**Submitted on** Sunday, 3/15/2015 2:16 PM

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I am a current member of the ASNR (Symposium organizers must be ASNR members): Yes

Title of Symposium: Axonal Sprouting and Growth after Neural Injury

Description of Submitted Symposium (please limit to 2000 characters): Nervous system injury induces a restorative response in brain, spinal cord and peripheral nerve. This response consists in part of axonal sprouting and the establishment of new connections within the nervous system or a reconnection with lost targets. Axonal sprouting has been linked to recovery of sensorimotor function but may also be responsible for "positive phenomena" such as spasticity, neuropathic pain or autonomic dysfunction. This symposium brings together experts in the field of axonal sprouting after nervous system injury to discuss the latest scientific developments in axonal sprouting in stroke, spinal cord injury and peripheral nerve nerve injury and the pathway to translating these into clinical therapies. Dr. Larry Benowitz will describe his work in axonal sprouting from the motor cortex after spinal cord injury and molecules that stimulate this process and enhance motor recovery. Dr. Keith Tansey will describe pain afferent axonal sprouting within the spinal cord and the relationship to abnormal nociceptive and autonomic responses after spinal cord injury. Dr. Shelly Sakiyama-Elbert will describe novel bioengineering approaches that enhance axonal sprouting and recovery in peripheral nerve injury. Dr. S. Thomas Carmichael will describe molecular systems that control axonal sprouting after stroke and lead to enhanced function.

Length of time required for symposium?: 2 hours

Additional Presenters (Limited to 4 additional presenters, list full name and email address) Please Note: Any Non-member speakers must receive prior approval from the Program Chair.: Larry Benowitz, Benowitz, <u>larry.Benowitz@childrens.harvard.edu</u> Keith Tansey, <u>ktansey@emory.edu</u> Shelly Sakiyama-Elbert, <u>sakiyama@wustl.edu</u>

What is the role of each presenter?: Each presenter will cover a different aspect of axonal sprouting in nervous system injury: axonal sprouting within the cerebral hemisphere after stroke, axonal sprouting from cortex into spinal cord after spinal cord injury, axonal sprouting of sensory afferents within the spinal cord after spinal cord injury, and peripheral nerve axonal sprouting with tissue bioengineering applications.

**Objective 1:** To understand how the formation of new connections leads to tissue repair after nervous system injury.

**Objective 2:** To identify how the body controls and limits the formation of new connections after nervous system injury.

**Objective 3:** To understand emerging therapeutics that stimulate axonal sprouting and recovery after nervous system injury.

Target Audience: physicians, occupational, physical and cognitive therapists

Type of Educational Activity: Symposia

Lecture - oral didactic presentation: Yes

Forum - open dialogue and discussion among all participants: Yes

Panel Discussion - 3 to 6 faculty engaged in dialogue: No

**Please explain:** To allow experts to present the latest research and then have a dialogue with the audience.

Please explain: NA

How do you know the practice gap exists? (You must answer this question for your symposium to be considered): Other

**Please describe:** 

What Desirable Physician Attribute(s) will your symposium address? (Select all that apply): Patient care

At the end of the educational session, what will your learners have gained? (check all that apply - you must answer this question for your symposium to be considered): Knowledge (information)

Please indicate any other needs for the symposium.:

By clicking "submit form" below, I agree to adhere to all deadlines and requirements as set forth by the ASNR Executive Office and understand if I do not adhere to these deadlines and requirements I may be disqualified from presenting at the meeting.:

Line:

Response ID: 1555