



***1st Annual  
Image Guided Interventional Spine  
Procedures Course***

**Saturday, April 30, 2022**

**Syllabus**

## **ESTEEMED FACULTY**

**Glen David, M.D.**

**Course Co-Chair**

Pain Management & Physiatry  
Director Interventional Spine  
Swedish Neuroscience Institute  
Seattle, Washington

**Douglas P. Beall, M.D.**

**Course Co-Chair**

Interventional Radiology  
Chief of Radiology Services  
Clinical Radiology of Oklahoma  
Oklahoma City, Oklahoma

**Ramana Naidu, M.D.**

**Course Co-Chair**

Pain Physician & Anesthesiologist  
California Orthopedics & Spine  
Director of Pain Management Marin General Hospital  
Director of Marin Specialty Surgery Center  
Larkspur, California

**Jens R. Chapman, M.D.**

Complex Spine Surgeon  
Swedish Neuroscience Institute  
Seattle, Washington

**Tyler Philips, M.D.**

Interventional Pain Fellow  
Clinical Radiology of Oklahoma  
Oklahoma City, Oklahoma

**Brian Rich, M.D.**

Interventional Pain Mgmt. & Sports Medicine  
aCELLerated Interventional Orthopedics  
Lawton, Oklahoma

**Neal H. Shonnard, M.D.**

Orthopaedic Surgeon  
Rainier Orthopedic Institute  
Puyallup, Washington

# AGENDA

6:30 a.m.      **Registration & Breakfast**

7 a.m.      **Welcome & Introduction**  
*Glen David, M.D. & Douglas P. Beall, M.D., Ramana Naidu, M.D.*

## **SECTION 1: POSTERIOR ELEMENTS**

7:05 a.m.      **Live Demonstration Broadcast from BioSkills Lab No. 1**  
**Radiofrequency Ablation**  
*Douglas P. Beall, M.D.*  
**Objectives:**

- Demonstrate radiofrequency ablation
- Provide pearls for radiofrequency ablation
- Outline the limitations of radiofrequency ablation

7:25 a.m.      **Q & A**

7:30 a.m.      **Live Demonstration Broadcast from BioSkills Lab No. 2**  
**SI-Joint Fusion**  
*Brian Rich, M.D.*  
**Objectives:**

- Demonstrate SI-joint fusion
- Provide pearls for SI-joint fusion
- Outline the limitations of SI-joint fusion

7:50 a.m.      **Q & A**

7:55 a.m.      **Posterior Elements: Barriers to Credentialing, Coding, and Reimbursement**  
*Ramana Naidu, M.D.*  
**Objectives:**

- Outline coding pearls for posterior elements procedures

8:15 a.m.      **Q & A**

8:20 a.m.      **Live Demonstration Broadcast from BioSkills Lab No. 3**  
**Advances in Spinal Cord Stimulation**  
*Ramana Naidu, M.D.*  
**Objectives:**

- Demonstrate advantages of different spinal cord stimulation technologies
- Outline limitations and pearls of spinal cord stimulation

8:40 a.m.      **Q & A**

8:45 a.m.      **Break and Exhibits** (*not for CME credit*)

## **SECTION 2: INTRASPINAL ELEMENTS**

- 8:55 a.m.      **Live Demonstration Broadcast from BioSkills Lab No. 4**  
**Interspinous Decompression Spacers (Fixated)**  
*Brian Rich, M.D. & Chad Stephens, D.O.*  
**Objectives:**
- Demonstrate interspinous decompression spacers (fixated)
  - Provide pearls of interspinous decompression spacers (fixated)
  - Outline the limitations of interspinous decompression spacers (fixated)

9:15 a.m.      **Q & A**

## **SECTION 3: ANTERIOR ELEMENTS**

- 9:20 a.m.      **Intradiscal Cellular Therapy**  
*Douglas P. Beall, M.D.*  
**Objectives:**
- Describe the background of regenerative technology for intradiscal procedures
  - Outline the advantages and disadvantages of regenerative therapy for intradiscal procedures

