THE PENDULUM SWINGS IN BOTH DIRECTIONS.
education goes forward.
painweek would like to thank these organizations for their contribution to the success of the 2018 conference.
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Everything you need to know about PAINWeek on your smartphone, tablet, or laptop.

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- Complete session evaluations

**2 Easy ways to use PAINWeek Mobile:**
- Download from the App Store or Google Play
- Visit m.painweek.org
YEAR of the LOCUSTS

The impact of the CDC guidelines on practitioners and patients

Robert Barkin
Gary Jay

Thurs Sept 6
Please note that PAINWeek staff will be capturing photographs and video onsite in professional settings throughout the conference. By attending PAINWeek, you acknowledge that there is a possibility that you may appear in such photographs and video, which may be used in future PAINWeek conferences and/or materials and publications. Photographs and video will only be taken in public areas of the hotel, and we will not use an identifiable photograph or likeness of you as the focus of an image or illustration.

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Kevin L. Zacharoff
Wednesday September 5

Fentanyl & Opioid Crisis

Kevin L. Zacharoff

the other opioid crisis
Dear PAINWeek Delegates:
Welcome to PAINWeek 2018! All of us on the PAINWeek team extend greetings to both new and returning participants to this 12th annual conference on pain for frontline practitioners. We recognize that you have many options with respect to continuing education, and we greatly appreciate your decision to join in the collaborative exchange that has made PAINWeek the largest US conference on pain.
The practice of pain medicine isn’t getting any easier. From the ongoing crisis of prescription opioid abuse—and public policy reaction to it—to a pervasively hostile payer and reimbursement landscape, the challenges inherent in treating patients with pain are a familiar litany to all who care for them. But the requirements of a population in pain, including the specialized needs of specific groups such as women, the elderly, pediatric patients, and those with comorbid conditions, only increases the pressure on primary care to respond with competence, confidence, and compassion. Our mission at PAINWeek has been to address this demand, through a year-round calendar of live events complemented by a robust platform of digital and print resources. And since its inception in 2007, the PAINWeek National Conference has been dedicated to elevating the pain management expertise of thousands of practitioners on the frontlines of patient care.
The popularity and relevance of PAINWeek is due in no small part to the continuous enhancement of the conference curriculum. As you review this program book, detailing over 120 CE/CME hours of instruction, here are just a few of the new topics and courses to consider. We’ve added a course track in Acute Pain Management exploring antispasmodics, nonopioid medications, and other treatment modalities as well as the role of acute care in the opioid epidemic. Our popular Advanced Practice Provider track returns with new topics of interest to nurse practitioners, physician assistants, clinical nurse specialists, and other frontline clinicians. New courses on abuse deterrent formulations, muscle relaxants, strategies for opioid tapering, and the impact of illicit fentanyl derivatives are featured in our expanded Pharmacotherapy track. An updated Medical Cannabinoids track will bring to light the latest research and examine applications to the treatment of painful skin conditions and other roles in pain management. And throughout the week, you’ll find Special Interest Sessions (over 30!) on a panoply of topics spanning public policy, patient assessment, pain presentations, medication alternatives, and analgesics of the future.
PAINWeek 101, offered on Monday evening, is a special opportunity for new participants to orient and prepare for the conference experience. The Keynote Presentation on Wednesday evening will be followed by refreshments and the opportunity to converse with faculty and colleagues at the Welcome Reception in the Exhibit Hall. And don’t forget the scientific poster session and reception on Thursday, and the podium presentations on Friday.
Finally, as we like to remind each year, the essence of PAINWeek is peer interaction. Share what you know! We salute your dedication to a better future for our patients with pain!
Ocean’s 11 Revisited
by Debra Weiner

Anniversaries are often a time for reflection. I am moved thinking of how another year is swept into the archives, while observing how much we’ve grown over the 12 years, yet retaining so much of our original DNA.

After the 2007 launch, we had t-shirts made with the phrase “I survived PAINWeek.” This was referring to the 16-hour days that were spent getting ready for the conference. This was a time when we couldn’t afford a large a/v staff, and we ran wires, taped them to the carpet, and did many other things that we now have the luxury of not having to do. Then, there was a lot of behind the scenes melodrama. Once Jeffrey was threatened by a diminutive attendee who was irate that he wasn’t permitted to take the hotel shuttle, even though he was staying at another hotel. A former meeting planner barked at Red for taking a small blueberry muffin from a breakfast reception buffet at 5:00 am. “Hey, those are for the attendees—NOT YOU!!!” You can imagine how well that went over. Another time, that same meeting planner angrily stomped through the corridors with a snarl, all because Jeffrey and I were attending a meeting during the Exhibit Hall closing reception that she had organized.

As PAINWeek has grown, several of our core team members have migrated to different parts of the world, which has conferred a very appealing Ocean’s 11 kind of life. For half the year Darryl and I are in Berlin, and Jeffrey is in Fort Lauderdale. Red and Keith are in Key West for the winter and New Hampshire in the summer, and Patrick has been comfortably replanted in Los Angeles for the last few years. We may live and work in different zip codes during the year, but we still have our central lab/office in Montclair, NJ. That is where so many of the things that you have seen and experienced were created and born out of our collective inspirations, arguments, and intermittent “a ha” moments. The fertilization cycles that emerge from working with mostly the same people year after year. Just like a band. Just like the Beatles, but now, given our tenure, maybe more like The Rolling Stones.

Last month, Alyssa moved back to the Bay Area to start a new chapter. Holly, Heather, and Nicole have kept the hearth going while attending a large number of PAINWeekEnd conferences throughout the year, in addition to their respective responsibilities. Red is still our Sam Seaborn, managing our sponsors and exhibitors. Keith spends the majority of his time searching for newsworthy items to write about in our Daily Dose and other emails, and Holly manages the significant editorial needs of the print and digital platform. Nicole is doing a superb job of growing our social media presence, and Patrick manages all of our audience generation activities, along with being onsite for PAINWeekEnd conferences. Jeffrey continues his ongoing operational stewardship, while Steve and Sean maintain and fuel the business development engines.

As for Darryl and I—whether we are in Berlin or Montclair—we continue to live our symbiotic lives, weaving words and images, as we look forward to the next caper that brings us all together again.

