

The 7th Kaua'i Pain Conference Online March 5-6, 2021

Exhibit Hall -
Resources/Meetings/Handouts

ePoster Hall

Conference Challenge

Discuss Neuromodulation

Discuss Regenerative Medicine

Discuss Pain Management & COVID-19

Discuss Diversity & Inclusion

System Checker

Technical Support

Abstract
Resources

Download the Poster and Abstract under the "Resources" button.

Stellate Ganglion Block (SGB), a procedure that has been in use for conditions such as chronic regional pain syndrome for nearly a century, involves injection of local anesthetic into the base of the neck near the C7 transverse process to cause a temporary blockade of this sympathetic ganglion. In recent years, there has been strong anecdotal evidence that SGB can reduce PTSD symptoms without the drawbacks of standard PTSD treatments. This poster presents initial findings from the first (to our knowledge) large-scale, federally funded, randomized, controlled trial, to formally assess the effectiveness of SGB for treatment of PTSD symptoms, as well as a qualitative acceptability study.

Category: Clinical Advancements in pain management/Therapeutic options for acute or chronic pain

Disclosure: Conflict of Interest Disclosures: None.

DISCLAIMER: The views expressed in this abstract/manuscript are those of the author(s) and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the US Government

Authors

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2. Bradford B. Walters, MD, PhD; RTI International, Research Triangle Park, NC
3. Kristine L. Rae Olmsted, MSPH; RTI International, Research Triangle Park, NC

**Stellate Ganglion Block for Post-traumatic Stress Disorder Symptoms:
A Randomized Clinical Trial**

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Kristine Rae Olmsted, MSPH, Bradford B. Walters, MD, PHD, RTI International, Research Triangle Park, NC.

Abstract

Posttraumatic Stress Disorder (PTSD) affects between 10 and 20 percent of active duty service members. Compliance with standard treatments for PTSD is challenged by delays in effectiveness, negative side effects, stigma associated with the condition and its treatment, and poor treatment adherence.

Stellate Ganglion Block (SGB), a procedure that has been in use for conditions such as chronic regional pain syndrome for nearly a century, involves injection of local anesthetic into the base of the neck near the C6 or C7 transverse process to cause a temporary blockade of this sympathetic ganglion. In recent years, there has been strong anecdotal evidence that SGB can reduce PTSD symptoms without the drawbacks of standard PTSD treatments. This presentation will describe initial findings from the first large-scale, federally funded, randomized, controlled trial, to formally assess the effectiveness of SGB for treatment of PTSD symptoms.

Design

Randomized Controlled Trial A total of 113 participants were randomized 2:1 across three study locations to either an active

Methods

Figure 1 Study Flowchart: Enrollment and use in follow-up effort stage

Measures

PTSD: CAPS-1, PCL-5, PCL-C
Suicidal Ideation: Selected items from the M.I.N.I.-Plus
Alcohol Use: AUDIT-C/AUDIT
Psychological Distress: K6
Depression: PHQ-9
Generalized Anxiety: GAD-7
Physical and mental functioning: SF-12
Pain: Numeric pain scale

Results

Unadjusted Means and Effect Size for Primary and Secondary Outcomes by Treatment Groups

Outcome Measure	SGB (n=75)	Sham (n=38)	Effect Size (d)
Primary Outcome: CAPS-1 Total Score	11.02 (14.25)	11.02 (14.25)	0.00
Secondary Outcome: CAPS-1 Total Score	11.02 (14.25)	11.02 (14.25)	0.00

Results

Figure 2 Unadjusted Clinician-Administered Posttraumatic Stress Disorder Scale for SGB & CAPS-1 Total Symptom Severity Scores at Baseline and Week 8 by Treatment Group

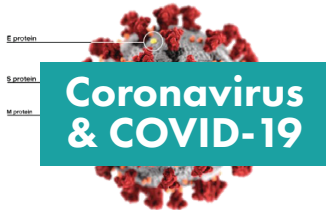
Abstract Guide

DUE: Jan 31, 2021

Completed abstracts must be submitted via email in .pdf or Word format to
Education@Neuroventions.com by 11:59 PM, PDT, Sunday, January 31, 2021.

Kaua'i Pain Goes ONLINE

Expanding our 'ohana (family)



Since the beginning of 2020, we've been monitoring the research and restrictions pertaining to the SARS-CoV-2 virus and COVID-19. In fact, the Kaua'i Pain Conference was the first CME conference to include education for learners to prepare for the impending pandemic - and we're so glad to have produced that session.

