# VINTER 2013 Q U A R T E R L Y

"The world can benefit from joint efforts of the brightest people to crack the code of how our brain works in health and disease."

 Marian Joëls, President of the Federation of European Neuroscience Societies

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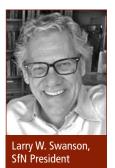
#### FENS and SfN Announce 2013 Advocacy Grant Program Recipients

Seven European national societies have each received grants of up to €5,000 to advance advocacy and education efforts in their home countries through the 2013 Advocacy Grants Program co-funded by the Federation of European Neuroscience Societies (FENS) and SfN. The Dutch Neurofederation, Italian Society of Neuroscience, Lithuanian Neuroscience Association, Neuroscience Ireland, Polish Neuroscience Society, Serbian Neuroscience Society, and Slovenian Neuroscience Association will use their funding in 2013 for activities such as promoting public awareness about the brain and nervous system and engaging with key policymakers.

Since the program started in 2011, it has awarded grants to more than 15 FENS member societies, helping neuroscientists around Europe get involved in advocacy and public education efforts at the national and local levels. Societies were selected through a competitive application process that evaluated detailed plans to raise the profile of neuroscience through outreach and advocacy.

Continued on page 9...

#### Message from the President **The Value of SfN in Difficult Times**



It is an extraordinarily exciting and challenging time to be a neuroscientist. We can expect important scientific developments in 2013 — from proteomics and epigenomics to functional analysis of complex brain circuits for cognition, action, and emotion. It is also a stark reality that as we pursue the research that will provide better mental health and productivity for all of us, political and financial circumstances outside the realm of our everyday laboratory routine make it harder to secure funding for research and career development.

In these difficult times, I have gained a better appreciation for the

value of SfN — to us as individual members and to the field as a whole. The Society is our greatest champion, providing valuable resources and programs to advance personal goals as well as our collective ability to shape the future of neuroscience.

#### MAXIMIZING VALUE

It is understandable that many scientists today feel unsure about their futures, wondering whether and how to pursue new aspects of science, or even careers beyond the bench. I encourage you to revisit SfN resources — looking at them in new ways. You will find programs that help you network with peers worldwide, explore career options, and advance individual professional growth.

To me, the annual meeting remains the single best venue to meet people and explore research areas that intersect with your own scientific interests across the wide interdisciplinary spectrum of neuroscience — and 2013 will offer an exceptional event in San Diego this fall. The meeting is also a prime place to explore your own professional growth. There are a dozen professional development workshops, a Meet-the-Experts session, a meeting mentor program, and an extremely popular Graduate School Fair. The exhibit floor not only showcases tools and technologies, but also allows you to explore other career options by talking with neuroscientists in other fields, from industry and government agencies like NIH and NSF to advocacy organizations for a wide spectrum of disorders related to the nervous system.

I have been to *every* SfN meeting — 42! — since the first one in 1971. Each meeting has served different needs through different stages of my career. As a young graduate student looking for a postdoctoral position at that first meeting in Washington, DC, it was exhilarating but disorienting to explore a new field and figure out how to chart my own path. I made a point of talking with others, including potential mentors; networking; and finding that next important bench position. Over the years, it has been a place to make new connections, explore new scientific ideas, find colleagues to collaborate with, and contribute to the neuroscience community.

Although the meeting is large and bustling, there are many opportunities for individual impact. It's a great place to get personal feedback on a poster from peers or senior leaders, self-organize a symposium or nanosymposium, gain greater visibility for an emerging topic, or attend a networking event to meet a potential mentor or collaborator.

SfN offers ways to keep that going the rest of the year. *NeurOnLine* and local chapters enable us to connect with others around the world, seek career or grant advice, or spark discussion. Additionally, a new SfN website launching this winter will enable easier navigation and more integration of the Society's programs, publications, and portals. It will have the first set of a new series of online content resources about careers beyond the bench, including interviews with members in a wide range of careers.

#### **PROMOTING THE SCIENTIFIC ENTERPRISE**

Beyond offering support for individual growth, SfN enables us to pursue collective actions that advance our field in vital ways, which is particularly important in challenging times. Collectively, we can be much more effective when communicating with the public, helping our global scientific community explain the value and importance of basic science investment. *BrainFacts.org* is a public information partnership of The Kavli Foundation, the Gatsby Charitable Foundation, and SfN that was launched just eight months ago and has already drawn more than 200,000 visitors, about half from outside the United States. Its goals are to help a wide audience learn more about the brain and to share our excitement for scientific discovery. Increasingly, SfN is partnering with organizations across regions and borders to broaden excitement about brain research, and we are delighted to begin new work in this area with the International Brain Research Organization and the Dana Foundation, among others.

