



**NEUROSCIENCE 2012**



**SEE YOU IN NEW ORLEANS**  
**OCTOBER 13–17, 2012**

**SfN**  
SOCIETY FOR NEUROSCIENCE



The Department of Anesthesiology at the University of Florida is recruiting for a prominent PhD neuroscientist for a tenure or non-tenure track Associate or Full Professor. Applicants should currently have significant federal funding, including being PI on one or more NIH grants of the R01, P or U series that complement existing clinical interests in chronic pain. Focus areas may include changes in ion channels leading to congenital analgesia, channel mutations resulting in extreme pain disorders, other electrophysiological disorders, etc. Via these skill sets, the successful applicants will directly participate and foster neuro-related basic and clinical research, a strategic area of interest to the College of Medicine and University. In addition, the applicant should be integrated into the national network of pain researchers studying these phenomena.

Interested individuals should respond by April 29, 2012, please send your CV to: Mary Ann Hoyt, Office Manager, Department of Anesthesiology, PO Box 100254, Gainesville FL 32610-0254 or e-mail [mhoyt@anest.ufl.edu](mailto:mhoyt@anest.ufl.edu).

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## PETER & PATRICIA GRUBER INTERNATIONAL RESEARCH AWARD IN NEUROSCIENCE

Supported by the Peter & Patricia Gruber Foundation

The Society for Neuroscience announces the call for nominations for the Peter & Patricia Gruber International Research Award in Neuroscience, recognizing two young neuroscientists for outstanding research and educational pursuit in an international setting.



DEADLINE: MAY 18, 2012

[www.sfn.org/pgi](http://www.sfn.org/pgi)

## DONALD B. LINDSLEY PRIZE IN BEHAVIORAL NEUROSCIENCE

Supported by The Grass Foundation

The Society for Neuroscience announces the call for nominations for the Donald B. Lindsley Prize in Behavioral Neuroscience, recognizing an individual for his or her outstanding PhD thesis in the area of behavioral neuroscience.



DEADLINE: MAY 18, 2012

[www.sfn.org/lindsley](http://www.sfn.org/lindsley)

# Enhanced media system for electrophysiology

## Improved spike rates in multielectrode arrays

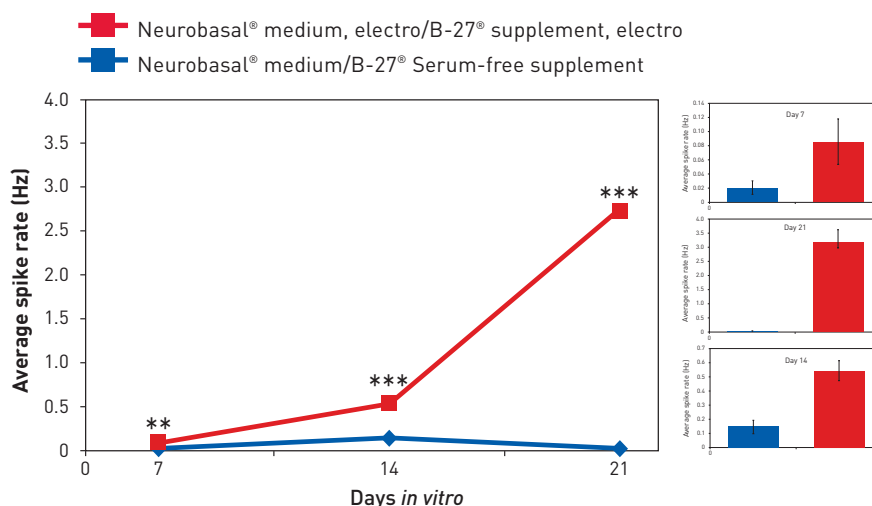
Primary neuronal cells cultured *in vitro* are an indispensable model for understanding the complex functions of the nervous system and how different disease states may impair a neuron's ability to fire properly or at all. Critical to this type of research is the establishment and maintenance of the cells' electrical activity because it is through electrical activity, that neurons communicate with each other as well as with muscles and other organs.

Historically, researchers culturing neuronal cells have used adapted traditional media and supplement combinations for their electrophysiology experiments. However, using traditional methods for this specific readout may not provide results as optimal as a specialized media system designed for electrophysiology. Life Technologies has designed the B-27® Electrophysiology Kit, which provides an ideal media system to measure electrical activity of neuronal cells. The B-27® Electrophysiology Kit includes optimized variations of B-27® Serum-Free Supplement and Neurobasal® Media designed to enhance spike rates

in neuronal cultures and improve the efficiency of multielectrode arrays used in neurotoxicology and neuropharmacological studies (Figure 1).

The B-27® Electrophysiology Kit promotes higher spike rates by a mechanism involving greater synaptogenesis, reflected by increased immunocytochemical marker expression of pre- and post-synaptic proteins. Additionally, neurite outgrowth is enhanced and cell survival is equivalent compared to a traditional media combination of B-27® Serum-Free Supplement and Neurobasal® Medium. Adding to the convenience of the B-27® Electrophysiology Kit, researchers can follow the same protocol used for other products in the B-27® product family.