9:40 a.m.      **Q & A**

- 9:45 a.m.      **Basivertebral Nerve Ablation: Intradiscal Procedure**  
*Ramana Naidu, M.D.*  
**Objectives:**
- Outline how vertebrogenic pain presents
  - Describe the anatomy of the basivertebral nerve
  - Explain the procedure for basivertebral nerve ablation

10:05 a.m.      **Q & A**

- 10:10 a.m.      **Live Demonstration Broadcast from BioSkills Lab No. 5**  
**Hydrogel Augmentation Intradiscal Procedure**  
*Douglas P. Beall, M.D.*  
**Objectives:**
- Demonstrate the hydrogel augmentation intradiscal procedure
  - Provide pearls for the hydrogel augmentation intradiscal procedure
  - Outline the limitations of the hydrogel augmentation intradiscal procedure

10:30 a.m.      **Q & A**

- 10:35 a.m.      **Anterior Elements: Barriers to Credentialing, Coding, and Reimbursement**  
*Ramana Naidu, M.D.*  
**Objectives:**
- Outline coding pearls for anterior elements procedures

10:55 a.m.      **Q & A**

11 a.m.      **Lunch Break & Exhibits** (*not for CME credit*)

**SECTION 4: OPTIMIZING SURGICAL TECHNIQUE & MAKING EXISTING SPINE SURGERIES LESS INVASIVE**

11:20 a.m.	<b>Live Demonstration Broadcast from BioSkills Lab No. 6 Latest Techniques in Vertebral Augmentation Side-by-Side</b> <i>Douglas P. Beall, M.D., &amp; Glen David, M.D.</i> <b>Objectives:</b> <ul style="list-style-type: none"><li>• Demonstrate the latest techniques in vertebral augmentation</li><li>• Provide pearls for vertebral augmentation</li><li>• Outline the limitations of vertebral augmentation</li></ul>
11:40 a.m.	<b>Q &amp; A</b>
11:45 a.m.	<b>Collaboration and Spine Care Principles</b> <i>Neal Shonnard, M.D. &amp; Jens R. Chapman, M.D.</i> <b>Objectives:</b> <ul style="list-style-type: none"><li>• Describe the essentials of successful collaboration</li><li>• Provide examples of successful collaboration</li></ul>
12:05 p.m.	<b>Q &amp; A</b>
12:10 p.m.	<b>Minifying Existing Surgical Techniques: Barriers to Credentialing, Coding, and Reimbursement</b> <i>Douglas P. Beall, M.D.</i> <b>Objectives:</b> <ul style="list-style-type: none"><li>• Explain the necessary qualifications for the purpose of obtaining procedural credentials at one's local facility</li><li>• Evaluate essential elements of a procedure for the purpose of ensuring proper code assignment</li><li>• Outline the differences between an open surgical technique and a minimally invasive or percutaneous technique as they apply to coding and reimbursement</li></ul>
12:30 p.m.	<b>Q &amp; A</b>
12:35 p.m.	<b>Break, Exhibits &amp; Change into Scrubs</b> ( <i>not for CME credit</i> )

**SECTION 5: HANDS-ON BIOSKILLS LAB**

12:50 p.m.	<b>Hands-On BioSkills Lab</b> ( <i>30 minute rotations</i> ) <i>All Faculty</i> <ol style="list-style-type: none"><li>1. Interspinous Decompression Spacers (Fixated)</li><li>2. SI-Joint Fusion</li><li>3. Radiofrequency Ablation</li><li>4. Vertebral Augmentation</li><li>5. Kyphoplasty</li><li>6. Interspinous Spacers</li></ol> <b>Objectives:</b> <ol style="list-style-type: none"><li>1. Practice the following techniques: Interspinous Decompression Spacers (Fixated), SI-Joint Fusion; Radiofrequency Ablation; Vertebral Augmentation; Kyphoplasty; and Interspinous Spacers</li></ol>
4 p.m.	<b>Adjourn</b>

## Acknowledgements

The Planning Committee gratefully acknowledges support for this conference from the following:

### Educational Grant

Boston Scientific  
Genesys  
Medtronic  
Merit Medical  
ReGelTec  
Southern Spine  
Spinal Simplicity  
Stratus Medical  
Stryker