We can also be a much more powerful voice to champion basic science investment and other major issues facing the field. SfN enables all of us to become more effective advocates for science funding and animal research, whether in the United States through Capitol Hill Day and legislative alerts, or through international advocacy grants with the Federation of European Neuroscience Societies (see page 1 for an update). I have joined SfN for Capitol Hill visits and have seen firsthand how easy SfN makes it to connect with legislators to make the individual case for science.

Finally, our collective voice enables us to be a catalyst for growth and innovation. In the United States, SfN has engaged closely with the White House Office of Science and Technology Policy as it seeks to advance neuroscience through a dedicated White House initiative (see fall 2012 *Neuroscience Quarterly* for more information). Through all of this, SfN has been a strong advocate for the essential role of continuing basic science investment, and I am very excited to see that the first White House announcements have included a key emphasis on this investment, including research on the brain and its disorders. This work will continue in 2013 and will be critical for maintaining scientific momentum even in uncertain times.

In these very uncertain times, I hope you too will find the personal and collective value of SfN and explore how its programs can advance our individual science as well as our dynamic and growing field. As always, SfN's Council welcomes your thoughts on how best to respond to the membership's evolving needs. Member satisfaction is our top priority!

# SfN Gears Up for Action as Uncertainty Continues Over U.S. Research Funding

SfN and its coalition partners are engaged in efforts to promote research funding in a challenging fiscal environment. With a number of key budget deadlines fast approaching, SfN members will be making their voices heard during Capitol Hill Day 2013, taking place on March 20. Members also may be called to weigh in with their legislators on short notice.

Over the last several months, SfN members have taken to social media, emailed their Congressional representative, and submitted letters to the editor all in support of biomedical research. In a one-month span, 5,000 messages were sent from SfN members to Capitol Hill. Similar efforts may be required in the early months of 2013.

Despite action on the "fiscal cliff," Congress must act before March 1 to avoid the automatic, across-the-board budget cuts known as sequestration. There has been no indication from key research agencies such as NIH and NSF about how they would implement these cuts – estimated to be 6-8 percent of their annual budgets. This is likely to lead to a drastic reduction in success rates for grant applications, which are already at historic lows. Cuts to grants in mid-cycle may also result.

Complicating matters, the federal government is currently funded by a continuing resolution for FY2013, set to expire on March 27. Congress will need to address FY2013 funding, along with sequestration, and must also begin considering the FY2014 budget. Traditionally, the budget process kicks off in the first week of February with the release of the President's budget; however, delays caused by fiscal cliff negotiations mean the administration's FY2014 budget will likely be several weeks late. Its release will occur around the same time as the new deadline to address sequestration.

For more information and to get involved in the Society's advocacy efforts, go to SfN.org/advocacy. ■

#### **Fall Council Round-Up**

The SfN Council met during Neuroscience 2012 in New Orleans for its annual fall meeting.

#### **GIVING AND INDIVIDUAL SUPPORT**

Council approved an Annual Fund campaign centered on the Friends of SfN Fund to raise funds to support programs such as travel awards and education and outreach activities. For information, visit SfN.org/supportsfn.

#### **ETHICS COMMITTEE**

The Council reviewed progress on the establishment of an Ethics Committee to serve as the governing body that investigates all ethics and misconduct allegations. To ensure a seamless transition in the administration of ethics activities and investigations, the new committee will work closely with the Scientific Publications Committee as it undertakes its responsibilities.

#### **FUTURE ANNUAL MEETING LOCATIONS**

Council decided that future annual meetings will rotate between San Diego; Washington, DC; and Chicago. New Orleans, which had been tentatively included in the roster, has been removed from the cycle. Council concluded that the integrity of scientific exchange at the annual meeting is at unacceptably high risk in New Orleans given a fall meeting during hurricane season. This risk was highlighted by damage experienced by contracted hotels following Hurricane Isaac, a Category 1 storm that hit New Orleans in August, seven weeks before the 2012 annual meeting. It became clear to the Council that a storm of greater intensity or closer to the meeting dates could seriously jeopardize SfN's ability to recover and execute a meeting consistent with its mission and member obligations. The Council's discussion was difficult and thoughtful, and the resulting Council vote was not unanimous. The schedule of future meetings can be found on SfN.org.

