per grant. No increases will be provided for inflation.

For the National Science Foundation, the President's request is $6.02 billion, an increase of $439 million or 7.9 percent over FY06. The increase reflects a 10-year budget-doubling effort for NSF and other agencies as part of the American Competitiveness Initiative that President Bush announced in the State of the Union address.

The FY07 request will allow NSF to make major contributions to new fundamental knowledge, and to underwrite discoveries that affect the future of science, engineering and education. In addition, through the foundation's long-standing practice of integrating research and education, the budget will facilitate the transfer of new concepts to the private sector as students involved in discovery enter the work force.

The FY07 request for NSF's four broad funding categories is:

- $2.9 billion (up 6.1 percent) for discovery across the frontier of science and engineering, connected to learning, innovation and service to society.
- $1.68 billion (up 13.2 percent) for broadly accessible, state-of-the-art science and engineering facilities, tools and other infrastructure that enable discovery, learning and innovation.
- $1.07 billion (up 3.8 percent) for a diverse, competitive, and globally engaged U.S. workforce of scientists, engineers, technologists and well-prepared citizens.
- $350 million (up 11.6 percent) for an agile, innovative organization that fulfills its mission through leadership in state-of-the-art business practices.

The FY07 Budget Request for the Directorate for Biological Sciences (BIO) is $607.85 million, an increase of $31.16 million, or 5.4 percent more than the FY06 current plan of $576.69 million. Disciplinary and interdisciplinary research in the Integrative Organismal Biology (IOB) core will increase by $4.18 million, which includes an increase of $350,000 plus an additional $3.83 million due to the transfer of responsibility for funding the Behavioral Neuroscience Science and Technology Center to Emerging Frontiers. Additional IOB funds will increase support for the areas of Integrative Developmental Biology and Genetic/Cellular Basis for Behavior.

Many SfN members receive federal funding from either NIH or NSF. Those with NIH grants could experience challenges with the coming year's grant-seeking process. According to data from NIH, the average age of a first R01

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recipient is 43, and it is uncertain how younger investigators will be affected by a decline in funding.

To advocate for increased federal funding at both agencies, SfN presented oral testimony before the House Appropriations Subcommittee on Labor, Health and Human Services, Education and Related Agencies on March 29, 2006, to ask for a five percent increase for NIH funding in FY07. This testimony made the case for strong federal funding by pointing to the concrete results of basic neuroscience research, such as those featured in *Brain Research Success Stories*.

SfN President Stephen Heinemann visited Capitol Hill on March 15, 2006, during Brain Awareness Week. He met with the offices of Rep. Susan Davis (D-CA) and Sen. Barbara Boxer (D-CA), and with a health staffer of Sen. Diane Feinstein (D-CA). Sen. Boxer sits on the Senate Commerce, Science & Transportation Committee, which helps shape science policy, and Sen. Feinstein sits on the Senate Appropriations Committee, which has jurisdiction over all federal discretionary funding.

On March 8, 2006, SfN member Paul F. Aravich of Eastern Virginia Medical School gave a presentation to the Congressional Brain Injury Task Force as part of the fifth annual Brain Injury Awareness Day on Capitol Hill. He addressed such topics as how research has led to a better understanding of pleasure pathways and addiction, fear response to Post Traumatic Stress Disorder, and aspects of schizophrenia. "A fiscal conservative might say that we should invest money in research now, rather than spend two or three times that in the health system in a few years to treat that same disease or disorder," explained Aravich.

In February 2006, SfN member John Hildebrand, SfN Past President Carol Barnes, and SfN Executive Director Marty Saggese met with NSF Director Arden Bement, NSF Deputy Director Kathie Olsen, and Jim Collins, assistant director of NSF's biological sciences division. NSF is currently revising its strategic plan, and SfN wanted to offer its help during the process. Check future issues of *Neuroscience Quarterly* for details. ■

. . . SfN Council Adopts New Strategic Plan, continued from page 4

seeks to urge medical and education professionals to become more actively involved in making people aware of the role of animal research in leading to effective treatments.

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. To sharpen this focus, SfN invests considerable resources to organize events and workshops at the National Science Teachers Association and the National Association of Biology Teachers national conferences.

The Society, in light of the shift in priorities as outlined by its new strategic plan, reevaluated its committee structure and decided that it was not optimal to oversee the current and planned set of programs and activities. A new structure approved by the SfN Council (see page 5 for details) seeks to provide committees clearer mandates, less redundancy, and a reasonable scope of work.

The SfN leadership is excited about the new plan and confident that the strategies it outlines will ensure the future strength of the Society. You may read the entire plan by visiting www.sfn.org. Because the plan will be a living document, members are encouraged to provide feedback through a Web form that may be accessed from the strategic plan. ■

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ing presses for the manufacture of its publications. SfN will also weigh the viability of requiring that its print vendors be FSC certified. This chain-of-custody certification assures that the paper product comes from a forest that has been responsibly managed to FSC standards.

Small Steps Toward a Big Difference

While the Society's headquarters building and printing choices are the most obvious examples of its environmental commitment, it has also undertaken less conspicuous initiatives. For instance, SfN hired a waste disposal company during the moving process that recycled unneeded paper products. Also during the move, SfN used reusable plastic bins instead of cardboard boxes for the packing and shipping of documents and supplies. One crate used for the duration of its 10-year lifespan eliminates 400 cardboard boxes from landfill waste. With its move complete, the Society now has established an even more aggressive daily recycling program, with sorting of recyclables in the kitchen and trash-handling areas.

The new building runs entirely on wind power purchased through a local energy utility. To minimize its energy needs, the Society has specified the use of Energy Star rated appliances and equipment in its offices.

By measures as simple as using screensavers and donating unused office equipment, and those as demanding as researching and exploiting the newest eco-friendly technologies, the Society will be vigilant in shaping an effective, responsible environmental strategy. ■

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 ...

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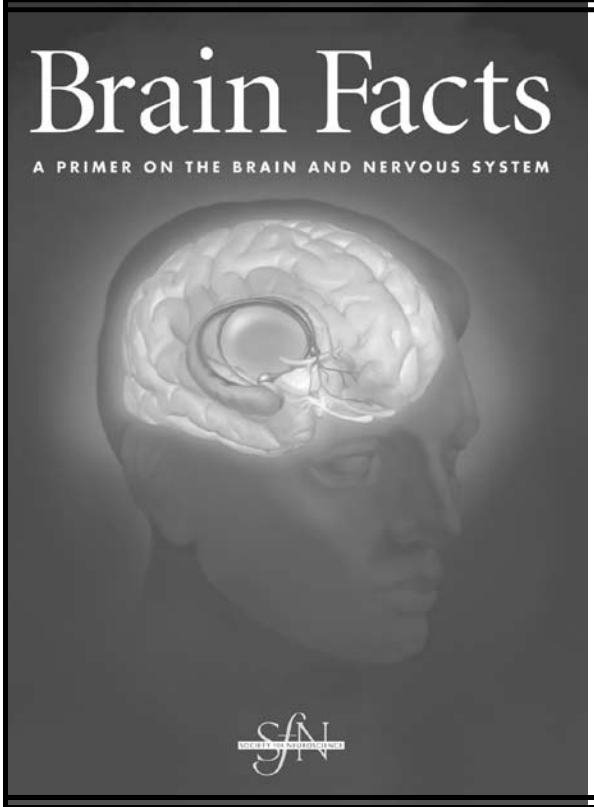

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