### Exhibit Support

Abbott  
Avanos  
Boston Scientific  
Control Rad  
Elliquence  
Genesys  
Nalu  
ReGelTec  
Southern Spine  
Spinal Simplicity  
Stratus Medical  
Stryker  
Vyrsa Tech

### In-Kind Support

Boston Scientific  
Control Rad  
Genesys  
Medtronic  
Merit Medical  
ReGelTec  
Southern Spine  
Spinal Simplicity  
Stratus Medical  
Stryker  
Vyrsa Tech

---

## Planning Committee

### **Glen David, M.D.**

Swedish Neuroscience Institute  
Seattle, Washington

### **Douglas P. Beall, M.D.**

Clinical Radiology of Oklahoma  
Oklahoma City, Oklahoma

### **Ramana Naidu, M.D.**

Marin Specialty Surgery Center  
Larkspur, California

### **Jonathan Plümer, M.D.**

Swedish Neuroscience Institute  
Seattle, Washington

### **James Ying, M.D.**

Swedish Neuroscience Institute  
Seattle, Washington

### **Linda Sahlin**

Seattle Science Foundation  
Seattle, Washington

---

### **Course Evaluation**

Please take a moment to complete our online evaluation, which will be emailed to you. Your feedback helps to ensure the effectiveness of this CME activity, as well as improve future educational activities. All responses are considered anonymous. <https://www.surveymonkey.com/r/IGIS2022>

If you do not receive the survey via email, please call (206)732-6500 or email [cme@seattle-science-foundation.org](mailto:cme@seattle-science-foundation.org).

---

### **Accreditation**

Seattle Science Foundation is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

### **AMA PRA Category 1 Credits™**

Seattle Science Foundation designates this live activity for a maximum of *8.25 AMA PRA Category 1 Credits™* for in-person attendance and *5 AMA PRA Category 1 Credits™* for virtual attendance. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### **Non-Physician Attendance**

Certificate of participation will be provided to other health care professionals requesting credits. Participants should ensure in advance that their credentialing or licensing organization accepts *AMA PRA Category 1 Credits™*.

## Identifying and Resolving Conflicts of Interest

**Purpose:** The information provided addresses several requirements of the ACCME to help **ensure purpose** in CME activities. Everyone in a position to control the content of a CME activity must disclose all relevant financial relationships with commercial interests to the CME provider. This information must be disclosed to participants prior to the beginning of the activity. Also, CME providers must resolve current conflicts of interest prior to the educational activity.

**Definitions: “Financial relationships”** are those relationships in which the individual benefits by receiving a salary, royalty, intellectual property rights, consulting fee, honoraria for promotional speakers’ bureau, ownership interest (e.g., stocks, stock options or other ownership interest, excluding diversified mutual funds), or other financial benefit. Financial benefits are usually associated with roles such as employment, management position, independent contractor (including contracted research), consulting, speaking and teaching, membership on advisory committees or review panels, board membership, and other activities from which remuneration is received, or expected. ACCME considers relationships of the person involved in the CME activity to include financial relationships of a spouse or partner.

The ACCME defines a **“commercial interest”** as any entity producing, marketing, re-selling or distributing health care goods or services consumed by, or used on, patients. Among the exemptions to this definition are government organizations, non-health care related companies and non-profit organizations that do not advocate for commercial interests.

Circumstances create a **“conflict of interest”** when an individual has an opportunity to affect CME content about products or services of a commercial interest with which he/she has a financial relationship.

ACCME focuses on financial relationships with commercial interests in the 12-month period preceding the time that the individual is being asked to assume a role controlling content of the CME activity. ACCME has not set a minimal dollar amount for relationships to be significant. Inherent in any amount is the incentive to maintain or increase the value of the relationship.

The ACCME defines **“relevant financial relationships”** as financial relationships in any amount occurring within the past 12 months that create a conflict of interest.

**CME Activity Planning Committee Members:** If a conflict of interest exists, the Planning Committee member must withdraw from the Planning Committee unless the conflict can be resolved. Resolution may be made by one of the following methods: (1) Peer review of CME content will be conducted at another oversight level to assure no commercial bias exists; (2) Change in focus of course so the activity does not include information related to products or services about which the planning committee member has a conflict; (3) Severing relationship(s) between the member and any related commercial interest; (4) Others to be determined by SSF CME Committee.