#### **NEUROSCIENCE POLICY WORKING GROUP (NPWG)**

The Council voted to extend the mandate of the NPWG for one year so that it may continue its successful work communicating about basic science and neurosciencerelated public policy issues with key federal policymakers.

#### **ENDOWMENTS**

In fall 2012, SfN was gratified to receive an endowment of \$750,000 from The Swartz Foundation to support the Swartz Prize for Theoretical and Computational Neuroscience, and an endowment of \$120,000 from Bernice Grafstein to support the Bernice Grafstein Award for Outstanding Accomplishments in Mentoring.

#### **Q&A** Marian Joëls: Opportunities and Challenges in European Neuroscience



Marian Joëls, President of the Federation of European Neuroscience Societies

Marian Joëls is the new president of the Federation of European Neuroscience Societies (FENS) and the director of the Rudolf Magnus Institute of Neuroscience and Scientific Manager Division Neuroscience at the University Medical Hospital Utrecht in the Netherlands. Neuroscience Quarterly asked her about her goals and outlook for her two-year term as FENS president.

# *NQ:* As president of FENS, what are your priorities for your two-year term? What initiatives or programs are underway to fulfill your goals?

Our most visible activity is, of course, the FENS Forum. We are in the process of organizing the 9th FENS Forum, taking place in July 2014 in Milan. We hope to welcome more than 7,000 participants. This should not only be a showcase of excellent neuroscience, but also the occasion for neuroscientists from Europe and elsewhere to gather in a lively environment. We also (co)organize smaller meetings, like the featured regional meeting in Prague in 2013 and the new biannual Dynamic Brain Conferences. The latter are small meetings at the highest scientific level. For my term, I have defined two additional goals. First, we will invigorate our program for higher education in neuroscience, which for many years has served and still serves a good cause. However, the European landscape in higher education has changed over the past ten years. Some tools need adaptation and new instruments will need to be developed. The second goal is to identify and facilitate the next generation in European neuroscience — a group of highly gifted neuroscientists based in Europe or with a European background. This will ensure that the base of European neuroscience remains healthy five to ten years from now. We really would like to involve them in FENS activities. We are working on an attractive format to turn this idea into a structural FENS activity.

*NQ:* The neuroscience field has exploded in recent years, particularly with the rising number of young scientists drawn to this dynamic discipline. What are some of the unique challenges facing young investigators in Europe and how do you envision FENS helping to address these? What role do you think FENS-IBRO schools program and national societies could play in supporting new investigators' careers? This is something very close to my heart. The two aims for my term directly relate to the future of young neuroscientists. We would like to offer them the best possible training partly through the network of existing local graduate schools (currently organized in the Network of European Neuroscience Schools) and through education that is not currently available at a local level. FENS is in the process of renovating the schools program in partnership with IBRO, SfN, and the Hertie Foundation, as well as hopefully by adding new partners. However, giving the next generation the best chance to succeed and flourish asks for more than training. Issues of crucial importance to neuroscientists' careers, such as the challenges of publishing or the grant system, should be high on our agenda. They should be the subject of dialogue between current policymakers (including the FENS board) and people who are in the middle of building their career. Neuroscience is a big and beautiful adventure, but nowadays it is not an easy ride in some European countries and certainly not for young scientists. We will support them as much as we can.

#### *NQ:* The European Brain Council (EBC) released a heavily-cited report on the economic burden of brain-related diseases and disorders in Europe last year. How has FENS worked with the EBC to coordinate advocacy for neuroscience and how has the report helped raise the profile of neuroscience funding?

The EBC report has been extremely useful in convincing policymakers to invest in neuroscience because scientific efforts are the best answer to the burden of disease. Research can develop new strategies to treat or prevent brain diseases and have an enormous impact on the life of patients and their family members. FENS collaborates with other EBC members to coordinate such advocacy and policy initiatives.