This is us.
Please Note: The Henry (restaurant) is located on Level 1
their hidden influence on chronic pain, health, and disease

kelly armstrong
saturday september 8

scars & traumas

their hidden influence on chronic pain, health, and disease
FULL METAL JACKET

examining the psychedelic side of ketamine
KEYNOTE
WED. SEPT. 5  5:45P
MONT-ROYAL BALLROOM

Certified for credit
Chronic pain is on the doorstep of every healthcare provider on Main Street. It doesn’t matter whether you’re in Kentucky or Iowa or Ohio or California or New York, it is everywhere. To me someone who says to a patient, ‘I don’t treat chronic pain because I’m not a pain management physician’ is really saying there are 7,000 board-certified pain clinicians in the United States. That’s a fact. More or less 7,000 vs the number of people in the United States who suffer with chronic pain which, according to the Institute of Medicine, is somewhere around a 100 million people. If you do the math, there’s not enough healthcare providers in that 7,000 to see patients 24 hours a day, 7 days a week, 365 days a year.”

—Kevin L. Zacharoff MD, FACIP, FACPE, FAAP

Over 120 hours of content will be presented!

**LEARNING OBJECTIVES**

After attending PAINWeek® 2018, learners should be better able to:

- Explain pain terminology
- Describe the protocols for acute and chronic pain assessment
- Interpret basic diagnostic procedures for used to identify pain disorders
- Describe mechanisms by which regular physical activity and exercise decrease pain
- Identify the specific pain pathways acted upon by certain pharmacotherapies
- Calculate opioid conversions
- Cite current medical/legal issues impacting clinical pain management
- Assess strategies for treating pain and chemical dependency
- Identify the top prescription drugs of abuse
- Recognize a patient-centered approach to chronic pain management
- Apply adult learning theories to patient, provider, and caregiver communications

For full learning objectives, please visit m.painweek.org.

**PHYSICIAN ACCREDITATION STATEMENT**

Global Education Group is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

**PHYSICIAN CREDIT DESIGNATION**

Global Education Group designates this live activity for a maximum of 39.0 AMA PRA Category 1 Credit™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
The planners and managers reported the following financial relationships or relationships to products or devices they or their spouse/life partner have with commercial interests related to the content of this CME activity:

<table>
<thead>
<tr>
<th>Name of Planner or Manager</th>
<th>Reported Financial Relationship</th>
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<tbody>
<tr>
<td>Lindsay Borvansky</td>
<td>Nothing to disclose</td>
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<tr>
<td>Kelvin Burton, MD</td>
<td>Nothing to disclose</td>
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<tr>
<td>Kristen Delisi, NP</td>
<td>Nothing to disclose</td>
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<tr>
<td>Andrea Funk</td>
<td>Nothing to disclose</td>
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<tr>
<td>Liddy Knight</td>
<td>Nothing to disclose</td>
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<tr>
<td>Ashley Marostica, RN, MSN</td>
<td>Nothing to disclose</td>
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**AMERICAN ACADEMY OF FAMILY PHYSICIANS CONTINUING EDUCATION**

PAINWeek 2018 is pending approval from AAFP.

**NATIONAL ASSOCIATION OF SOCIAL WORKERS CONTINUING EDUCATION**

This program is Approved by the National Association of Social Workers (Approval # 886551415-1846) for 33 continuing education contact hours.

**ACEND PHYSICAL THERAPIST CONTINUING EDUCATION**

PAINWeek 2018 is pending approval from ACEND.

**DISCLOSURE OF UNLABELED USE**

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m.painweek.org

Please note that registration fees apply to this conference.

For information about the accreditation of this program, please contact Global at 303-395-1782 or cme@globaleducationgroup.com.

Supported in part by an educational grant from Daiichi Sankyo, Inc.; Biogen Idec, Inc.; Amgen; Jazz Pharmaceuticals; Supernus; Flexion Therapeutics; and St. Jude/Abbott.

**AMERICANS WITH DISABILITIES ACT**

Event staff will be glad to assist you with any special needs (ie, physical, dietary). Please contact Patrick Kelly at (973) 415-5109 prior to the live event.
Monday September 3  6:00p – 8:00p

An overview for conference attendees on the curriculum, faculty, satellite programs, and more.

