16TH ANNUAL
UCSF SPINE SYMPOSIUM
HILTON SAN FRANCISCO FINANCIAL DISTRICT

UCSF COURSE DIRECTORS
Sigurd Berven, MD
Professor of Orthopaedic Surgery
Chief of Orthopaedic Spine Service
Praveen Mummaneni, MD, MBA
Professor and Vice Chair of Neurological Surgery; Director, UCSF Spine Center
Conor O’Neill, MD
Professor of Orthopaedic Surgery

SPECIAL GUEST FACULTY
Richard Derby, MD
Spinal Diagnostics & Treatment Center
Daly City, CA
James S. Harrop, MD
Thomas Jefferson
University Hospitals
Philadelphia, PA
Juan Uribe, MD
Barrow Neurological Institute
Phoenix, AZ
James N. Weinstein, MD
Senior Vice President
Microsoft Healthcare
Lyme, NH

FRIDAY - SATURDAY
May 20-21, 2022

spinesymposium.ucsf.edu
The UCSF Spine Symposium is an annual two-day event emphasizing pioneering trends in diagnostic and therapeutic strategies for patients suffering from spinal disorders. This course is designed to be interactive with talks given by leaders in the spine community. All lectures are followed by case discussions aimed at highlighting key issues in breakthrough treatments. The course is designed for neurosurgeons, orthopedists, nurses, physical therapists, physiatrists, anesthesiologists, pain specialists as well as primary care providers.

OBJECTIVES

The purpose of this course is to increase competence and improve clinical practice in the management of patients with spinal pathologies. Attendees will be better equipped to:

- Evaluate and treat spinal pain in a cost effective and reliable manner based on recently published guidelines;
- Identify appropriate indications for surgery of the painful, degenerated spine and identify the appropriate surgical approach based on recently published guidelines;
- Evaluate and treat lumbar degenerative disease and deformity in a cost effective manner and avoid perioperative complications by identifying risk factors that may predispose to morbidity;
- Determine pain management strategies for patients with spine-related pain;
- Increase utilization and competence with NASS spinal stenosis guidelines and the AANS-CNS cervical spine guidelines;
- Provide physical exams that include a process to identify lower extremity pain that dissipates while sitting and exacerbates with standing or walking;
- Identify spinal instability related to spinal tumors and formulate surgical treatment plans to deal with neurological deficits and pain in spine oncology patients based on recently published guidelines.

Hilton San Francisco Financial District

ACCREDITATION

The University of California, San Francisco School of Medicine (UCSF) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. UCSF designates this live activity for a maximum of 14.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This CME activity meets the requirements under California Assembly Bill 1195, continuing education and cultural and linguistic competency.

Pain Management and End-of-Life Care

The approved credits shown above include a maximum of 7.25 Pain Credits toward meeting the requirement under California Assembly Bill 487, Pain Management and End-of-Life Care.

Nurses

For the purpose of recertification, the American Nurses Credentialing Center accepts AMA PRA Category 1 Credit™ issued by organizations accredited by the ACCME.

Physician Assistants

American Academy of Physician Assistants accepts category 1 credit from ACCME. Prescribed credit from AAFP, and AMA PRA Category 1 Credit™ from organizations accredited by the ACCME.
# 16TH Annual UCSF SPINE SYMPOSIUM

**FRIDAY, MAY 20, 2022**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>7:00 am</td>
<td>Registration and Continental Breakfast</td>
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<tr>
<td>7:55</td>
<td>Welcome and Introduction</td>
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<tr>
<td>8:00</td>
<td><strong>I. Diagnosis of Spinal Pain</strong> • Moderator: Dr. Conor O’Neill</td>
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<tr>
<td>8:00</td>
<td>P Innovations in Imaging of the Lumbar Spine - Implications for Intra-discal Therapies</td>
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<tr>
<td>8:20</td>
<td>P Intra-discal therapies for Chronic Low Back Pain</td>
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<tr>
<td>8:40</td>
<td>P Cervical Inter-laminar vs. Transforaminal Injections - What's the Evidence?</td>
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<tr>
<td>9:00</td>
<td>P Prolotherapy and Other Complementary Therapies for Chronic Low Back Pain</td>
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<tr>
<td>9:20</td>
<td>P The MILD Procedure for Treatment of Lumbar Spinal Stenosis</td>
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<tr>
<td>9:40</td>
<td>P Risk Stratification in Chronic Low Back Pain</td>
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<tr>
<td>10:00</td>
<td>P Case Studies/Q&amp;A</td>
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<tr>
<td>10:30</td>
<td>Coffee Break</td>
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**II. Management of Spinal Pain • Moderator: Dr. Conor O’Neill**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:45</td>
<td>P PRP and Other Regenerative Therapies for Spinal Disc and Joint Pain - Hope or Hype?</td>
</tr>
<tr>
<td>11:05</td>
<td>P Pain Management in the Age of Telemedicine</td>
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<tr>
<td>11:25</td>
<td>P The Role of the Paraspinal Muscles in Low Back Pain</td>
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<tr>
<td>11:45</td>
<td>P Basiwarteral Nerve Ablation for Chronic Low Back Pain</td>
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<tr>
<td>12:05</td>
<td>P The Spectrum of Care for Piriformis Syndrome - Conservative to Operative</td>
</tr>
<tr>
<td>12:30</td>
<td>P Reflections on Interventional Diagnosis and Treatment of Spinal Pain</td>
</tr>
<tr>
<td>1:00</td>
<td>Boxed Lunch in Exhibit Hall (included in registration fee)</td>
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**III. Updates and Controversies in the Management of Common Spinal Pathologies**