We should not forget, however, that neuroscience research is important for many aspects of daily life, not just for disease-related conditions. FENS will keep emphasizing that neuroscience research has an excellent return on investment for brain disease and otherwise. Basic neuroscience has value in itself and we work to communicate that to policymakers as well. *NQ*: SfN and FENS recently launched a collaborative effort to support European national neuroscience societies advocacy activities through grants. Can you speak to some of the contributions these initiatives have made so far and how scientists can promote neuroscience in their home country?

Two years ago FENS started a joint activity with SfN to support advocacy about neuroscience in Europe. Member societies from FENS could apply for financial support to promote neuroscience advocacy at a national level. So far, sixteen projects have been funded (see page 1). These are very diverse in nature, which is not unexpected, because the neuroscience advocacy needs of each country are unique. Some countries have organized big events to raise public awareness for neuroscience and its relevance to aspects of daily life. Other countries have organized small, more targeted meetings with policymakers responsible for important decisions regarding the funding of neuroscience. There were also more unexpected, out-of-the-box approaches. For instance, one linked neuroscience to art, showing this to the public at large. At this moment, the impact of the FENS-SfN advocacy program is still being analyzed. It is clear, however, that the initiative has helped sensitize FENS member societies to the importance of advocacy at the national level.

#### *NQ:* Neuroscience research is increasingly global in nature. What opportunities do you see in the globalization of science and how can FENS and SfN partner to advance the field?

With the Internet, the world is at your fingertips including emerging research, potential collaborators, and data sets worldwide. As such, neuroscience is already a global enterprise. Yet some parts of the world are more privileged than others. There is huge potential not currently being tapped. The world can benefit from joint efforts of the brightest people to crack the code of how our brain works in health and disease. FENS, SfN, IBRO, and other societies should join forces to involve the best people in answering this question and advancing the field. ■

### 2013 Annual Spring Conference of Neuroscience Departments and Programs **MENTORING AND MORALE**



#### March 8-Washington, DC



Featuring discussion sessions on:

- Research Training Program Recommendations from the NIH Biomedical Research Workforce Working Group (Keynote speaker: Naomi Rosenberg, Dean, Sackler School of Graduate Biomedical Sciences, Tufts University)
- How to Develop Faculty as Strong Mentors
- Best Practices in Recruiting and Retaining Students
- Ethical Issues in Neuroscience Training
- Student Perspectives on Novel Ideas in Neuroscience Training
- Program innovations of the 2012 undergraduate and graduate Neuroscience Program-of-the-Year Award winners

#### Register and view the conference agenda at SfN.org/ndp

#### Inside Science Scientists Probe Role of Sleep in Memory

Sleep. We spend a third of our time doing it, it renders us utterly defenseless, and we can't live without it. Yet, the purpose of sleep remains difficult to understand. While there is little evidence sleep is important for restoring the body, sleep appears to play a key role in helping the brain to maintain its normal functions, explained Clifford Saper of Beth Israel Deaconess Medical Center and Harvard Medical School during a press conference on sleep at Neuroscience 2012. Saper chaired the event, where presenters discussed recent research suggesting sleep is particularly important to forming and storing memories.

#### **SLEEP DEPRIVATION: TIMING IS EVERYTHING**

Previous studies show even brief stretches of sleep loss impair hippocampal function. Press conference presenter Ted Abel and colleagues at the University of Pennsylvania investigated just how little sleep loss it takes to jeopardize memory consolidation by depriving mice of sleep for varying lengths and periods of time after they learned a new task. Abel and his colleagues found that preventing mice from sleeping for three hours, two to five hours after training impaired the ability of the mice to perform the task the next day. However, when the researchers shifted the deprivation period to just one hour earlier, the mice properly stored the memory and recalled it the next day.

Between two and four hours after training, "something is happening normally during sleep that's particularly vulnerable to deprivation," said Abel. According to Abel, the data suggest that memories are reactivated during this time window.

#### SLEEPLESSNESS DISRUPTS CONNECTIVITY

Sleep deprivation also alters the connections between some regions of the brain, according to press conference presenter Hengyi Rao, also of the University of Pennsylvania. Rao described his recent imaging work examining how sleep deprivation affects the connections between the hippocampus and the brain's default mode network (DMN) — a group of regions hard at work when the brain is awake but not engaged in a mental task.