Level 4. Nolita 3

This course is NOT certified for credit.
AGENDA

TUESDAY 9.4 WEDNESDAY 9.5 THURSDAY 9.6 FRIDAY 9.7 SATURDAY 9.8
<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Title</th>
<th>Level</th>
<th>Facilitator(s)</th>
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</thead>
<tbody>
<tr>
<td>7:00 – 7:50 a</td>
<td>BHV-01</td>
<td>The Carrot and the Stick: Values Based Interdisciplinary Pain Management</td>
<td>Level 3</td>
<td>Corinne Cooley DPT, DCS</td>
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<td>Heather Poupore-King PhD</td>
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<tr>
<td>7:00 – 7:50 a</td>
<td>CPS-01</td>
<td>The Weight of the World: Evaluation and Management of Sacroiliac Joint Dysfunction</td>
<td>Level 4</td>
<td>Ramon L. Cuevas-Trisan MD</td>
</tr>
<tr>
<td>7:00 – 7:50 a</td>
<td>INT-01</td>
<td>Electroceuticals: The Future of Interventional Pain Management?</td>
<td>Level 3</td>
<td>Sean Li MD</td>
</tr>
<tr>
<td>8:30 – 9:30 a</td>
<td>PDM-01</td>
<td>Insights on Novel Technology in Pain Management with Abuse-Deterrent Extended-Release Opioids*</td>
<td>Level 3</td>
<td>Jonathan Clapp MD, MS</td>
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<tr>
<td>9:00 – 10:30 a</td>
<td>BHV-02</td>
<td>Unveiling the Mask: The Relationship of Chronic Pain and Psychopathology</td>
<td>Level 3</td>
<td>David Cosio PhD, ABPP</td>
</tr>
<tr>
<td>9:00 – 10:30 a</td>
<td>INT-02</td>
<td>Injections, Nerve Blocks, Pumps, and Spinal Cord Stimulation</td>
<td>Level 4</td>
<td>Paul J. Christo MD, MBA</td>
</tr>
<tr>
<td>9:00 – 10:30 a</td>
<td>SIS-01</td>
<td>Brain Based Biomarkers for Pain: Objective Measures of Pain or a Journey Down the Rabbit Hole?</td>
<td>Level 3</td>
<td>Sean C. Mackey MD, PhD</td>
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<tr>
<td>9:00 – 12:30 p</td>
<td>WRK-01</td>
<td>Cannabis and Cannabinoids: Kissing Cousins or Good Cop/Bad Cop?</td>
<td>Level 3</td>
<td>Douglas L. Gourlay MD, MSC, FRCPC, FASAM</td>
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<td>Mary Lynn McPherson PHARM, MA, BCPS, CPE</td>
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<td>10:30 – 11:00 a</td>
<td>Break</td>
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<tr>
<td>11:00 – 12:00 a</td>
<td>BHV-03</td>
<td>The Psychological Science of Pain Relief and Opioid Reduction</td>
<td>Level 4</td>
<td>Beth Darnall PhD</td>
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<tr>
<td>11:00 – 12:00 a</td>
<td>CPS-02</td>
<td>Neck and Upper Extremity Pain Syndromes</td>
<td>Level 3</td>
<td>David M. Glick DC, DAIPM, CPE, FASPE</td>
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<tr>
<td>11:00 – 12:00 a</td>
<td>INT-03</td>
<td>Stem Cells and Regenerative Medicine for Chronic Pain</td>
<td>Level 4</td>
<td>Jay Joshi MD</td>
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<tr>
<td>11:00 – 12:00 a</td>
<td>SIS-02</td>
<td>The Emperor’s New Clothes: Multimodal Engagement &amp; Improving Access to Care</td>
<td>Level 4</td>
<td>David Cosio PhD, ABPP</td>
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<tr>
<td>12:30 – 1:30 p</td>
<td>PDM-03</td>
<td>Rethink Relief When Treating Chronic Pain Patients*</td>
<td>Level 3</td>
<td>Joseph V. Pergolizzi, Jr MD</td>
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<tr>
<td>1:00 – 2:30 p</td>
<td>BHV-04</td>
<td>Sleep and Pain: Friend or Foe?</td>
<td>Level 3</td>
<td>Fiona Warwick PhD</td>
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<tr>
<td>1:00 – 2:30 p</td>
<td>INT-04</td>
<td>Procedures or Medication Management? When to Refer to a Specialist</td>
<td>Level 4</td>
<td>Sean Li MD</td>
</tr>
<tr>
<td>1:00 – 3:30 p</td>
<td>MAS-01</td>
<td>When Stars Collide: Diagnosis and Pathophysiology of Minor Traumatic Brain Injury and Posttraumatic Headache</td>
<td>Level 4</td>
<td>Gary W. Jay MD, FAAPM, FACFEI</td>
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<tr>
<td>1:00 – 4:40 p</td>
<td>WRK-02</td>
<td>Patient Centered Opioid Reduction</td>
<td>Level 4</td>
<td>Beth Darnall PhD</td>
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<td>Ming-Chih Kao MD, PhD</td>
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<td>Sean C. Mackey MD, PhD</td>
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<tr>
<td>1:40 p</td>
<td>SYM-01</td>
<td><strong>Extended-Release and Long-Acting Opioid Analgesics:</strong> &lt;br&gt;Risk Evaluation and Mitigation Strategy (REMS)</td>
<td>Level 3</td>
<td>Bill McCarberg MD, Lynn Webster MD</td>
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<td>Sponsored by Global Education Group and Rockpointe</td>
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<td>2:40 p</td>
<td>CPS-03</td>
<td><strong>How Central is Central Poststroke Pain?</strong></td>
<td>Level 3</td>
<td>Michael M. Bottros MD</td>
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<tr>
<td>2:40 p</td>
<td>SIS-03</td>
<td><strong>Involuntary Tapers:</strong> &lt;br&gt;Legal, Ethical, and Clinical Concerns</td>
<td>Level 4</td>
<td>Douglas L. Gourlay MD, FRCPC, PASAM</td>
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<td>Mont-Royal Ballroom</td>
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<td>Stephen J. Ziegler PhD, JD</td>
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<td>3:40 p</td>
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<td><strong>Break</strong></td>
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<td>3:40 p</td>
<td>PDM-05</td>
<td><strong>Opioid Discontinuation - A New Treatment Option</strong></td>
<td>Level 3</td>
<td>Joseph V. Pergolizzi, Jr MD</td>
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<td>Sponsored by Salix Pharmaceuticals</td>
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<td>4:40 p</td>
<td>BHV-05</td>
<td><strong>The Psychology Toolbox:</strong> &lt;br&gt;Evidence Based Treatments for Pain Management</td>
<td>Level 3</td>
<td>Ravi Prasad PhD</td>
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<tr>
<td>4:40 p</td>
<td>CPS-04</td>