**Moderator: Dr. Sigurd H. Berven**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>2:00</td>
<td>Post-op Pain Management</td>
</tr>
<tr>
<td>2:20</td>
<td>Guest Lecture Introduction</td>
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<tr>
<td>2:25</td>
<td>Virtual Presentation</td>
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<tr>
<td></td>
<td>The Role of Technology in Patient Care and Empowerment of Informed Choice</td>
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<tr>
<td>2:55</td>
<td>Question and Answer</td>
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<tr>
<td>3:10</td>
<td>Coffee Break</td>
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</tbody>
</table>

**IV. Case Presentation • Moderator: Dr. Praveen Mummaneni**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>3:30</td>
<td>P Cervical Radiculopathy – Case Presentation and Panel Discussion</td>
</tr>
<tr>
<td>3:45</td>
<td>P Lumbar Symptomatic Disc Degeneration – Case Presentation and Panel Discussion</td>
</tr>
<tr>
<td>4:00</td>
<td>P Cervical Myelopathy – Case Presentation and Panel Discussion</td>
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<tr>
<td>4:15</td>
<td>P Lumbar Spondylolisthesis – Case Presentation and Panel Discussion</td>
</tr>
<tr>
<td>4:30</td>
<td>P Adult Degenerative Scoliosis – Case Presentation and Panel Discussion</td>
</tr>
<tr>
<td>4:55</td>
<td>Adjourn</td>
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<tr>
<td>5:00 pm</td>
<td>Wine Tasting Reception in Exhibit Hall</td>
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**Hilton San Francisco Financial District**

750 Kearny Street
San Francisco, CA 94108
(415) 433-6600
S A T U R D A Y, M A Y 2 1 , 2 0 2 2

7:00 am  Registration and Continental Breakfast

V. Healthcare Reform – Economics of Managing Spinal Disorders

Moderators: Dr. Sigurd H. Berven Dr. Praveen Mummaneni

7:30  Healthcare Economics in the Management of Spinal Disorders- Burden of Spinal Disorders on the Healthcare Economy  Dr. Sigurd H. Berven

7:50  Cost and Value in the Management of Spinal Disorders – a Healthcare Economist Perspective  Dr. Leslie Wilson

8:10  Guest Lecture Introduction  Dr. Praveen Mummaneni

8:15  Evolution of Lateral Interbody Fusion: From Inception to Current  Dr. Juan Uribe

8:45  Evidence in the Management of Spinal Disorders – Large Data, AI, and Machine Learning  Dr. Thomas Peterson

9:05  Spine Surgery During the COVID Pandemic  Dr. Praveen Mummaneni

9:25  Guest Lecture Introduction  Dr. Praveen Mummaneni

9:30  Evidence Based Medicine for Lumbar Fusion  Dr James S. Harrop

10:00 Question and Answer

10:20 Coffee Break

VI. Alternative Payment Models • Moderator: Dr. Sigurd H. Berven

10:40  BCPI and the UCSF Experience  Dr. Gina Intinarelli

11:00  The Payor’s Perspective on Costs and Value - What Metrics Matter  Dr. Leslie Black

11:20 Course Luncheon (included in registration fee)