Rao and colleagues performed a functional MRI (fMRI) on 22 healthy adults after a full night's sleep (nine hours), after 24 hours without sleep, and once more after two nights of recovery sleep (20 hours total). According to Rao, while sleep deprivation did not alter the activity of the DMN, hippocampal communication with the DMN "disappeared" after 24 hours of sleep deprivation, but was restored to normal levels after sleep recovery. According to Rao, decreased connectivity between the DMN and hippocampus was associated with poor performance on a memory task — the less hippocampal connectivity, the less the participant was able to recall. The loss of its connection with the DMN suggests the importance of hippocampal function to memory at rest as well as during active memory formation, Rao said.

#### SLEEPINESS THROWS DEFAULT NETWORK OUT OF SYNC

Previous imaging studies show that the disparate brain areas of the DMN have similar activity patterns during rest, but certain conditions can cause these patterns to fall out of sync. The coherence of activity patterns from different regions in the network can tell researchers how well the network is functioning as a whole.

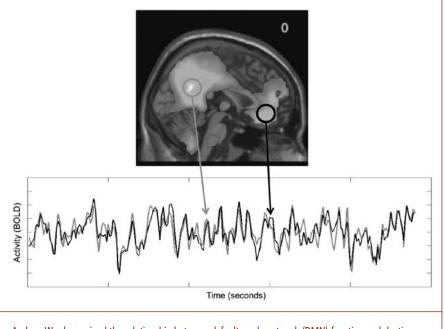
Decreases in DMN coherence have been associated with increased daytime sleepiness, decline in memory, and early symptoms of Alzheimer's disease. Elderly people without memory problems also report sleep problems, including increased daytime sleepiness. However, the relationship between chronic daytime sleepiness in healthy elderly people and DMN connectivity has not been studied. Press conference presenter Andrew Ward, a postdoctoral fellow working in the laboratory of Reisa Sperling at Massachusetts General Hospital, examined whether reports of daytime sleepiness by elderly adults without memory problems correlated with decreased DMN coherence.

Ward and colleagues asked 84 healthy older adults to report how likely they were to fall asleep during daily activities, ranging from watching TV in the dark to driving, before they underwent a resting-state functional connectivity MRI (fcMRI). Those who reported the least daytime sleepiness displayed the healthiest DMN activity, whereas sleepy participants showed a less coordinated DMN.

The results suggest that "brain function is going down with sleepiness before there are reports of memory problems," Ward said during the press conference. Ward noted that efforts to improve the amount of sleep people receive at night may be able to improve DMN connectivity and decrease the risk of developing Alzheimer's disease.

#### **SLEEP HELPS BRAIN TO FORGET**

Previous research shows sleep plays an important role in memory formation and storage, but scientists are continuing to work to understand just how sleep alters memories. Several press conference presenters discussed



Andrew Ward examined the relationship between default mode network (DMN) function and daytime sleepiness. In the graph, signals from the posterior cingulate cortex (gray) and medial prefrontal cortex (black) were plotted over time. The more similar the activity patterns in these regions, the better the DMN is functioning as a whole.

evidence suggesting sleep helps make way for new information by clearing out old associations.

"We learn mostly by strengthening [synaptic] connections, but that strengthening has consequences," explained Giulio Tononi, of the University of Wisconsin, Madison. Extraneous synapses make neurons more "expensive": they occupy valuable real estate and cost precious resources to maintain, he noted. In addition, they compromise our ability to learn from new experiences.

Tononi described a growing body of evidence that supports the hypothesis that during sleep synaptic strength is globally reduced to a baseline level that is energetically sustainable and beneficial for memory and performance. Recent studies suggest that after sleep there are fewer synapses; they are smaller, less electrically active; and they have fewer glutamate receptors.

One mechanism that may contribute to the weakening of synapses within the memory network during sleep is the reduction of the neurotransmitter noradrenaline (NA), according to press conference presenter Gina Poe of the University of Michigan.

Previous studies show NA is absent during rapid eye movement (REM) sleep and the seconds preceding sleep spindle waves during non-REM sleep. Poe and colleagues examined what would happen if they prevented the drop in NA during sleep. They delivered an antidepressant drug that maintains synaptic NA or infused NA directly to the hippocampus in sleeping rats after the rats learned a task. They then recorded memory circuit activity while the animal slept or learned a new environment.

Behavioral tests indicated that when the rats did not experience the drop in NA during post-learning sleep, new information could not be consolidated with old. Such findings could one day guide new treatments for post-traumatic stress disorder (PTSD), where research suggests NA levels remain elevated during sleep and the forgetting process that accompanies sleep appears to be impaired, keeping the traumatic experience fresh.