This has been a difficult year. For a while, it appeared that the situation was improving. We worked extensively with the venue, the Hawai'i Department of Health, and local government officials. We wanted to bring you an in-person conference, but now is not the time. The 2021 Kaua'i Pain Conference will be entirely [ONLINE](#), but mark your calendars for March 4-5, 2022 because we can hardly wait to see you in person.

Fortunately, innovation is at the heart of Neuroventions. In August, we conducted the first all-digital format pain conference, the 2020 Napa Pain Conference Online, and it was an astounding success. Over 1,300 attendees from 34 countries registered for that engaging, educational activity. The ePoster hall shared research before, during, and after the conference. Today, all visitors to the [Neuroventions Education Hub](#) can [download copies](#) of the posters and abstracts, keeping the content alive.

Participants remained engaged and enthusiastic throughout the conference, and enjoyed the many opportunities to interact with their colleagues through real-time chats, networking directories, discussion forums, and direct messaging.

We've developed exciting ways to replicate the interactivity of a Poster Hall, providing attendees with downloadable abstracts, ePosters, and options to virtually chat with the authors and collaborators. After the conference, attendees will gain access to copies of the complete ePoster materials and an archive will be published to the Kaua'i Pain Conference section of the Neuroventions Education Hub.

Abstracts will be collected from December 1, 2020 to January 31, 2021. Share your research, clinical outcomes, quality improvement initiatives, practice improvements, or patient care strategies at one of the nation's most unique pain conferences. Each selected work will be presented with a dedicated page that includes the ePoster, title, summary, and abstract.

Submitters will be notified by February 12, 2021 of acceptance. The outcome of each abstract review will be emailed to the primary author listed on the abstract by Friday, February 12, 2021.

About the Kaua'i Pain Conference

Expanding our 'ohana (family)



Now in its 7th year, the Kaua'i Pain Conference (KPC) has blossomed into the premier pain conference on the Hawaiian Islands. The conference has grown 30% year over year, and we're excited to bring this stellar conference to the entire world through online learning.

KPC connects the best and brightest minds in the fields of pain management and neuroscience with learners and public policy officials. Learn the latest in the treatment of chronic pain and emerging therapies,

GUIDING PRINCIPLES

The success of KPC is rooted in creating and serving a community devoted to:

- Diversity
- Equality
- Inclusion
- Collaboration
- Independence
- Unbiased information
- The strongest science

At Neuroventions, we fundamentally believe in diversity and inclusion in our workforce, in our decision-making, and in how we care for patients. We celebrate all of our employees and believe this is critical for innovation and to achieve the best care for every patient. Our unwavering mission is to inspire hope and to contribute to the health and well-being of our patients and communities through integrated clinical practice, research, and education.



Eric J. Grigsby, MD, MBA founded the Kaua'i Pain Conference in 2015 while establishing the Spine & Pain Center of Kaua'i. Dr. Grigsby recognized the need for a conference where everyday practitioners could get together, build a community, and share stories, successes, and challenges in treating persons with chronic pain.

SUPPORTING Global Innovation

The Kaua'i Pain Conference benefits the HealthRoots Foundation for Global Health, a 501(c)(3) corporation supporting health initiatives in low-resource communities around the world.

PRODUCED BY Neuroventions Education

Neuroventions Education designs national conferences in pain, neuroscience, the management of chronic conditions, and emerging medicine. We take pride in creating world-leading opportunities for learning, collaboration, and networking.

Scientific Poster Hall

Distributing the latest research



Medical providers continue to seek the latest breakthroughs and clinical strategies. Researchers continue innovating. We're working with our digital vendor and other pain societies to fill the void and deliver a poster hall of the highest caliber.