VII. Perspectives on the Management of Specific Cases • Moderator: Dr. Praveen Mummaneni

12:30 pm  Lumbar Disc Herniation- Ambulatory vs. Inpatient  Dr. Tarun Arora

12:50  Degenerative Spondylolisthesis  Dr. Catherine Miller

1:10  Complex Spinal Deformity- Primary  Dr. Dean Chou

1:30  High Risk Spinal Trauma  Dr. Anthony Di Giorgio

1:50  High Risk Patient with Spinal Disorders  Dr. Alekos Theologis

2:10  Impact of Complications on Outcome and Cost of Care, Classification of Complications, Strategies for Avoiding Complications, and Risk  Dr. Lionel Metz

2:30  When to Say No to Surgery  Dr. Bobby Tay

2:50  Avoiding Neurological Deficits During Spine Surgery  Dr. Lee Tan

3:10  MIS Strategies for Patients with Medical Co-Morbidities  Dr. Aaron Clark

VIII. Spinal Surgery/ Case Presentation • Moderator: Dr. Praveen Mummaneni

3:30  Round Table Interdisciplinary Discussion

Table 1 – Dr. Sigurd Berven/ Dr. Phillip Kissel/ Dr. Patricia Zheng/ Dr. Valli Mummaneni/ Dr. Jay K. Morgan/ Dr. Leslie C. Robinson

Table 2 – Dr. Praveen Mummaneni/ Dr. Lionel Metz/ Dr. Peter I-Kung Wu

Table 3 – Dr. Conor O’Neill/ Dr. Lee Tan/ Dr. Alekos Theologis

Table 4 – Dr. Dean Chou/ Candita Rodriguez, NP/ Dr. Bobby Tay

4:15 Question and Answer Session

4:35 pm Adjourn

P • Pain Credit

G E N E R A L I N F O R M A T I O N

Advance registration closes at 10:00 am on Thursday, May 19, 2022. On-site registration fees will apply after advance registration closes.

H O W T O E N R O L L

Early Bird Rates prior to 2/28/22

Tuition:
- Physicians  $400 by 2/28/22  
- $475 after 2/28/22
- Nurses/Pharmacists/Advanced Health Practitioners/Residents/Fellows  $300 by 2/28/22  
- $375 after 2/28/22

* Onsite registration will be $50 additional

Payment can be made by American Express, Visa, MasterCard or check.

R E G I S T E R V I A :

Online:  cme.ucsf.edu

Mail: Complete course registration form and send with payment to:  
UCSF Office of CME  
490 Illinois St., Floor 8  
San Francisco, CA 94143

Phone: To register by phone or to inquire about registration status, please call UCSF’s CME Registration Office at (415) 476-5808. Please check our website for up-to-date information on the course:  
cme.ucsf.edu

On-Site Registration: Generally we are able to accommodate on-site registration at our courses, however pre-registration is preferred to ensure that we have adequate course materials.
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Director, UCSF Spine Center

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Professor of Orthopaedic Surgery

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Medical Director, Spinal Diagnostics & Treatment Center, Daly City, CA

James S. Harrop, MD
Professor and Director, Division of Spine and Peripheral Nerve Surgery
Co-Director Neurologic Surgery
Quality and Safety Neurosurgery
Director of Delaware Valley SCI Center, Thomas Jefferson University Hospitals, Philadelphia, PA

Juan Uribe, MD
Chief, Spinal Disorders;
Sonntag Chair of Spine Research
Vice Chair, Neurosurgery
Barrow Neurological Institute,
Phoenix, AZ

James N. Weinstein, DO, MS
Senior Vice President, Microsoft Healthcare, Lyme, NH

COURSE FACULTY
(University of California, San Francisco unless indicated)

Christopher R. Abrecht, MD
Assistant Professor of Anesthesiology;
Director, Chronic Pain Service

Tarun Arora, MD
Assistant Professor of Neurological Surgery

Leslie Black, MD
Department of Orthopaedic Surgery

Dean Chou, MD
Professor of Neurological Surgery

Aaron Clark, MD, PhD
Associate Professor of Neurological Surgery

Alan Dang, MD
Associate Professor of Orthopaedic Surgery

Anthony DiGiorio, DO, MHA
Assistant Professor of Neurological Surgery

Sibel Deviren, MD
Professor, Department of Orthopaedic Surgery

Vedat Deviren, MD
Professor of Orthopaedic Surgery

Aaron Fields, PhD
Associate Professor of Orthopaedic Surgery

Melanie M. Henry, MD, MPH
Professor of Anesthesiology

Line Jacques, MD
Professor of Neurological Surgery,
John Adams Endowed Professorship;
Director of Peripheral Nerve and Pain Surgery