View a scientific poster that presents a comparison of a traditional media system to the B-27® Electrophysiology Kit at [lifetechnologies.com/b27electro](http://lifetechnologies.com/b27electro)



**Figure 1. Measurement of electrical activity.** A multielectrode array was used to measure spontaneous spike rates. Hippocampal neurons cultured using the B-27® Electrophysiology Kit produced higher spike rates compared to neurons cultured in a traditional media system of Neurobasal® Medium and 2% B-27® Serum-Free Supplement. Day 7 = 4.2, day 14 = 3.4 fold and day 21 = 78-fold increase; n=2, \*\* denotes  $p < 0.001$ , \*\*\* denotes  $p < 0.0001$ .





## JANETT ROSENBERG TRUBATCH CAREER DEVELOPMENT AWARD

*Supported by the Trubatch Family*

The Society for Neuroscience announces  
the call for nominations for the  
Career Development Award, recognizing two  
young neuroscientists who have demonstrated  
originality and creativity in research.



**DEADLINE: MAY 18, 2012**  
[www.sfn.org/cda](http://www.sfn.org/cda)



## YOUNG INVESTIGATOR AWARD

*Supported by AstraZeneca*

The Society for Neuroscience announces  
the call for nominations for the  
Young Investigator Award, recognizing  
a young neuroscientist's outstanding  
achievements and scientific contributions.



**DEADLINE: MAY 18, 2012**  
visit [www.sfn.org/yia](http://www.sfn.org/yia)



## PATRICIA GOLDMAN-RAKIC HALL OF HONOR

The Society for Neuroscience announces  
the call for nominations for the  
Patricia Goldman-Rakic Hall of Honor,  
posthumously recognizing an outstanding  
neuroscientist who pursued career excellence  
and exhibited dedication to the advancement  
of women in the field of neuroscience.



**DEADLINE: MAY 25, 2012**  
[www.sfn.org/rakic](http://www.sfn.org/rakic)



## BERNICE GRAFSTEIN AWARD FOR OUTSTANDING ACCOMPLISHMENTS IN MENTORING

*Supported by Bernice Grafstein, PhD*

The Society for Neuroscience announces the call  
for nominations for the Bernice Grafstein Award  
for Outstanding Accomplishments in Mentoring,  
recognizing an individual who has shown a  
dedication to promoting women's advancement  
in the field of neuroscience and who has made  
outstanding accomplishments in mentoring.



**DEADLINE: MAY 25, 2012**  
[www.sfn.org/grafstein](http://www.sfn.org/grafstein)





## LOUISE HANSON MARSHALL SPECIAL RECOGNITION AWARD

The Society for Neuroscience announces the call for nominations for the Louise Hanson Marshall Special Recognition Award, recognizing an individual who has significantly promoted the professional advancement of women in the field of neuroscience through teaching, organizational leadership, and other efforts not necessarily related to research.

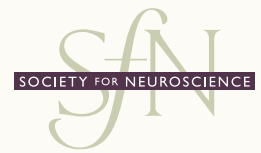


DEADLINE: **MAY 25, 2012**  
[www.sfn.org/marshall](http://www.sfn.org/marshall)



## MIKA SALPETER LIFETIME ACHIEVEMENT AWARD

The Society for Neuroscience announces the call for nominations for the Mika Salpeter Lifetime Achievement Award, recognizing an individual with outstanding career achievements in neuroscience and contributions to the professional advancement of women in the field.



DEADLINE: **MAY 25, 2012**  
visit [www.sfn.org/salpeter](http://www.sfn.org/salpeter)



## SCIENCE EDUCATOR AWARD

The Society for Neuroscience announces the call for nominations for the Science Educator Award, recognizing an individual who has made significant contributions to educating the public about neuroscience.

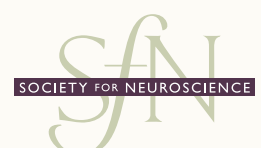


DEADLINE: **JUNE 1, 2012**  
[www.sfn.org/sea](http://www.sfn.org/sea)



## AWARD FOR EDUCATION IN NEUROSCIENCE

The Society for Neuroscience announces the call for nominations for the Award for Education in Neuroscience, recognizing outstanding contributions to neuroscience education and training.



DEADLINE: **JUNE 1, 2012**  
[www.sfn.org/aen](http://www.sfn.org/aen)



## JULIUS AXELROD PRIZE

*Supported by Eli Lilly and Company Foundation*

The Society for Neuroscience announces the call for nominations for the Julius Axelrod Prize, honoring distinguished achievements in neuropharmacology and mentoring.



