

CSR News Flash

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Center for Scientific Review
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A Fourth Neuroscience Integrated Review Group at NIH's Center for Scientific Review

Summary

To coordinate the review of the thousands of grant applications it receives every year, the [Center for Scientific Review](#) (CSR) currently has 23 Integrated Review Groups—clusters of study sections—that are managed by about 240 Scientific Review Administrators (now called “Scientific Review Officers”). Following recommendations from stakeholders, CSR developed plans to create a fourth neuroscience IRG that will be called the “Emerging Technologies and Training in Neurosciences (ETTN) IRG.” The NIH Peer Review Advisory Committee unanimously endorsed these plans at its [August 27, 2007 meeting](#). The ETTN IRG will make a home for 2 new study sections focused on molecular neurogenetics and neurotechnology as well as 10 Special Emphasis Panels to review fellowship and small business grant applications. No current study section will be altered.

The Need for a New Neuroscience IRG

These plans were developed in response to (1) growth in the science, (2) input from leaders of the scientific community who attended a recent [Open House Workshop](#), and (3) increasing workloads at CSR. Establishing a new neuroscience IRG will be primarily a recluster activity as none of the existing chartered study sections in the current neuroscience IRGs will be changed: [Brain Disorders and Clinical Neuroscience](#) (BDCN), [Integrative, Functional, and Cognitive Neuroscience](#) (IFCN), or [Molecular, Cellular, and Developmental Neuroscience](#) (MDCN). The intent is to improve quality and efficiency of review by clustering together such crosscutting applications as neurotechnology, neurogenetics, small business, and fellowships.

This initiative grew out of an examination of review of small groups of R01 and R21 applications in somewhat duplicative Special Emphasis Panels (SEPs). The examination resulted in the recommendation by the NIH Peer Review Advisory Committee to form two new chartered study sections in neurotechnology and neurogenetics. The concept of creating a crosscutting neuroscience IRG arose when CSR could not find a suitable home within the three current neuroscience IRGs for the two new study sections. A new crosscutting neuroscience IRG will not only provide a home for these new study sections but will also reduce heavy workloads in established neuroscience IRGs by incorporating small business and fellowship applications.

Science

Crosscutting neuroscience topics are reviewed in all three existing neuroscience IRGs, e.g., technology, training, and small business. Clustering such applications for peer review will reduce duplication of efforts, which could improve review efficiency. Furthermore, a more integrated review approach, in which multiple facets of a problem may be explored in different applications, may enrich the review perspectives.

* In an announcement issued August 29, 2007, CSR announced plans to name this new IRG the “Emerging Neuroscience and Training” IRG. It was subsequently changed to the “Emerging Technologies and Training in Neurosciences (ETTN) IRG” to better represent the areas it will cover.

Community Interest

At the [CSR neuroscience community Open House](#) (first in a series of six), March 2, 2007, the community cited neurotechnology as an important, emerging area in the next 10 years. The breakout group on Neurotechnology, Neuroimaging, and Neuroinformatics listed a focus on neuroscience as an important aspect of appropriate evaluation of such applications.

On March 12, 2007, a crosscutting Working Group assembled to examine small SEPs spread among the existing neuroscience IRGs recommended clustering of neurotechnology R01/R21 applications into two to three regular study sections that would ensure review in a neuroscience context. [On April 19](#), the PRAC examined the Working Group recommendations and approved formation of two to three new crosscutting study sections for neurotechnology R01/R21 applications, depending on review workloads:

Molecular Neurogenetics Study Section (MNG)

Molecular genetics underlying neural function, with focus on application of genetics in a neuroscience context as in refinement of phenotypes.

Neurotechnology Study Section (NT)

Application of bioengineering to the study and remodeling of the nervous system, including neuroinformatics and imaging, with focus on application of technologies to neuroscience studies. Given sufficient numbers of applications, two regular study sections are recommended, one focusing on neuroengineering, the other on neuroinformatics and imaging.

Quality and Efficiency

If all applications on neuroscience technology are in one IRG, duplication of efforts will be reduced, review of more applications can move from small, relatively inefficient SEPs to regular study sections, use of staff and reviewers can be more efficient, and advice to the funding ICs will be based on broader perspectives. Also, if NIH is moving to review fellowship applications in larger study sections, clustering of fellowship applications will be facilitated by putting them in one IRG.

Management

The existing neuroscience IRGs have 38 Scientific Review Officers (SROs)—formally called Scientific Review Administrators—and PRAC recently approved two more regular study sections in neurotechnology. At present, the three neuroscience IRGs are too large for ideal management (BDCN has 14 SROs, IFCN 11, and MDCN has 13 SROs authorized). Experience and multiple working group analyses indicate that 8-12 SROs per IRG are optimal. Thus, the numbers justify formation of a fourth neuroscience IRG at this time.