<td><strong>Mirror, Mirror on the Wall:</strong> &lt;br&gt;Graded Motor Imagery to Treat Complex Regional Pain Syndrome</td>
<td>Level 3</td>
<td>Michael M. Bottros MD</td>
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<tr>
<td>4:40 p</td>
<td>INT-05</td>
<td><strong>Central Sensitization and Ketamine Infusions</strong></td>
<td>Level 4</td>
<td>Jay Joshi MD</td>
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<tr>
<td>4:40 p</td>
<td>SIS-04</td>
<td><strong>Hello Darkness My Old Friend:</strong> &lt;br&gt;Tapping Into Temperament and Pain With Music Psychotherapy</td>
<td>Level 4</td>
<td>Joanne V. Loewy DA, LCAT, M-BC</td>
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<td>John F. Mondanaro MA, M-BC, LCAT</td>
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<td>Andrew R. Rossetti MMT, LCAT, M-BC</td>
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<tr>
<td>5:40 p</td>
<td>BHV-06</td>
<td><strong>Being Held Hostage?</strong> &lt;br&gt;Use Psychological Strategies for Resolving Difficult Patient Behaviors</td>
<td>Level 3</td>
<td>David Casio PhD, ABPP</td>
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<tr>
<td>5:40 p</td>
<td>CPS-05</td>
<td><strong>Pain from Head to Toe:</strong> &lt;br&gt;The Challenge of Multiple Comorbidities</td>
<td>Level 3</td>
<td>Charles E. Argoff MD, CPE</td>
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<tr>
<td>5:40 p</td>
<td>SIS-05</td>
<td><strong>Neurogenic Thoracic Outlet Syndrome</strong></td>
<td>Level 3</td>
<td>Paul J. Christo MD, MBA</td>
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<th>Level</th>
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<tr>
<td>7:00a – 7:50a</td>
<td>ACU-01</td>
<td>The Role of Acute Care in the Opioid Epidemic</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>Chad M. Brummett MD</td>
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<td>7:00a – 7:50a</td>
<td>IPPS-01</td>
<td>A Spy in the House of Love: Unraveling the Mysteries of Misplaced Cells and Cyclic Pain in Endometriosis</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Sawsan As-Sanie MD, MPH</td>
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<td>7:00a – 7:50a</td>
<td>PEF-01</td>
<td>Pain Terminology: Knowing the Difference Makes a Difference!</td>
<td>Level 3</td>
<td>Gracia 3</td>
<td>Jessica Geiger-Hayes PHARM, BCPS, CPE</td>
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<td>Mary Lynn McPherson PHARM, MA, BCPS, CPE</td>
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<td>8:30a – 9:30a</td>
<td>PDM-07</td>
<td>Salix Pharmaceuticals Invites You to a Breakfast Product Theater on Opioid-Induced Constipation*</td>
<td>Level 3</td>
<td>Brera Ballroom</td>
<td>Jeffrey A. Gudin MD</td>
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<tr>
<td>8:30a – 9:30a</td>
<td>PDM-08</td>
<td>Legislation and Litigation: A Moving Target Impacting Patient Care*</td>
<td>Level 3</td>
<td>Castellana Ballroom</td>
<td>Michael Barnes ESG, Bob Twillman PhD</td>
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<td>Sponsored by PERNIX Therapeutics</td>
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<tr>
<td>9:40a – 10:30a</td>
<td>IPPS-02</td>
<td>Sciatica My Ass! Pregnancy Related Pelvic Girdle Pain</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Colleen M. Fitzgerald MD, MS</td>
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<tr>
<td>9:40a – 10:30a</td>
<td>PEF-02</td>
<td>Pain Pathways Made Simple</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>David M. Glick OC, DAPM, CPE, FASPE</td>
</tr>
<tr>
<td>9:40a – 12:30p</td>
<td>WRK-03</td>
<td>Working With Buprenorphine and Methadone: Lipstick on the Pig? Or Mama's Got a Brand New Bag? (Requires separate registration fee)</td>
<td>Level 4</td>
<td>Yaletown 1</td>
<td>Douglas L. Gourlay MD, MSC, FRCPC, FASAM, Mary Lynn McPherson PHARM, MA, BCPS, CPE</td>
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<td>10:30a – 11:00a</td>
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<td>Break</td>
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<td>10:30a – 12:00p</td>
<td>ACU-02</td>
<td>The Dynamics of Managing Acute Postoperative Pain in the Current Opioid Sparing Environment</td>
<td>Level 3</td>
<td>Gracia 3</td>
<td>Robert L. Barkin MBA, PHARM, FCP, DAPM</td>
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<td>Rami Ben-Joseph PHD, Tong J. Gan MD, MBA</td>
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<td>Joseph V. Pergolizzi, Jr MD, Robert B. Raffa PHD</td>
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<tr>
<td>11:10a – 12:00p</td>
<td>ACU-03</td>
<td>Relax, All Antispasmodics Are the Same....Right?</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Jessica Geiger-Hayes PHARM, BCPS, CPE</td>
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<td>11:10a – 12:00p</td>
<td>PEF-03</td>
<td>Chronic Pain Assessment</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>Michael R. Clark MD, MPH, MBA</td>
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<tr>
<td>11:10a – 12:00p</td>
<td>SIS-06</td>
<td>Full Metal Jacket: Examining the Psychedelic Side of Ketamine</td>
<td>Level 4</td>
<td>Nolita 3</td>
<td>R. Norman Harden MD</td>
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<tr>
<td>12:30p – 1:30p</td>
<td>PDM-09</td>
<td>A New Option in Migraine Prevention*</td>
<td>Level 3</td>
<td>Brera Ballroom</td>
<td>Charles E. Argoff MD</td>
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<td>12:30p – 1:30p</td>
<td>PDM-10</td>
<td>My Patient’s Not an Addict: Why Should I Worry About Opioid Overdose?*</td>
<td>Level 3</td>
<td>Castellana Ballroom</td>
<td>Michael J. Brennan MD, Michael E. Schatman PHD, Rasheed Singleton MD</td>
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<td>1:40p – 2:30p</td>
<td>ACU-04</td>
<td>Emerging Trends in Acute Pain Management</td>
<td>Level 4</td>
<td>Nolita 3</td>
<td>Alexis LaPietra DO, FACEP, FAAEM</td>
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<tr>
<td>1:40p – 2:30p</td>
<td>SIS-07</td>
<td>The Outer Limits: Analgesics of the Future</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Jeffrey A. Gudin MD</td>