#### MANIPULATING MEMORIES DURING SLEEP

Some people with PTSD benefit from extinction therapy, in which a traumatic

memory is repeatedly re-experienced in a safe setting. However, reliving painful memories can be emotionally difficult, and because memory is context-dependent, it may succeed in a therapist's office only to fail in real life. Could manipulation of memories during sleep provide a more effective therapy?

Press conference presenter Asya Rolls, working in the labs of H. Craig Heller and Luis de Lecea at Stanford University, conditioned mice to fear the scent of jasmine by pairing the odor with a foot shock. Later, when the mice were sleeping, the researchers released puffs of the jasmine scent, reactivating the fear memory. Mice exposed to the odor during sleep demonstrated a greater fear response upon waking, suggesting the fear memory was strengthened during sleep.

The researchers found that if they delivered a protein synthesis inhibitor in the amygdala before the trained mice slept, the fear memory was extinguished upon waking. The model provides a proof-of-concept that memories can be manipulated during sleep.

Together, this research hints at how sleep may provide an important time for the brain to get organized for memory — filing away important memories and disposing of unnecessary associations — following a day's events. Scientists are hopeful advances in imaging and other technology will one day lead to new answers about sleep and memory, as well as viable new treatments for Alzheimer's disease and PTSD, conditions where sleep processes are particularly vulnerable.

#### **Congratulations to the winners of 2012 SfN awards**

SfN awarded more than \$500,000 to recognize scientific excellence and promise, training and education, and public outreach, as well as support meeting attendance.



Award for Education in Neuroscience SHARON L. JULIANO, PHD OSVALDO D. UCHITEL, MD, PHD

Julius Axelrod Prize Supported by Eli Lilly and Company Foundation RICHARD W. TSIEN, D.PHIL

Ralph W. Gerard Prize in Neuroscience Supported by Lilly USA, LLC COLIN BLAKEMORE, SCD, FRS

Bernice Grafstein Award for Outstanding Accomplishments in Mentoring ANNE M. ETGEN, PHD

The Peter and Patricia Gruber International Research Award in Neuroscience Supported by The Gruber Foundation

LISA M. GIOCOMO, PHD JUNJIE GUO, PHD

Donald B. Lindsley Prize in Behavioral Neuroscience

Supported by The Grass Foundation KATHERINE TSCHIDA, PHD





Undergraduate Program of the Year BALDWIN WALLACE UNIVERSITY

Graduate Program of the Year VANDERBILT UNIVERSITY

#### **Next Generation Award**

Pre-/Post-doctorate Level AMY L. ALTICK, PHD BETHANY R. BROOKSHIRE, PHD

Junior Faculty Level COURTNEY STEVENS, PHD

#### Mika Salpeter Lifetime Achievement Award MARTHA CONSTANTINE-PATON, PHD

MICHAEL J. ZIGMOND, PHD
Science Educator Award

DAVID M. EAGLEMAN, PHD JAY N. GIEDD, MD

Swartz Prize for Theoretical and Computational Neuroscience

Supported by The Swartz Foundation JOHN J. HOPFIELD, PHD

#### Janett Rosenberg Trubatch Career Development Award

Supported by the Trubatch Family ANNE K. CHURCHLAND, PHD DAYU LIN, PHD

Jacob P. Waletzky Award Supported by the Waletzky Family ANDREW HOLMES, PHD

#### Young Investigator Award Supported by AstraZeneca

RUI M. COSTA, DVM, PHD GUO-LI MING, PHD, MD



"FENS is delighted to expand the reach of the Advocacy Grants Program in 2013," said Marian Joels, FENS president. "These important projects will build on the achievements of 2012 grantees, who undertook a diverse range of innovative programs that are raising greater support for and awareness of neuroscience research."

"SfN encourages advocacy engagement by members around the globe. We know national and regional neuroscience societies are uniquely positioned to lead advocacy programs that reflect each country's funding and political systems," said Anne Young, chair of the SfN Government and Public Affairs Committee. "SfN is pleased to continue its valued partnership with FENS, joining forces to help enhance brain advocacy."

