NEUROSCIENCE **2012**

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OCTOBER 13–17, 2012

SOCIETY FOR NEUROSCIENCE

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.

SOCIETY FOR NEUROSCIENCE

Deadline: May 18, 2012

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.

SOCIETY FOR NEUROSCIENCE

Deadline: May 18, 2012

www.sfn.org/lindsley

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.

SOCIETY FOR NEUROSCIENCE

Deadline: May 18, 2012

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.

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Deadline: May 18, 2012

visit 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.

SOCIETY FOR NEUROSCIENCE

Deadline: May 25, 2012

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.

SOCIETY FOR NEUROSCIENCE

Deadline: May 25, 2012

www.sfn.org/grafstein

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Enhanced media system for electrophysiology

Improved spike rates in multielectrode arrays

Primary neuronal cells cultured *in vitro* are an indispensible 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-syanaptic 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**

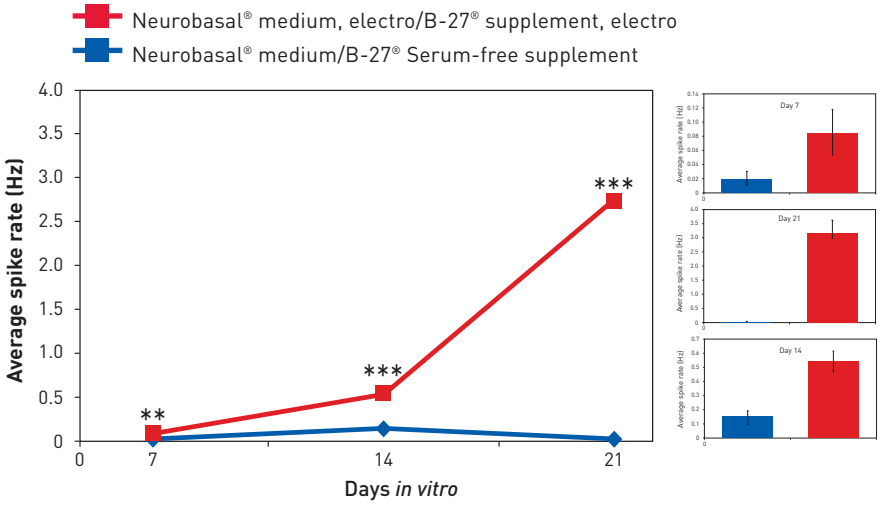

Figure 1. Measurement of electrical activity. A multielectrode array was used to measure spontaneous spike rates. Hippocampal neurons cultured using the B-27® Electrophysiology Kit produced higher spike rates compared to neurons cultured in a traditional media system of Neurobasal® Medium and 2% B-27® 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.

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