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<tr>
<td>1:40p – 2:30p</td>
<td>SIS-08</td>
<td>The Other Opioid Crisis: Fentanyl and Heroin</td>
<td>Level 4</td>
<td>Mont-Royal Ballroom</td>
<td>Kevin L. Zacharoff MD, FACIP, FACPE, FAAP</td>
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<th>Level</th>
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<tr>
<td>1:40p – 3:30p</td>
<td>PEF-04</td>
<td>Pain Therapeutics                                                    Level 4</td>
<td>Alexandra McPherson PHARMD, MPH</td>
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<tr>
<td>2:40p – 3:30p</td>
<td>ACU-05</td>
<td>The Impact of Centralized Pain on Acute and Chronic Pain Outcomes    Level 3</td>
<td>Chad M. Brummett MD</td>
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<tr>
<td>2:40p – 3:30p</td>
<td>IPPS-03</td>
<td>Fear &amp; Loathing in the Bedroom: A Savage Journey Into Sexual Pain    Level 3</td>
<td>Meryl J. Alappattu PT, DPT, PhD</td>
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<tr>
<td>2:40p – 3:30p</td>
<td>SIS-09</td>
<td>The Yin and the Yang of Pain Research: Matching Disease Mechanisms   Level 4</td>
<td>R. Norman Harden MD</td>
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<td>3:40p – 4:30p</td>
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<tr>
<td>3:40p – 4:30p</td>
<td>PDM-11</td>
<td>Rethink Relief: A Case Study Series in Chronic Pain Patients*        Level 3</td>
<td>Christopher A. Gilmore MD</td>
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<tr>
<td>4:40p – 5:30p</td>
<td>IPPS-04</td>
<td>The Razor’s Edge: Evaluating Pelvic Pain Caused By Peripheral Nerve Injury Level 3</td>
<td>Mario E. Castellanos MD</td>
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<tr>
<td>4:40p – 5:30p</td>
<td>PEF-05</td>
<td>Clinical Pearls: Unraveling the Secrets of Imaging Studies           Level 4</td>
<td>David M. Glick DC, DAIPM, CPE, FASPE</td>
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<tr>
<td>4:40p – 5:30p</td>
<td>SIS-10</td>
<td>From Here to Infirmity                                              Level 4</td>
<td>Kevin L. Zacharoff MD, FACIP, FACPE, FAAP</td>
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<tr>
<td>7:00p – 9:00p</td>
<td></td>
<td>Welcome Reception                                                    Level 4</td>
<td>Exhibit Hall/Belmont Ballroom</td>
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<tbody>
<tr>
<td>7:00 a – 7:50 a</td>
<td>APP-01</td>
<td>Practicing Multidisciplinary Pain Management in the Community Setting</td>
<td>Level 3</td>
<td>Theresa Mallick-Searle MS, NP-BC, ANP-BC</td>
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<tr>
<td>7:00 a – 7:50 a</td>
<td>NR0-01</td>
<td>Initial Evaluation and Management of Common Neuromusculoskeletal Painful Conditions</td>
<td>Level 4</td>
<td>Ramon L. Cuevas-Trisan MD</td>
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<tr>
<td>7:00 a – 7:50 a</td>
<td>PEF-06</td>
<td>Teamwork Through Common Language—A CPE Approach to Engaging Patients in a Multimodal Care Plan</td>
<td>Level 3</td>
<td>Kathryn A. Schompmyer PT, DPT, CPE</td>
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<tr>
<td>8:30 a – 9:30 a</td>
<td>PDM-13</td>
<td>Opioid-Induced Constipation: Understanding the Neuropathic Disease*</td>
<td>Level 3</td>
<td>Gerald Aronoff MD</td>
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<tr>
<td>8:30 a – 9:30 a</td>
<td>PDM-14</td>
<td>Postherpetic Neuralgia Treatment: The Science, Patient Burden, and a Prescription Treatment Approach*</td>
<td>Level 3</td>
<td>Gerard DeGregoris III MD</td>
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<tr>
<td>9:40 a – 10:30 a</td>
<td>MOL-01</td>
<td>Get Your Specimens in Order: The Importance of Individualized Test Orders and Timely Test Utilization</td>
<td>Level 4</td>
<td>Jennifer Bolen JD</td>
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<tr>
<td>9:40 a – 11:00 a</td>
<td>APP-02</td>
<td>Multidisciplinary Pain Management: Complex Cases</td>
<td>Level 3</td>
<td>Jeremy A. Adler MS, PA-C</td>
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<tr>
<td>9:40 a – 11:00 a</td>
<td>SIS-11</td>
<td>Year of the Locusts: The Impact of the CDC Guidelines on Practitioners and Patients</td>
<td>Level 4</td>
<td>Robert L. Barkin MBA, PHARM, FCP, DAPM</td>
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<tr>
<td>10:30 a – 11:00 a</td>
<td></td>
<td>Break &amp; Exhibits</td>
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<tr>
<td>10:30 a – 12:00 p</td>
<td>AMS-01</td>
<td>American Headache Society: Chronic Migraine Education Program (Part 1)</td>
<td>Level 3</td>
<td>Scott Powers PhD, ABPP, FAHS</td>
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<tr>
<td>11:10 a – 12:00 p</td>
<td>NR0-02</td>
<td>The Not So Silent Scream: Managing Pain in Demyelinating Disorders</td>
<td>Level 3</td>
<td>Charles E. Argoff MD</td>
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<tr>
<td>11:10 a – 12:00 p</td>
<td>SIS-12</td>
<td>Pain, Drugs, and Ethics</td>
<td>Level 4</td>
<td>Kevin L. Zacharoff MD, FACIP, FACPE, FAAP</td>
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<tr>
<td>12:30 p – 1:30 p</td>
<td>PDM-15</td>
<td>Understanding Migraine Pathophysiology and Disease Burden*</td>
<td>Level 3</td>
<td>Charles E. Argoff MD</td>
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<tr>
<td>12:30 p – 1:30 p</td>
<td>PDM-16</td>
<td>An Industry-Sponsored Presentation on an Abuse-Deterrent Opioid, presented by Dr. Jeff Gudin*</td>
<td>Level 3</td>
<td>Robert Cowan MD, FAAN</td>
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<tr>
<td>1:40 p – 2:30 p</td>
<td>SIS-13</td>
<td>Dangerous Liaisons: Regimens, Regimes, and Rapprochements</td>
<td>Level 4</td>
<td>Steven D. Passik PhD</td>
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| 1:40 p – 2:30 p | SIS-14  | Do As I Say! Facilitating Treatment Adherence in Pain Medicine      | Level 4 | Martin D. Cheatie PhD                                                   

