



January 18, 2013

Linda Porter, Ph.D.  
Health Science Policy Advisor for Pain  
National Institute of Neurological Disorders and Stroke  
National Institutes of Health  
31 Center Drive  
Bethesda, MD 20892

Re: Nomination for Interagency Pain Research Coordinating Committee

Dear Dr. Porter,

The American Society of Anesthesiologists (ASA), representing over 48,000 members, is pleased to nominate Gary Brenner, M.D., Ph.D., for the Interagency Pain Research Coordinating Committee (IPRCC) at the National Institutes of Health (NIH). ASA believes that Dr. Brenner possesses the crucial experience and expertise including the advancement of pain care research that the IPRCC seeks.

Dr. Brenner's academic activities are divided between fundamental and translational neuroscience research, clinical duties in the Massachusetts General Hospital (MGH) Department of Anesthesia, teaching and national advocacy for the advancement of pain training. All of these activities are inter-related through their focus on pain medicine science, clinical care, education, and national advocacy.

Dr. Brenner's initial research at MGH focused on the contribution of changes in NMDA-R phosphorylation state and subcellular trafficking to the development of central sensitization. A second focus was the intracellular transduction pathways responsible for altered NMDA-R structure and function. This and other work related to pain sensitization was NIH-funded and conducted under the mentorship of Clifford J. Woolf, M.D., Ph.D., an internationally renowned neuroscientist who focuses on neuroplasticity as it relates to pain.

Dr. Brenner's more recent research efforts have focused on sensory systems, both peripheral and central, and have included the role of immune mechanisms in the generation of central sensitization; the role of bone morphogenetic protein (BMP) signaling pathways in peripheral nerve regeneration; investigation of putative pain-processing pathways in the brain via virally-delivered optical channels (i.e., 'optogenetic' modulation using channel rhodopsin and halorhodopsin); and the generation of a novel mouse-models of neurofibromatosis (NF) and the development of new therapeutic strategies – in particular, gene therapy – for the treatment of these peripheral nervous system tumors. Dr. Brenner's interest in neurofibromatosis stems from his clinical practice; MGH is a major NF treatment center and Dr. Brenner has multiple patients with persistent, severe pain caused by this disease. In 2012, Dr. Brenner was awarded an R01 by NINDS to investigate the mechanisms through which viral vector delivered caspase-1 leads to destruction

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of NF tumors. These studies are related as they all involve investigation of the response of peripheral and central sensory systems to injury, and all ultimately seek to improve the care of individuals with pain.

Dr. Brenner's primary clinical responsibility is at the MGH Center for Pain Medicine within the Department of Anesthesia and Critical Care. Since 2002, he has been the Program Director of the MGH Pain Medicine Fellowship and is responsible for the organization, oversight, and development of this ACGME-accredited training program. During his tenure as Program Director, the fellowship has grown both in number of trainees and in the scope of outside departments and institutions in which the fellows train, including neurology, neurosurgery, physiatry, palliative care, radiology, and orthopedic spine. In addition, Dr. Brenner developed a year-long course for Pain Medicine Fellows that focuses on the fundamental neuroscience underlying the practice of pain medicine, as well as a novel medical simulation-based training program designed to improve the ability of pain fellows to respond to critical events that can occur during out-patient interventional pain practice. A manuscript related to this training program was recently published in the journal *Anesthesia and Analgesia*.

Finally, through involvement in two national organizations, Dr. Brenner works towards the continued development of pain medicine training at the national level. He was elected to the Board of Directors and is President of the National Association of Pain Medicine Program Directors. He is also currently serving the elected position of President of the Association of Anesthesiology Subspecialty Program Directors (AASPD) and is a member of the governing board of the AASPD's parent organization - the Society of Academic Anesthesiology Associations.

If selected to serve on the IPRCC, Dr. Brenner is enthusiastically willing to serve and commit to the meetings required.

ASA is pleased to have the opportunity to nominate Dr. Brenner to the IPRCC and hopes that the IPRCC will seriously consider his appointment. Dr. Brenner is a recognized leader in pain medicine and provides a diverse and broad expertise that will benefit the important mission of the committee. If you have any questions, please do not hesitate to let me know.

Sincerely,



John Zerwas, M.D.  
President  
American Society of Anesthesiologists