Abstracts

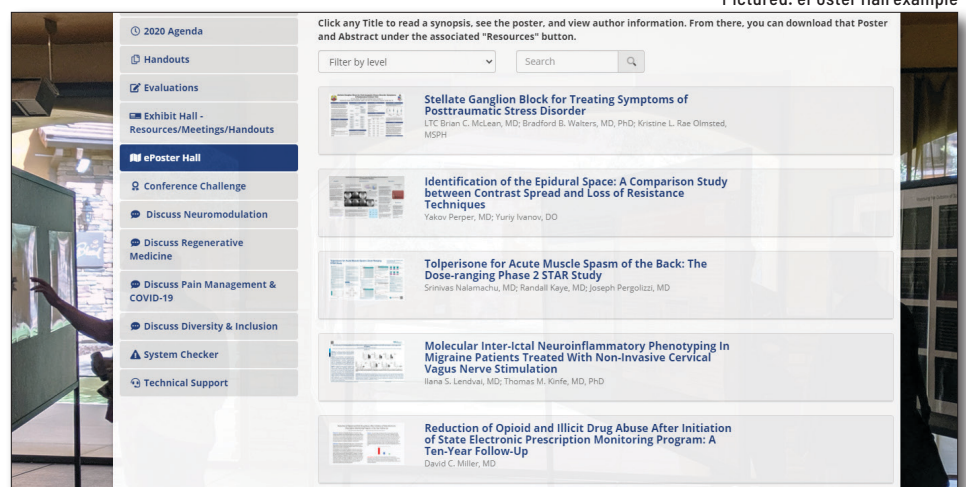
COLLECTED DEC 1 - JAN 31

Share your research, clinical outcomes, quality improvement initiatives, practice improvements, or patient care strategies at one of the nation's most prestigious pain conferences.

NOTIFICATION: FEB 12

The outcome of each abstract review will be emailed to the primary author listed within the abstract by Friday, February 12, 2021.

Pictured: ePoster Hall example



PUBLISHED ONLINE

Posters will be viewable in the ePoster Hall.

Each selected work will be presented with a dedicated page that includes the ePoster, title, summary, and abstract.

We're working to include pre-recorded presentations by some authors. Stay tuned for additional information.

Preparing Your Abstract

Put your best foot forward



For uniformity, ease of review, and eventual presentation to learners, each abstract must follow this same format and contain each of the necessary components.

Send your abstracts in two (2) pages with the following sections.

Page 1

TITLE

What do you call this project?

- Be descriptive, concise, and avoid brand/trade names whenever possible.

SYNOPSIS

Limited to 100 words

- If selected as an ePoster, this will display alongside the poster.
- Don't worry about being redundant to information in the abstract, this high-level overview should summarize the project, results, and purpose.

AUTHORS

Who performed the work?

- If there is more than one author, provide a note identifying the Primary/Submitting author. This person must be able to answer questions, provide revisions, and communicate with organizers of the Kaua'i Pain Conference.
- The Primary Author must register for, and attend the conference.
- Abstracts must include information for each author (**Name, Company, Position, Mailing Address, Phone Number, Email**); however, contact information will not be published to attendees.

CATEGORIES

Select from the categories listed on page 7.

Preliminary Investigation Of A Novel Ultrahigh-Frequency Stimulation Paradigm At Dorsal Root Ganglion In Patients With Intractable Back Pain And/Or Leg Pain

Synopsis

High-frequency spinal cord stimulation (SCS) at 10 kHz could provide better efficacy at reducing back and leg pain than traditional SCS and does not produce paresthesia. We thus hypothesized that an implantable modality with ultra-high frequency pulses (UHF 500 kHz) at the DRG level may produce equal effects. We conducted the DRG study with IRB approval. The averaged baseline VAS was 6.4 ± 1.1 . The most significant pain reduction (VAS: 3.0 ± 1.1 , $p < 0.001$) occurred one day after stimulation and 4 cases showed pain reduction $> 70\%$. The responsive duration (with reduction $> 50\%$) was from 3 days to over 2 weeks. We still need evidence from double-blinded, randomized control studies to prove this hypothesis.

Authors

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Associate Professor, School of Medicine, China Medical University, Taichung, Taiwan

Category

Bioelectronic medicine, including neurostimulation

Disclosure

Nothing to disclose by any author.

DISCLOSURES

Work submitted for presentation must include an acknowledgment of funding sources of commercial nature, and/or consulting or holding of significant equity in a company that could be affected by the results of the study.

Even if indicated elsewhere in the abstract, the last sentence of the abstract should read "funded by..." and/or "equity in..."

If nothing to disclose, state "Nothing to disclose by any author(s)."

Disclosure of funding and/or relationships must not include company logos (text only).

Preparing Your Abstract

Follow the guidelines



Page 2

TITLE

Repeat the title.

PURPOSE

Answer the question:

- Why was this study/research performed?

METHODS

Answer the question:

- How has this problem been studied?

RESULTS

Answer the question:

- What was the outcome or data and statistical analysis?

DISCUSSION

Answer the question:

- What is the relevance to clinical practice or future research?

REFERENCES

References should use the styles below.

CITATIONS IN THE BODY OF THE PAPER

Cite each source in numerical order using superscript Arabic numerals (1, 2, 3...).