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</table>
| 1:40p – 3:30p | AHS-02  | American Headache Society:  
Chronic Migraine Education Program (Part 2)                                    | Level 3 | Scott Powers PhD, ABPP, FAHS  
Juliana H. VanderPluym MD, FRCPC  
Bert B. Vargas MD, FAHS, FAAN |
| 1:40p – 3:30p | SIS-15  | Pain Clinical Trials                                                  | Level 4 | Rami Ben-Joseph PhD  
Errol M. Gould PhD  
Ernest A. Kopecky PhD, MBA  
Srinivas Nalamachu MD  
Joseph V. Pergolizzi, Jr MD  
Robert B. Raffa PhD  
Robert Taylor PhD |
| 2:40p – 3:30p | MDL-02  | Embrace Changes and Prevent Overdose:  
A Basic Blueprint for Legal Risk Mitigation and Response               | Level 4 | Jennifer Bolen JD |
| 2:40p – 3:30p | PEF-07  | Plan Before You Leap!  
Instructional Design for Clinicians                                     | Level 3 | Mary Lynn McPherson PHARMD, MA, BCPS, CPE |
| 2:40p – 3:30p | SIS-16  | Pain Management at Ground Zero                                        | Level 3 | Mark Garofoli PHARMD, MBA, BCGP, CPE |
| 3:40p – 4:30p |         | Break & Exhibits                                                      |         |                                                                                                       |
| 4:40p – 5:30p | APP-03  | Preventing Burnout:  
Caring for the Clinician & Promoting Wellness                         | Level 3 | Ravi Prasad PhD |
| 4:40p – 5:30p | MDL-03  | Trusted But Not Busted:  
Staying Compliant in a Litigious Environment                           | Level 4 | Michael C. Barnes JD, MIEP |
| 4:40p – 5:30p | NRO-03  | Big News in Small Fiber Neuropathies                                  | Level 3 | Charles E. Argoff MD, CPE |
| 4:40p – 5:30p | SIS-17  | Applying Mechanism-Based Classification to  
Clinical Reasoning for Complex Persistent Pain                        | Level 3 | Miroslav Backonja MD  
Kathryn A. Schopmeyer PT, DPT, CPE |
| 5:40p – 6:30p | APP-04  | Case Studies in Aberrant Drug Taking Behaviors                        | Level 3 | Jeremy A. Adler MS, PA-C |
| 5:40p – 6:30p | NRO-04  | The Pomptus of Pain:  
Living Through Postherpetic Neuralgia                                  | Level 3 | Gary W. Jay MD, FAAPM, FACFEI |
| 5:40p – 6:30p | PEF-08  | It’s a Bird! It’s a Plane! No, It’s a Case Manager!  
Utilizing Complex Care Case Managers in a Pain Clinic Setting          | Level 4 | Susan N. Myers MBA, RN, CCM  
Karen Sugarman MSW, LCSW |
| 5:40p – 6:30p | SIS-18  | Solutions to Counterfeit Medicines                                   | Level 4 | Jay Joshi MD |
| 6:30p – 8:30p | PDS-01  | Scientific Poster Session and Reception*                              | Level 2 | Co-Chairs  
Srinivas Nalamachu MD  
Joseph V. Pergolizzi, Jr MD |

