

Grand Summit  
The Canyons

Workshop Dates  
Friday, Saturday & Sunday  
February 26-28, 2010

Park City, Utah

# International Spine Intervention Society Neurostimulation & Intrathecal Spinal Pumps Bio-skills Lab

International Spine  
Intervention Society  
161 Mitchell Blvd  
Suite 103  
San Rafael, CA 94903

First Class Mail  
US Postage  
PAID  
Permit #925  
San Francisco, CA



Registration open online,  
fax or mail [www.spinalinjection.com](http://www.spinalinjection.com)

➤ **REGISTRATION IS REQUIRED!**  
FIRST COME, FIRST SERVED.

## who may attend

This advanced bio-skills lab and lecture series will provide the highest level on clinical content available in a single course. This activity is not a simple review course and will not be found elsewhere. ISIS members who are currently practicing spine intervention medicine and/or spine injection techniques who have taken the Phase 1 Lumbar Bio-Skills lab and are currently doing implants in a practice or fellowship may attend. This course is specifically designed for advanced practitioners. In accordance with new guidelines recommended by the education committee and adopted by the board of directors, the following specialties only may enroll in this course: Anesthesia, Physical Medicine & Rehabilitation, Radiology, Orthopedic Surgery and Neurosurgery. Any member who wishes a waiver of these protocols must contact ISIS.

## course goals

The field of spine intervention is rapidly changing due to increased knowledge of patient outcomes, advances in therapeutic techniques and new treatment technology. The overall goals of this course are to enhance patient care by providing participants with information and skill building exercises developed on an evidence-based approach to spine pain. ISIS incorporates a comprehensive approach in the diagnosis and treatment of patients with spine pain and this course includes: anatomy, imaging, techniques, risks, or complications and outcomes. Time is provided for one-on-one faculty interaction and participant questions.

## educational objectives

- Develop skill sets that will provide tools for anchoring of leads and catheters under difficult clinical situations
- Understand the occurrence and treatment of complications of intrathecal pumps and spinal cord stimulators, some of which have not been reported in the literature but have been reported to the FDA
- Recognize the expanding role of neuromodulation in the treatment of different types of pain but with deference to evidence based support of the use of these modalities
- Maximize the potential of neuromodulation devices by becoming an expert in programming and medication management of these devices
- Become an advocate for your patients by avoiding errors that lead to complications
- Develop the skills necessary to compare the different systems available and make the system, technique, and modality selection based on specific patient needs

### Lab Description:

1. Lumbar, low thoracic, caudal, foraminal approaches
2. Cervical lead placement advanced techniques
3. Advanced pocket development SCS and IT Pump
4. Occipital stim and subcutaneous electroanalgesia field techniques
5. Advanced anchoring techniques SCS and IT Catheters
6. Advanced IT Pump Placement: Subrectus/gluteal
7. Didactic: Granuloma Treatment/Avoidance of Granulomas/Partition Coefficient Concepts/Standard and Non-standard medications

## course description

This **12.5-hour pain management techniques workshop** will include both didactic lectures and hands-on work using specimens. C-arms with computerized image enhancement, fluoroscopic tables, and state of the art Electroneuromodulation equipment are used. Participants should dress in causal attire or scrubs, no opened toed shoes. Leaded aprons and thyroid shields will be provided please bring your own protective eyewear.

## registration information

ISIS membership is required prior to registration. Participants who are confirmed into this workshop will receive notice by email. If you do not receive a confirmation, please contact the ISIS office. All applications are accepted on a first come, first serve basis (online, fax & mail) until the course is full. In the event that a registration is received after the workshop is filled, registrants will be placed on a waiting list in case there are cancellations.

ISIS reserves the right to cancel this workshop upon reasonable notice and will assume no financial obligation to registrants for cancellation of the course for reasons beyond its control. Registration fees will be refunded, however, costs incurred by the registrants such as airline or hotel fees or penalties, are the responsibility of the registrants.

## continuing medical education

The International Spine Intervention Society is accredited by the *Accreditation Council for Continuing Medical Education* to provide continuing medical education for physicians.