Premise of New IRG and New Neurotechnology Study Sections

Existing regular study sections in bioengineering (BST and SBIB), in neuroscience (BDCN, IFCN, and MDCN), and in genetics (GGG) will not be disrupted and will not be sources of applications for the new IRG. The intent is to cluster for better review applications presently reviewed in neuroscience IRG SEPs.

Outline of the New Emerging Neuroscience and Training (ENST) IRG

The existing neuroscience IRG Chiefs (Chris Melchior, Carole Jelsema, and Rene Etcheberrigaray) estimate that a fourth, crosscutting IRG consisting of technology, including the BRP (Bioengineering Research Partnerships) applications, fellowship, and small business applications, will probably have about 600 applications a cycle. Assuming 80 applications per SRO, this will require about eight staff members (one IRG Chief and seven SROs), possibly more depending on workloads and number of SEPs where applications are counted as 1.5 R01 equivalents each.

Tentative Timeline

Shared with Chiefs and neuroscience SROs	early June 2007
Shared with IC Directors	early June 2007
Shared with Open House participants	mid June 2007
Shared with Neuroscience WG and CSR all	mid June 2007
Shared with PRAC subcommittee	July 2007
Endorsed by PRAC	August 27, 2007
Begin recruitment of Chief	late August 2007
Post description of IRG and guidelines	late August 2007
Implementation (first receipt dates)	October 5, 2007
Implementation (first study section meetings)	February 2008

Additional information on the development of this new IRG is available in the associated [PowerPoint](#) presentation given at the August 27, 2007, PRAC meeting.

Present Neuroscience IRGs	Proposed Neuroscience IRGs
<p>BDCN/Brain Disorders and Clinical Neuroscience IRG (14 SROs authorized)</p> <p>Anterior Eye Disease Brain Injury and Neurovascular Pathologies Cell Death in Neurodegeneration Clinical Neuroimmunology and Brain Tumors Clinical Neuroscience and Disease Clinical Neuroplasticity and Neurotransmitters Developmental Brain Disorders Neural Basis of Psychopathology, Addictions, and Sleep Disorders 1 Fellowship panel 3 SBIR panels</p>	<p>BDCN/Brain Disorders and Clinical Neuroscience IRG (est. 11 SROs authorized)</p> <p>Anterior Eye Disease Brain Injury and Neurovascular Pathologies Cell Death in Neurodegeneration Clinical Neuroimmunology and Brain Tumors Clinical Neuroscience and Disease Clinical Neuroplasticity and Neurotransmitters Developmental Brain Disorders Neural Basis of Psychopathology, Addictions, and Sleep Disorders</p>
<p>IFCN/Integrative, Functional and Cognitive Neuroscience IRG (11 SROs authorized)</p> <p>Auditory System Biological Rhythms and Sleep Cognitive Neuroscience Central Visual Processing Neurobiology of Learning and Memory Neurotoxicology and Alcohol Neurobiology of Motivated Behavior Neuroendocrinology, Neuroimmunology, and Behavior Somatosensory and Chemosensory Systems Sensorimotor Integration 2 Fellowship panels 2 SBIR panels</p>	<p>IFCN/Integrative, Functional and Cognitive Neuroscience IRG (est. 9 SROs authorized)</p> <p>Auditory System Biological Rhythms and Sleep Cognitive Neuroscience Central Visual Processing Neurobiology of Learning and Memory Neurotoxicology and Alcohol Neurobiology of Motivated Behavior Neuroendocrinology, Neuroimmunology, and Behavior Somatosensory and Chemosensory Systems Sensorimotor Integration</p>
<p>MDCN/Molecular, Cellular and Developmental Neuroscience IRG (13 SROs authorized)</p> <p>Cellular and Molecular Biology of Glia Cellular and Molecular Biology of Neurodegeneration Synapses, Cytoskeleton and Trafficking Neural Oxidative Metabolism and Death Biophysics of Neural Systems</p>	<p>MDCN/Molecular, Cellular and Developmental Neuroscience IRG (est. 10 SROs authorized)</p> <p>Cellular and Molecular Biology of Glia Cellular and Molecular Biology of Neurodegeneration Synapses, Cytoskeleton and Trafficking Neural Oxidative Metabolism and Death Biophysics of Neural Systems</p>

Neurotransporters, Receptors, Channels and Calcium Signaling Molecular Neuropharmacology and Signaling Neurogenesis and Cell Fate Neurodifferentiation, Plasticity, and Regeneration 2 Fellowship panels 1 SBIR panel	Neurotransporters, Receptors, Channels and Calcium Signaling Molecular Neuropharmacology and Signaling Neurogenesis and Cell Fate Neurodifferentiation, Plasticity, and Regeneration
	ETTN/Emerging Technologies and Training in Neurosciences IRG (est. 8 SROs authorized) Molecular Neurogenetics Neurotechnology 5 Fellowship panels 6 SBIR panels