Example 1: A review of regulations has been complete by the WHO.¹⁵

Example 2: The data were as follows^{3,5}:

Example 3: As previously reported,^{11-14, 25}

Preliminary Investigation Of A Novel Ultrahigh-Frequency Stimulation Paradigm At Dorsal Root Ganglion In Patients With Intractable Back Pain And/Or Leg Pain

Purpose

High-frequency spinal cord stimulation (SCS) at 10 kHz could provide better efficacy at reducing back and leg pain than traditional SCS and does not produce paresthesia.⁴ Another high-frequency example in use is dorsal root ganglion (DRG) stimulation with pulsed radiofrequency paradigm (500 kHz), which exerts temporary analgesia. We thus hypothesized that an implantable modality with ultra-high frequency pulses (UHF) at the DRG level may produce equal effects.

Methods

We conducted the DRG study with IRB approval. Eligible patients with intractable back and/or leg pain (with average pain score VAS-ave >5) were included. Only one electrode was implanted and stimuli were sequentially increased but limited below 9 mA, 5-min in duration, and maximally three stimuli during 2 implantation days for safety concern. The lead was implanted for 2 days and was explanted before discharge. Feeling of paresthesia, leg motor function, pain scores, and analgesics medication were evaluated pre- and post-stimulation.

Results

Eleven eligible patients were enrolled and 8 cases (5 males) completed the study. Seven cases were diagnosed with failed back surgery syndrome. The averaged baseline VAS was 6.4 ± 1.1 . The most significant pain reduction (VAS: 3.0 ± 1.1 , $p < 0.001$) occurred one day after stimulation and 4 cases showed pain reduction >70%. The responsive duration (with reduction >50%) was from 3 days to over 2 weeks. The analgesic medications (NSAID, opioid, and antiepileptics) were reduced but no statistical significance. No severe adverse events (SAE) was present. Most AEs were injection-induced local pain (about 30%) were mild and resolved before the end of study.

Discussion

This is a pilot and the first study to date demonstrating intermittent UHF pulsed at the DRG is safe, paresthesia-free, efficacious in attenuating back pain and leg pain, and can normalize functionality. Each stimulus produces temporary analgesia for days, implicating no continuous electrostimulation is necessary. These findings are compatible with our preclinical studies and worthy of developing next generation of a power-saving or battery-free DRG stimulation.

References

1. Kapural L, Yu C, Doust MW, et al. Comparison of 10-kHz High-Frequency and Traditional Low-Frequency Spinal Cord Stimulation for the Treatment of Chronic Back and Leg Pain: 24-Month Results From a Multicenter, Randomized, Controlled Pivotal Trial. *Neurosurgery*. Nov 2016;79(5):667-677.
2. Huang RY, Liao CC, Tsai SY, et al. Rapid and Delayed Effects of Pulsed Radiofrequency on Neuropathic Pain: Electrophysiological, Molecular, and Behavioral Evidence Supporting Long-Term Depression. *Pain Physician*. Feb 2017;20(2):E269-E283.

CITATIONS IN THE REFERENCE LIST

List references numerically in the order by which they were cited in the text.

Example 1: 1. Rainier S, Thomas D, Tokarz D, et al. Myofibrillogenesis regulator 1 gene mutations cause paroxysmal dystonic choreoathetosis. *Arch Neurol*. 2004;61(7):1025-1029.

Example 2: 2. Weiss R. The promise of precision prescriptions. *Washington Post*. June 24, 2000:A1. www.washingtonpost.com. Accessed October 10, 2001.

Sorting Your Content

Facilitating review & publication



The Program Committee is accepting original abstracts in the following categories. If your work doesn't fit within an established category, please submit it under "Miscellaneous" for review.

Categorization

Indicate your content category when submitting your abstract. This helps the Program Committee to assign your abstract to the most appropriate reviewers, and to construct unified and logical sessions at the conference.

- Quality Improvement (QI) initiatives undertaken at your institution that improved clinical care, service, cost or patient outcomes
- Advances in practice management, including implementation of EHR and transitioning to ICD-10
- Improving patient communications and/or adherence to treatment plans
- Clinical advancements in pain management
- Therapeutic options for acute or chronic pain
- Safe prescribing
- Cancer pain
- Targeted drug delivery
- Bioelectronic medicine, including neurostimulation
- Regenerative medicine
- Opioid use disorder and overdose treatment, including buprenorphine and naloxone
- Miscellaneous (doesn't fit within established categories)
- COVID-19

If necessary, include a second category to ensure that your abstract is sent to the optimal combination of reviewers relevant to the content of your abstract. Not every abstract fits neatly into a single category and the identification of a secondary category might be helpful during the review and program construction process.