The International Spine Intervention Society designates this educational activity for a maximum of **12.5 AMA PRA Category 1 credit(s)**<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## Americans with Disabilities

ISIS only contracts with facilities that are in compliance with the Americans with Disabilities Act. Please call us at least 90 days prior to your arrival if you have special needs or dietary limitations that we can address to make your participation more enjoyable.



# workshop agenda

## Friday, February 26

2:30 pm	Registration and Refreshments
3:00 pm	<b>Lectures</b> 1. <b>Advanced lead anchor concepts and techniques</b> – Trans interspinous lig, trans spinous process, strain relief loops and where to place them, knotting the lead, separate anchors (2) on a lead, what suture to use (non-absorbable ethibond etc), tension on the lead and when extension will be necessary eg obese or long distance to SCS generator 2. <b>SCS Generator placement, pocket development</b> – Depths of gen placement, removal of SC fat in the pocket pro and con, when to suture to deep fascia, pro and cons of SCS generator placements based on patient anatomy/preference of patient, which side they have to hold the programmer and whether that arm has arthritis prohibiting reaching the generator 3. <b>SCS Trials: Types, length, what is acceptable psych</b> – Also what is unacceptable, pro and con of perm lead implant at trial using extension, table trial only 4. <b>SCS Complications of lead implants</b> – Migration Sub Cutaneous and into the cord during trial or implant, difficulty occasionally in approximating the trial lead location during perm lead implant, case disaster analysis 5. <b>SCS Complications of generator implantation and programming</b> – Avoiding infections (irrigation, antibiotic coverage, tight control of diabetes before/during/after procedure for one week, use of non-braided suture, avoidance of excess electrocautery use), seroma treatment, pro and con of I and D with irrigation vs explant of infected subcutaneous area vs SCS pocket, literature on washing of pocket and reimplant of infected stim, programming errors 6. <b>Generator types, characteristics and comparison of battery, stim parameters</b> 7. <b>Discussion of paddle lead vs round lead implants</b> – Cost differential, revision considerations, stimulation discomfort of lig flavum stimulation
4:30 pm	Break
4:40 pm	<b>Lectures (cont.)</b> 8. <b>PNS and Angina Utilization</b> – Optimal lead placement and lit supporting techniques 9. <b>IT Trial Types: What constitutes an adequate trial in the 4 trial types</b> – Single shot vs Continuous epidural vs IT; home IT trials; respiratory depression unlikely given high oral doses of opiates; to wean or not to wean prior to IT pump trial, anticoagulant considerations 10. <b>IT Pump complications</b> – Pump pocket, programming, med complications, pump malfunction eg. MRI rotor freeze, CT complications, gear 5 complications, bolus valve malfunctions 11. <b>IT Catheter complications</b> – Kinking, disconnect, pithing during refill, twisting due to pump rotation, shearing at the anchor due to weight gain, granuloma (will be covered more in the didactic) 12. <b>IT Pump types</b> – 4 pump types, survey of the 2 products on the market and those coming soon 13. <b>Advanced medication concepts</b> – Microdose morphine, mixing and matching meds
6:00 pm	Q&A
6:40 pm	Adjourn

## Saturday, February 27

7:00 am	Breakfast
7:30 am	Bio-Skills Lab and Didactic Sessions (1 Hour Rotations)
11:30 am	Adjourn to free time (box lunch provided)
5:30 pm	Reception
6:00 pm	Q&A with faculty during reception. Attendees may bring cases for discussion. (Max 1hr CME)
7:00 pm	Adjourn

## Sunday, February 28

7:00 am	Breakfast
7:30 am	Resume Bio-Skills Lab and Didactic Sessions
10:30 am	Free lab hour
11:30 am	Course adjourns