**DEADLINE: JUNE 8, 2012**

[www.sfn.org/axelrod](http://www.sfn.org/axelrod)



## RALPH W. GERARD PRIZE IN NEUROSCIENCE

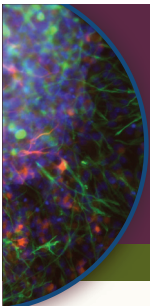
*Supported by Lilly USA, LLC*

The Society for Neuroscience announces the call for nominations for the Ralph W. Gerard Prize, the highest recognition conferred by the Society, honoring an outstanding neuroscientist who has made significant contributions to the field over the course of his or her career.



**DEADLINE: JUNE 8, 2012**

[www.sfn.org/gerard](http://www.sfn.org/gerard)



## SWARTZ PRIZE FOR THEORETICAL AND COMPUTATIONAL NEUROSCIENCE

*Supported by The Swartz Foundation*

The Society for Neuroscience announces the call for nominations for the Swartz Prize for Theoretical and Computational Neuroscience, recognizing significant contributions or advances in theoretical or computational neuroscience.



**DEADLINE: JUNE 8, 2012**

[www.sfn.org/swartz](http://www.sfn.org/swartz)



## THE JACOB P. WALETZKY AWARD

*Supported by the Waletzky Family*

The Society for Neuroscience announces the call for nominations for the Jacob P. Waletzky Award, presented to a scientist who has conducted or plans to conduct research in the area of substance abuse and the brain and nervous system.



**DEADLINE: JUNE 8, 2012**

[www.sfn.org/waletzky](http://www.sfn.org/waletzky)



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# *The Journal of Neuroscience*

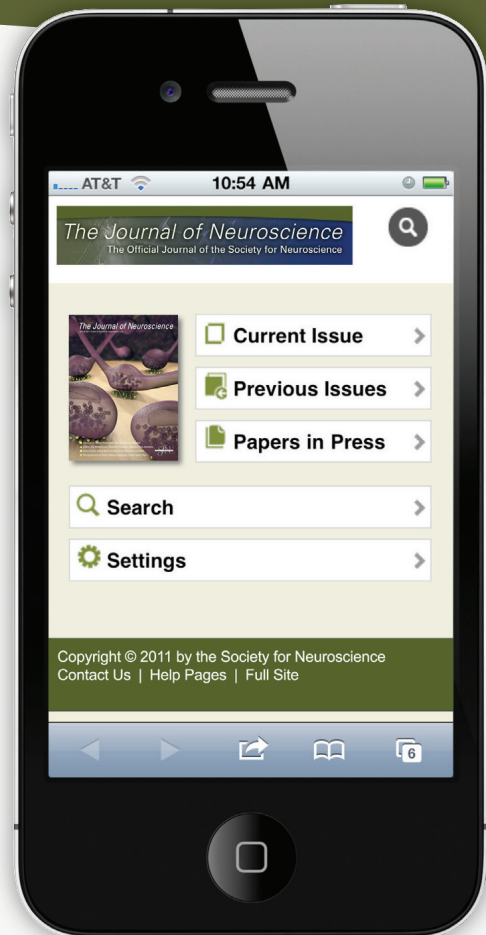
The Official Journal of the Society for Neuroscience

Launching in Spring 2012

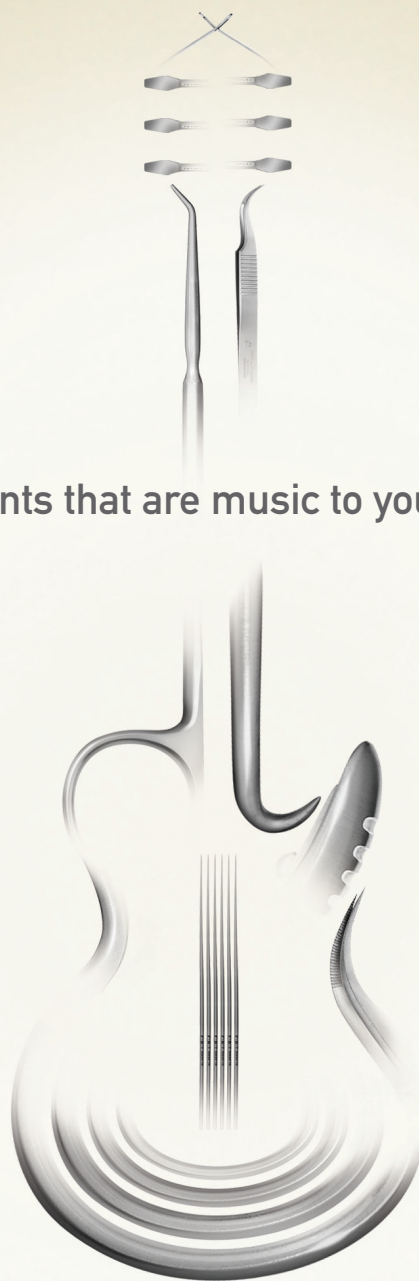
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