**CME Activity Presenter:** When a conflict of interest exists, the Planning Committee must address the conflict by one of the following methods: (1) Review content to be presented by speaker in advance to assure content balance; (2) Change topic so the presentation is not related to products or services where a conflict exists; (3) Select a different presenter without any related commercial interest; (4) Include presentations by other faculty to provide an overall balance to the content of the course; (5) Limit or specify the sources for recommendations that the presenter can use. Each speaker is required to give a balanced, evidence-based presentation based on published research. No conclusions or recommendations without external validation may be made by a speaker with a conflict of interest.

## Faculty Disclosure Summary

The following planners and presenters, in the past 24 months, have/had a financial relationship with a commercial interest: (*S = Speaker; P = Planner*)

**Douglas Beall, M.D.** (S)(P): Consulting Fee: Medtronic, Inc., Spineology, Merit Medical, Johnson and Johnson, IZI, Techlamed, Peterson Enterprises, Medical Metrics, Radius Pharmaceuticals, Avanos, Boston Scientific Corporation, Sollis Pharmaceuticals, Simplify Medical, Stryker, Lenoss Medical, Spine BioPharma, Piramal, ReGel Tec, Nanofuse, Talosix, Spinal Simplicity, Pain Theory, Spark Biomedical, Micron Medical Corp, Bronx Medical, Smart Soft, Tissue Tech, Kahtnu Surgical, RayShield, Stayble, Thermaquil, Vivex, Stratus Medical, Genesys, Abbott, Eliquence, SetBone Medical, Amber Implants,

Contracted Research: Medtronic, Inc., Medical Metrics, Avanos, Relievent, Boston Scientific Corporation, Stryker, Sollis Pharmaceuticals, Simplify Medical, Lenoss Medical, Spine BioPharma, Eliem Therapeutics, Smart Soft, Tissue Tech, Vivex, Stratus Medical

Advisory Board: Medtronic, Inc., , ReGelTec, Nanofuse, Talosix, Spinal Simplicity, Pain Theory, Spark Biomedical, Smart Soft, Tissue Tech, Bronx Medical, Kahtnu Surgical, Thermaquil, Vivex, Genesys, Smart Soft, SetBone Medical, Amber Implants

Board Member: Nocimed, Vivex

Stock Holder: Artio, Sophiris, Eleven Biotherapeutics, Radius Pharmaceuticals, Flow Forward, Lenoss Medical, Spine BioPharma, ReGel Tech, Spark Biomedical, Vivex

Editorial Support: Thieme, Springer, Humana

Speaker: Radius Pharmaceuticals, Stryker, Medtronic, Inc., Boston Scientific Corporation, Merit Medical, Avanos, Piramal, Genesys, Eliquence

Royalty: IZI, Vivex

**Jens R. Chapman, M.D.** (S): Consulting Fee: Globus Medical, Inc

**Glen David, M.D.** (S)(P): Consulting Fee: Medtronic

**Ramana Naidu, M.D.** (S)(P): Consulting Fee: Abbott, Boston Scientific, Bioventus, Medtronic

**Tyler Phillips, M.D.** (S): Consulting Fee: Medtronic

**Brain Rich, M.D.** (S): Consultant: Medtronic, Stimwave, Southern Spine, Omnia; Royalties: Vyrsa; Teaching: Genesys, Vyrsa, Stimwave, Southern Spine

**Neal Shonnard, M.D.** (S): Royalty: Globus Medical; Consulting Fee: Medtronic, Inc., Stryker; Ownership Interest-Consultant and Advisory Board Member: Talosix; Royalty: Globus Medical; Former Assistant Medical Director: SCOAP, Foundation for Healthcare Quality

---

The following planners and presenters, in the past 24 months, have/had no financial relationship with a commercial interest: (*S = Speaker; P = Planner*)

**James Ying, M.D.** (P)

**Jonathan Plümer, M.D.** (P)

**Linda Sahlin** (P)

All planners and presenters attested that their content suggestions and/or presentation(s) will provide a balanced view of therapeutic options and will be entirely free of promotional bias. All presentations have been reviewed by a planner with no conflicts of interest to ensure that the content is evidence-based and unbiased.