## instructors

**Kam Assil MD**  
Anesthesiology  
Thousand Oaks CA

**Aaron Calodney MD**  
Anesthesiology  
Tyler TX

**Lewis Frazier MD**  
Physiatry  
Plano TX

**Rod Jones MD**  
Anesthesiology  
Wichita KS

**Rich Rosenthal MD**  
Anesthesiology  
Provo UT

**Lee Snook Jr MD**  
Anesthesiology  
Sacramento CA

**Bradley Vilims MD**  
Anesthesiology  
Denver CO

**Michael Whitworth MD**  
*Course Director*  
Anesthesiology  
Columbus IN

## program organizer

**Jared Wasowicz**  
jared@spinalinjection.com  
415.724.1377 mobile

**ISIS**  
161 Mitchell Blvd, Suite 103  
San Rafael, CA 94903  
888.255.0005 toll free in US  
415.457.4747 office  
415.457.3495 fax  
www.spinalinjection.com

**ISIS bio-skill workshops are created to enhance physician understanding of the complexity of performing these procedures. ISIS advises participants to continue to have proctoring, mentoring and additional experience prior to treating patients.**

## registration form

Complete and return this form with payment of \$1,250 via fax, mail or go online to register at [www.spinalinjection.com](http://www.spinalinjection.com). **A 30 day cancellation notice is required to obtain a partial refund after 30 days no refunds will be awarded.**

ISIS needs your valid email address, please write it clearly in the box provided.

YES, Please send me an ISIS Guidelines Book today! \$75 book.  
Add \$15 for domestic shipping or \$35 for international shipping.  
Check here:

last name	
first name	
specialty	degree

check #	
visa/mc/amex	
exp date	3-digit code
signature	

address
city
state
zip code
phone
fax
e-mail

### hotel accommodations

Hotel accommodations should be arranged at the **Grand Summit Resort, The Canyons**, 4000 Canyons Resort Drive, Park City, UT 84098. **888.226.9667**. Hotel reservation cut-off date is **Tuesday, February 2, 2010**.

### ISIS Room Rates

#### Grand Summit Lodge:

Standard Guestroom	\$269
One Bedroom Suite	\$529
Two Bedroom Suite	\$699

#### Sundial Lodge:

Standard Guestroom	\$219
One Bedroom Suite	\$399
Two Bedroom Suite	\$529

The hotel will extend this exceptional room rate offer for 3 days prior and post meeting for those participants wishing to create a true ski excursion vacation.

### transportation

The nearest airport is the Salt Lake City International Airport (SLC). Contact All Resort Express for shuttle transportation to Park City. 877.658.3999 (toll free), 435.649.3999 (local). Follow the link below or call to book your reservation and you'll receive a 20% discount (\$30 each way, regular price is \$37).

Group Name: SCS Pumps Bio Skills Lab

Link: <https://www.allresort.com/CorporateGroups/Reservations.aspx?grpId=6561&tmpId=5659&tmpl=1>

### supported by educational grants from:

Boston Scientific Corporation  
Medtronic Inc.  
St. Jude Medical

### in-kind commercial support:

GE Healthcare  
Kimberly Clark Health Care  
Philips Medical Systems  
Ziehm Imaging Inc.

All applications will be accepted on a first come, first serve basis (via online, fax & mail) until the course is full. Registrants will be confirmed via email. If you do not receive a confirmation, please contact our office. Do not book hotel accommodations or airfare until you are confirmed into the course. ISIS accepts no responsibility for airfare or accommodations that must be cancelled.

Questionnaires regarding the course, which will be sent to you in an email, must be completed online in order to receive proper CME credit for the course.

ISIS is a non-profit medical society. Revenues from this and all meetings are used for future ISIS research and educational endeavors.

### Disclosure

It is the policy of ISIS to plan and implement educational activities in accordance with ACCME's Essential Areas and Policies to ensure balance, independence, objectivity, and scientific rigor. All program faculty and planners are required to disclose any relevant financial relationships they may have or have had within the last 12 months with commercial interests whose products or services are related to the subject matter of the presentation. Any real or apparent conflicts of interest must be resolved prior to the presentation. Disclosure information will be made available to attendees at the meeting. Faculty will also be expected to disclose this information to the audience verbally and on introductory slides at the beginning of each presentation. Faculty is also required to inform program participants if any unlabeled uses of products regulated by the Food and Drug Administration will be discussed.