Submitting Your Abstract

Deadline: January 31



Submit via Email

Abstracts must be submitted electronically to: Education@Neuroventions.com

SUBJECT LINE

Title your subject line: "KPC2021 Abstract: [Add your title]"

DUE DATE

Sunday, January 31, 2021 by 11:59 pm, PST

FILE FORMATS

Adobe .pdf or Microsoft Word

INCLUDE

2 pages with all required fields

AUTHORIZATION

The submitting author verifies, by virtue of submitting the abstract, that all authors agree:

- to the submission of the abstract to the Kaua'i Pain Conference
- that the abstract constitutes an original work
- that copyright permissions have been secured (as necessary) for included material
- the abstract includes valid, accurate, and balanced content

Submission of an abstract constitutes a commitment by the author(s) to present their work, if accepted.

A presenting author of each abstract must register for the Kaua'i Pain Conference. Submission of an abstract does not automatically register you for the conference.

Expenses associated with the production and presentation of an abstract are the responsibility of the presenter. This includes the production of posters.

If selected, your presentation/poster is expected to reflect the contents of your abstract. Substantial deviation from the published abstract or failure to present may jeopardize acceptance for future abstracts.

Refine Your Abstract

Put your best foot forward



Concise and clear abstracts are graded more highly than long or disorganized ones. You have limited space, so make every word count. Misspellings and typographical errors reflect poorly upon your research.

Tips

PROOFREAD

Proofread your abstract to identify and correct any errors before submission. Avoid abbreviations. Type in sentence case.

FOLLOW THE INSTRUCTIONS

Part of the grading includes organization and clarity. Follow the instructions and guidelines to give your abstract the best chance during review and selection.

THINK “NEW”

Novel, innovative, or recent discoveries or improvements will be weighted higher. However, there is always a place for best practices with good outcomes.

“SHOW ME THE DATA”

Support your abstract with appropriate evidence.

Robustness of evidence and analysis is the most important factor for a well-received abstract.

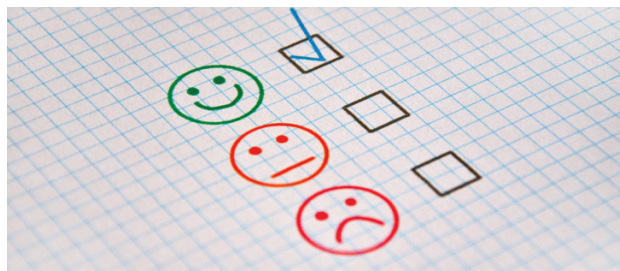
If you have the information, make sure to include: sample size, significance, study/observation duration, follow-up.

Regardless of design or the central thesis of the abstract, ensure that there is sufficient evidence to support your conclusions. All recommendations involving clinical medicine must be based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients. Data/outcomes should be substantive and not just implied. When possible, comprehensive statistical analysis should be applied. Images and spectra should be of the highest quality.

Abstracts submitted without data, because investigations or analyses are incomplete, will be evaluated only on the basis of the information contained within the abstract.

General Information

For all abstracts



Considerations

There is no limit to the number of abstracts an author may submit for consideration. However, multiple submissions of the same or nearly the same abstract by the same author(s)/institution(s) is grounds for rejection of all submitted abstracts from the submitting parties.

A presenting author of each abstract must register for the Kaua'i Pain Conference. Submission of an abstract does not automatically register you for the conference.

Abstracts submitted to, or presented at, other societies or national meetings may only be submitted for consideration if:

- The prior submission is not currently under review by the other organization;
- You have retained copyright authority vs. transferring copyright to the previous entity; and
- You disclose prior publication as part of the abstract, as this must be considered in scoring abstracts.

All recommendations involving clinical medicine must be based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in the care of patients.

All submissions must be HIPAA-compliant. Patient confidentiality must be protected. No names, hospital ID numbers or any other identifying information can appear in your work.

All scientific research referred to, reported, or used in support or justification of a patient care recommendation must conform to generally accepted standards of experimental design, data collection and analysis.

A person who is employed by a "commercial interest" (defined as any entity producing, marketing, re-selling, or distributing health care goods or services consumed by, or used on, patients) cannot speak if the content relates to the business lines and products of its employer. However, industry employees are encouraged to submit "poster-only" abstracts. Posters are not part of the CME-certified content and are a great way to convey the latest research and developments.

A presenter is not to receive financial support in conjunction with their presentation(s), except from their employer.

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Reviewer scores and comments are confidential and will not be made available to anyone (including authors) outside of the immediate review process.

Bias in favor of a particular product or company is grounds for rejection. Use of a particular company's products or equipment in itself does not represent bias. Likewise, research involving a single method, drug, or device would not constitute bias if it conforms to best practices of study design and analysis. Non data-driven statements of superiority, however, would be considered biased.