Teresa Jones, PA-C
Physician Assistant Specialist

Gina Intinno, PhD, MS
Associate Dean, Clinical Affairs,
School of Nursing;
Vice President, Office of Population Health and Accountable Care

COURSE FACULTY (CONT’D)
Phillip Kissel, MD, FACS
Clinical Professor Department of Neurological Surgery, UCSF
Director of Neurological Surgery, UCSF
Sierra Vista Regional Medical Center, San Luis Obispo, CA

Lionel N. Metz, MD
Assistant Professor of Orthopaedic Surgery

Catherine Miller, MD
Assistant Professor of Neurological Surgery

Jay K. Morgan, MD
Neurosurgeon, Sierra Neurosurgery Group, Reno, NV

Vali P. Mummaneni, MD
Associate Professor of Anesthesia

Thomas Peterson, Jr., PhD
Assistant Professor of Orthopaedic Surgery

Heidi Reetz, MD
Assistant Professor of Anesthesia

Candida Rodriguez, NP
Department of Neurological Surgery

Lee Tan, MD
Assistant Professor of Neurological Surgery

Bobby Tay, MD
Professor of Orthopaedic Surgery

Alekos Theologis, MD
Assistant Professor of Orthopaedic Surgery

Doris Wang, MD, PhD
Assistant Professor of Neurological Surgery

Leslie Wilson, PhD
Professor of Medicine and Pharmacy

Peter I-Kung Wu, MD, PhD
Assistant Professor of Orthopaedic Surgery

Patricia Zheng, MD
Assistant Professor of Orthopaedic Surgery
REGISTRATION • MOR22003

16TH ANNUAL UCSF SPINE SYMPOSIUM
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Hilton San Francisco Financial District

Mail to: UCSF Office of CME
490 Illinois St., Floor 8
San Francisco, CA 94143

Online registration: spinesymposium.ucsf.edu
Registration Information: (415) 476-5808
Course Information: (415) 476-4251

☐ Dr. ☐ Ms. ☐ Mr. ☐ Mrs. ☐ Mx.

LAST NAME
FIRST
M.I.

DEGREE
SPECIALTY

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EMAIL

Address Label Code Letter (see address label: example, A, B, C, D, etc.)

Would you like to be on our priority email list? ☐ Yes ☐ No

Please indicate if you have any special needs: _______________________________________

Registration Fees:
Postmarked By 2/28/22 ☐ $400 Physicians
After 2/28/22 ☐ $475 Physicians
Postmarked By 2/28/22 ☐ $300 Nurses/Pharmacists/Adv. Health Practitioners/Residents/Fellows
After 2/28/22 ☐ $375 Nurses/Pharmacists/Adv. Health Practitioners/Residents/Fellows

**Beginning on 5/17/22, registration will be $50 additional.

Check enclosed payable to UC Regents

Please charge my credit card: ☐ Visa ☐ MasterCard ☐ AmEx for $__________________________

_____________________________________ / _______________________
CARD #
EXPIRATION DATE

NAME ON CARD (PLEASE PRINT)
AUTHORIZED SIGNATURE

Refund Policy: Cancellations received in writing before May 17, 2022 will be refunded, less a $100 administrative fee. No refunds will be made on cancellations received after May 17, 2022.

Please check our website for up to date information on the course: spinesymposium.ucsf.edu

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CONFERENCE LOCATION
Enjoy San Francisco’s renowned attractions such as the historic cable cars, shopping in Union Square, or visit San Francisco’s culinary hub at the Ferry Building.
The Hilton San Francisco Financial District is just steps from the famed North Beach and Jackson Square as well as within walking distance to the Embarcadero waterfront and Fisherman’s Wharf. A block of guestrooms has been reserved at the special UCSF conference rate of $249/night. You are urged to make your reservations early. The cut off date is April 20, 2022, or until the group room block is filled.

After this date, rooms will be provided on a space-available basis only. To make hotel reservations please visit the course webpage on our website at spinesymposium.ucsf.edu and click on the reservations link in the Travel & Lodging section. You can also call Hilton Reservations at 800-424-8292 to reserve by phone.
By staying at the host hotel, you help UCSF meet its contractual obligations and keep registration fees reasonable.

AIR TRANSPORTATION
UCSF has negotiated special fares with United Airlines for our course attendees. You may use the following code to book on your own: United – www.united.com • code: ZK47190520
You can also visit the course webpage on our website at spinesymposium.ucsf.edu and find direct links for United in the Travel & Lodging section.