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<tr>
<td>7:00a – 7:50a</td>
<td>APS-01</td>
<td>The Knee Bone’s Connected to the...</td>
<td>Level 4</td>
<td>Roger B. Fillingim PHD</td>
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<td>Peripheral and Central Mechanisms in Knee Osteoarthritis</td>
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<td>ENC-01</td>
<td>Pain Pathways Made Simple</td>
<td>Level 3</td>
<td>David M. Glick DC, DAIPM, CPE, FASPE</td>
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<td>PHM-01</td>
<td>Walking the Line: Opioid Dose De-escalation</td>
<td>Level 3</td>
<td>Abigail T. Brooks PHARMD, BCPS</td>
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<td>POS-02</td>
<td>Poster/Podium Presentations*</td>
<td>Level 3</td>
<td>Co-chairs: Srinivas Nalamachu MD, Joseph V. Pergolizzi, Jr MD</td>
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<td>8:30a – 9:30a</td>
<td>PDM-19</td>
<td>An Industry-Sponsored Presentation on an Abuse-Deterrent Opioid, presented by Jeremy Adler*</td>
<td>Level 3</td>
<td>Jeremy Adler MS, PA-C</td>
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<td>9:40a – 10:30a</td>
<td>PHM-02</td>
<td>Opioid Conversion Calculations</td>
<td>Level 3</td>
<td>Mary Lynn McPherson PHARMD, MA, BCPS, CPE</td>
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<td>9:40a – 10:30a</td>
<td>SIS-19</td>
<td>Policies and Practicalities: Focusing on the Patient, Not the Opioid</td>
<td>Level 4</td>
<td>Jennifer M. Hah MD, MS</td>
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<td>Ravi Prasad PHD</td>
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<td>10:30a – 11:00a</td>
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<td>Break &amp; Exhibits</td>
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<td>11:00a – 11:45a</td>
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<td>11:45a – 12:30p</td>
<td>SIS-21</td>
<td>The Knee Bone’s Connected to the...</td>
<td>Level 4</td>
<td>Robert L. Barkin MBA, PHARMD, FCP, DAIPM</td>
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<td>Peripheral and Central Mechanisms in Knee Osteoarthritis</td>
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<td>Gary W. Jay MD, FAAHP, FACFEI</td>
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<td>11:45a – 12:30p</td>
<td>APS-02</td>
<td>Oh My Aching Back: Assessment and Management of Low Back Pain</td>
<td>Level 4</td>
<td>Burel R. Goodin PhD</td>
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<td>12:30p – 1:30p</td>
<td>PDM-21</td>
<td>Opioid-Induced Constipation: The Science, Patient Burden, and a Prescription Treatment Approach*</td>
<td>Level 3</td>
<td>Jeffrey A. Gudin MD</td>
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<td>1:40p – 3:45p</td>
<td>PHM-03</td>
<td>Thug Drugs</td>
<td>Level 3</td>
<td>Mark Garofoli PHARMD, MBA, BCGP, CPE</td>
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<td>1:40p – 3:45p</td>
<td>SIS-23</td>
<td>IV Naloxone Infusion: A Hidden Gem</td>
<td>Level 4</td>
<td>Charles Louy MD, PHD</td>
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<td>1:40p – 3:45p</td>
<td>MAS-02</td>
<td>Back Pain: It’s All About the Diagnosis</td>
<td>Level 3</td>
<td>David M. Glick DC, DAIPM, CPE, FASPE</td>
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<tr>
<td>1:40p</td>
<td>SIS-24</td>
<td>Common Threads in Pain and Chemical Dependency</td>
<td>Level 4</td>
<td>Mont-Royal Ballroom</td>
<td>Douglas L. Gourlay MD, MSC, FRCP, FASAM, Mel Pohl MD, Gary M. Reisfield MD</td>
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<tr>
<td>2:40p</td>
<td>APS-03</td>
<td>Here a Pain, There a Pain, Everywhere a Pain Pain: Widespread Pain and Fibromyalgia</td>
<td>Level 4</td>
<td>Nolita 3</td>
<td>Roland Stauf MD, FACP</td>
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<td>2:40p</td>
<td>PHM-04</td>
<td>ADFs: Gimmick or Godsend?</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Jeffrey Fuad BS, PHRMD, DAAPM, FCCP, FASHP, Michael E. Schatzman PHD, CPDE, DASPE</td>
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<td>2:40p</td>
<td>SIS-25</td>
<td>Benzodiazepines and 'Z' Drugs for Pain Patients: The Problem of Prolonged Withdrawal Syndrome</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>Joseph V. Pergolizzi, Jr MD, Robert B. Raffa MD, Steven L. Wright MD, FAAP, FASAM</td>
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<td>2:30p</td>
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<td>Exhibit Hall Closing Reception</td>
<td>Level 4</td>
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<td>3:40p</td>
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<td>Break &amp; Exhibits</td>
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<tr>
<td>4:40p</td>
<td>CIIN-02</td>
<td>An Unexpected Valentine: Cannabis for Painful Skin Conditions</td>
<td>Level 3</td>
<td>Gracia 5</td>
<td>Jeanette Jacknin MD</td>
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<tr>
<td>4:40p</td>
<td>PHM-05</td>
<td>Nonopioid Analgesics, Adjuvants, and Antidepressants</td>
<td>Level 3</td>
<td>Gracia 3</td>
<td>Anna Aljassem MD, Levi M. Hall PHARM, BCPS</td>
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<tr>
<td>4:40p</td>
<td>SIS-26</td>
<td>Bridges to Babylon: Assessing &amp; Managing Comorbidities in Chronic Pain Patients</td>
<td>Level 3</td>
<td>Gracia 1</td>
<td>Martin D. Cheattle PHD</td>
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<td>4:40p</td>
<td>SIS-27</td>
<td>Fudin vs Gudin: Debate on 4 HOT Topics!</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>Jeffrey Fuad BS, PHRMD, DAAPM, FCCP, FASHP, Jeffrey A. Gudin MD</td>
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<tr>
<td>5:40p</td>
<td>APS-04</td>
<td>Exercise Your Demons: The Benefits of Exercise as a Treatment for Musculoskeletal Pain</td>
<td>Level 4</td>
<td>Nolita 3</td>
<td>Marie Hoeger Bement PT, PHD</td>
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<tr>
<td>5:40p</td>
<td>CIIN-03</td>
<td>Medical Cannabis: Focus on Pain Management</td>
<td>Level 4</td>
<td>Nolita 1</td>
<td>Theresa Mallick-Searle MS, NP-BC, ANP-BC</td>
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<tr>
<td>5:40p</td>
<td>PHM-06</td>
<td>Topical Analgesics: Perfect “Solution” for Reducing Systemic Opioid Exposure</td>
<td>Level 3</td>
<td>Gracia 3</td>
<td>Anna Aljassem MD, Levi M. Hall PHARM, BCPS</td>
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<tr>
<td>5:40p</td>
<td>SIS-28</td>
<td>Nontraditional Law Enforcement Solutions to Misuse, Abuse, and Diversion of Opioids</td>
<td>Level 4</td>
<td>Mont-Royal Ballroom</td>
<td>Victor Fazie EDD, Marc S. Gonzalez PHARM</td>
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<tbody>
<tr>
<td>8:40a – 9:30a</td>
<td>INTG-01</td>
<td>Battlefield Acupuncture Protocol Combined With Microcurrent for Stress and Pain Reduction</td>
<td>Level 3</td>
<td>Kelly Armstrong OTR/L, SIPT, SRT, MPP</td>
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<tr>
<td>8:40a – 9:30a</td>
<td>PHM-07</td>
<td>What’s All the “GABA” About? Pregabalin and Gabapentin Abuse</td>
<td>Level 3</td>
<td>Abigail T. Brooks PHARMD, BCPS</td>
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<tr>
<td>8:40a – 9:30a</td>
<td>SIS-29</td>
<td>Clinical Applications of Electronic Signal Treatment and the Combined Electrochemical Treatment: A New Method for the Treatment of Neuropathies and Neuropathic Pain</td>
<td>Level 4</td>
<td>Robert H. Odell MD</td>
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<tr>
<td>9:30a – 10:00a</td>
<td>PHM-07</td>
<td>Palliative Care Bootcamp: You’re in the Army Now! (Requires separate registration fee)</td>
<td>Level 4</td>
<td>Frank D. Ferris MD</td>
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<tr>
<td>9:30a – 10:00a</td>
<td>ENC-02</td>
<td>Full Metal Jacket: Examining the Psychedelic Side of Ketamine</td>
<td>Level 4</td>
<td>R. Norman Harden MD</td>
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<tr>
<td>9:30a – 10:00a</td>
<td>PHM-08</td>
<td>Spasms vs Spasticity: Causes and Treatments</td>
<td>Level 3</td>
<td>Mark Garofoli PHARMD, MBA, BCPS, CPE</td>
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<tr>
<td>9:30a – 10:00a</td>
<td>PTH-01</td>
<td>Change the Narrative for Improved Outcomes—Words Matter in Pain Care</td>
<td>Level 4</td>
<td>Kathryn A. Schopmeyer PT, DPT, CPE</td>
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<tr>
<td>10:30a – 11:00a</td>
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<td>Break</td>
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<tr>
<td>11:10a – 12:00p</td>
<td>ENC-03</td>
<td>The Yin and the Yang of Pain Research: Matching Disease Mechanisms With Interventions</td>
<td>Level 4</td>
<td>R. Norman Harden MD</td>
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<tr>
<td>11:10a – 12:00p</td>
<td>PHM-09</td>
<td>Are Bootleg Fentanyl the New Pill Mills?</td>
<td>Level 3</td>
<td>Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHF</td>
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<tr>
<td>11:10a – 12:00p</td>
<td>SIS-30</td>
<td>Pain Management Strategies for the Geriatric Population: How to Live in Your Discomfort Zone Without Opioids</td>
<td>Level 3</td>
<td>Winifred Bragg MD</td>
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<tr>
<td>1:00p – 1:50p</td>
<td>PHM-10</td>
<td>The Trifecta: Central Sensitization, Opioid Tapering, and Educational Support for Chronic Pain Management</td>
<td>Level 3</td>
<td>Maria C. Foy PHARMD, BCPS, CPE</td>
</tr>
<tr>
<td>1:00p – 1:50p</td>
<td>PTH-02</td>
<td>Dry Needling and Trigger Points: The Science Behind How Dry Needling Might “Work”</td>
<td>Level 4</td>
<td>Jarod A. Hall PT, DPT</td>
</tr>
<tr>
<td>2:00p – 2:50p</td>
<td>INTG-02</td>
<td>Scars &amp; Traumas: Their Hidden Influence on Chronic Pain, Health, and Disease</td>
<td>Level 3</td>
<td>Kelly Armstrong OTR/L, SIPT, SRT, MPP</td>
</tr>
</tbody>
</table>
| 2:00p – 2:50p | PHM-11 | To Dream the Impossible Dream: Acute Pain Management for Patients on Buprenorphine | Level 3 | Maria C. Foy PHARMD, BCPS, CPE                                              
<table>
<thead>
<tr>
<th>Time</th>
<th>Code</th>
<th>Topic</th>
<th>Level</th>
<th>Speakers</th>
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<tr>
<td>2:00p – 2:50p</td>
<td>PTH-03</td>
<td><strong>Addressing Altered Sensory Perception:</strong> A Missing Piece to the Pain Puzzle</td>
<td>4</td>
<td>Marcos Lopez PT, DPT, OCS, TPS</td>
</tr>
<tr>
<td>3:00p – 3:50p</td>
<td>ENC-04</td>
<td><strong>Pain Management at Ground Zero</strong></td>
<td>3</td>
<td>Mark Garofoli PHARMD, MBA, BCSP, CPE</td>
</tr>
<tr>
<td>3:00p – 3:50p</td>
<td>INTG-03</td>
<td><strong>This is Us!</strong> Interdisciplinary vs Integrative Pain Management</td>
<td>3</td>
<td>Sondra M. Adkinson PHARMD, DAAPM, CPE, BSBN</td>
</tr>
<tr>
<td>3:00p – 3:50p</td>
<td>PTH-04</td>
<td><strong>Unstable Core or Unstable Theories?</strong></td>
<td>4</td>
<td>Jarod A. Hall PT, DPT</td>
</tr>
<tr>
<td>3:00p – 3:50p</td>
<td>SIS-31</td>
<td><strong>Ketamine in the Acute Care Setting:</strong> What’s Old is New Again</td>
<td>3</td>
<td>Charles Louy MD, PhD</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Chona Melvin DNSC, MSN, RN, FNP-C</td>
</tr>
</tbody>
</table>
UNVEILING THE MASK
The relationship of chronic pain and psychopathology