2012 Advocacy grant achievements included:

- The Spanish Society of Neuroscience promoted public awareness and education about the brain and nervous system and worked with legislators, culminating in the Spanish government declaring 2012 The Year of Neuroscience.
- The Croatian Society for Neuroscience helped establish the Croatian Brain Council and held a meeting with members from the national and European Brain Council to promote strategic partnerships.

- The French Neuroscience Society created an online database of resources for its members to use in advocating for neuroscience during meetings with policymakers. The Society hopes to expand the website to include information for the public about neuroscience and brain diseases.
- The British Neuroscience Association held meetings with scientists and legislators to discuss policies on neurodegenerative diseases and social challenges.
- The Portuguese Society for Neuroscience organized meetings with citizens to promote brain research in collaboration with Ciência Viva Agency, held a session for senior citizens dedicated to the brain and memory, and developed a Facebook page called Brain Research Friends.
- The Hungarian Neuroscience Society started a campaign to target specific policymakers in Debrecen with the goal of building relationships at the local, regional, and national levels. The Society has produced presentation materials for meetings with policymakers.

To learn more about current and past FENS-SfN Advocacy Grants recipients, visit fens.org/fens-sfn-AdvocacyGrants.

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#### **Neuroscience 2012**

The Society for Neuroscience held its 42nd annual meeting in New Orleans, Oct. 13–17, 2012, convening more than 28,500 attendees from around the world to participate in more than 16,000 scientific presentations and dozens of workshops supporting professional development and the neuroscience field. SfN's annual meeting continues to expand its reach, engaging more neuroscientists and members of the general public from a variety of professions.

#### Spotlight on the Convergence of Neuroscience and Society

Some of the most popular events in 2012 were those that allowed attendees to engage with topics beyond the field. "You go at it with an attitude of solving problems. You're very much like a scientist. You don't believe in inspiration... Inspiration is for amateurs. The rest of us just show up and get to work."

- Chuck Close, 2012 Dialogues Between Neuroscience and Society speaker

This year's Dialogues Between Neuroscience and Society series featured prosopagnosic (face-blind) portrait artist and National Medal of Arts winner Chuck Close in "My Life as a Rolling Neurological Clinic."

"You go at it with an attitude of solving problems," said Close of painting with prosopagnosia. "You're very much like a scientist. You don't believe in inspiration... Inspiration is for amateurs. The rest of us just show up and get to work." Through a satellite feed, Close held thousands of attendees rapt with a personal tour of his New York studio and a step-by-step view into his methodology.

Other public lectures discussed the difficulties of incorporating advocacy for healthy brain practices into popular culture and lifestyles when so many societies disregard it, be it



# CALL FOR NOMINATIONS

**DEADLINE:** FEBRUARY 28

NEUROSCIENCE

Shape the future of neuroscience by nominating yourself or a colleague for SfN's volunteer leadership. Elections will follow in the spring. through athletics or policy. The Public Advocacy Forum, "The Developing Brain: How Research and Advocacy Is Shaping Public Policy," made a strong case for the necessities of policy reform based on the prevalence of abuse and neglect in childhood and how that develops over time. The Fred Kavli Public Symposium, "The Societal Impact and Biology of the Overt and Hidden Dysfunctions Resulting from Traumatic Brain Injury," examined how traumatic brain injury affects participants of sports ranging from youth to professionals, as well as veterans returning from war, and how those who have suffered from TBI can develop dramatically different personalities with age.

Chuck Close's talk and the Neuro-science 2012 Public Advocacy Forum can be found at YouTube.com/sfnvideo on the Neuroscience 2012 playlist.

#### **New! GRADUATE SCHOOL FAIR**

Undergraduates and neuroscientists alike flocked to the Society's first-ever Graduate School Fair to meet with 35 different neuroscience graduate programs. The well-attended fair was a great success. Prospective students and graduate schools used the opportunity to meet face-to-face to discuss program offerings for budding neuroscientists. To learn more about SfN's online Neuroscience Training Program Directory and Institutional Program membership or to participate in the Neuroscience 2013 Graduate School Fair, contact ndp@sfn.org.



The new and very popular Graduate School Fair allowed Neuroscience 2012 attendees to connect face-to-face with 35 graduate programs.

## NEUROSCIENCE

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43 trees

19,489 gallons of water

- 1,235 pounds of solid waste
- 4,322 pounds of hazardous effluent



#### Abstract Submission Opens April 18

Submit an abstract for a poster session or nanosymposium.

San Diego

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