david cosio
tuesday september 4
sciatica
my
ass!
pregnancy
related
pain

colleen m. fitzgerald
wednesday september 5
meryl j. alappattu

FEAR & LOATHING IN THE BEDROOM

a savage journey into sexual pain

wed. sept. 5
FACULTY
Sondra M. Adkinson PHARMD, DAAPM, CPE, BSPH
Clinical Pharmacy Specialist—Pain Management
Bay Pines VA Healthcare System
PM&R Specialty Pain Clinic
Bay Pines, FL
Nothing to disclose

Jeremy A. Adler MS, PA-C
Senior Pain Management PA
Pacific Pain Medicine Consultants
Encinitas, CA
Consultant/Independent Contractor: Collegium; Eagalet; Millennium Labs; Quest Diagnostics
Honoraria: AstraZeneca; Daiichi; Pernix; St. Jude/Abbott

Meryl J. Alappattu PT, DPT, PhD
Research Assistant Professor
University of Florida
Department of Physical Therapy
Gainesville, FL
Nothing to disclose

Annas Aljassem MD
Assistant Professor
Oakland University William Beaumont
School of Medicine
Department of Physical Medicine and Rehabilitation
Dearborn, MI
Nothing to disclose

Charles E. Argoff MD, CPE
Professor of Neurology
Albany Medical College
Director, Comprehensive Pain Center
Albany Medical Center
Department of Neurology
Albany, NY
Consultant/Independent Contractor:
Collegium; kaleo; Lilly; Novartis; Pfizer; Quest; Regeneron; Teva; US World Meds; Vertex
Grant/Research Support: Grünenthal; Vertex
Honoraria: Allergan; Amgen; AstraZeneca; BDSI; DSI; Novartis; Teva
Stock Shareholder: Depomed; Pfizer
Other/Royalty: Cambridge Press; Elsevier

Kelly Armstrong OTR/L, SIPT, SRT, MPP
Occupational Therapist
Women’s Integrative Healing, LLC
St. Augustine, FL
Senior Instructor
Acumed Medical
New York, NY
Consultant/Independent Contractor/Honoraria:
Center of Pain and Stress Research

Sawsan As-Sanie MD, MPH
Associate Professor
University of Michigan
Department of Obstetrics and Gynecology
Ann Arbor, MI
Consultant/Independent Contractor:
AbbVie; Myovant Sciences

Miroslav Backonja MD
Clinical Professor
University of Washington
Department of Neurology
Seattle, WA
Executive Director
Scientific Solutions Pain and Inflammation Franchise
Worldwide Clinical Trials
Morrisville, NC
Nothing to disclose

Robert L. Barkin MBA, PHARMD, FCP, DAPM
Professor of Anesthesiology, Pharmacology, and Family Medicine
Rush Medical College
Chicago, IL
Nothing to disclose

Michael C. Barnes JD, MIEP
Attorney, Managing Partner
DCBA Law & Policy LLP
Washington, DC
Nothing to disclose

Fiona Barwick PhD
Clinical Assistant Professor
Stanford University School of Medicine
Department of Psychiatry & Behavioral Sciences, Division of Sleep Medicine
Stanford, CA
Director, Behavioral Sleep Medicine Program
Stanford Sleep Medicine Center
Redwood City, CA
Nothing to disclose

Rami Ben-Joseph PhD
Consultant
NEMA Research
Naples, FL
Consultant: Nema Research; Neumentum

Jennifer Bolen JD
Founder
Legal Side of Pain
Knoxville, TN
Consultant/Independent Contractor:
Alera; Generation Partners; MTI Solutions; Pernix

Michael M. Bottros MD
Assistant Professor of Anesthesiology
Washington University School of Medicine
Director of the Acute Pain Service
Barnes-Jewish Hospital
Department of Anesthesiology
Division of Pain Medicine
St. Louis, MO
Nothing to disclose

Winifred Bragg MD
Adjunct Faculty
Old Dominion University
College of Health Sciences
School of Community Health Professions and Physical Therapy
Medical Director
Spine and Orthopedic Pain Center, PC
Norfolk, VA

Abigail T. Brooks PHARMD, BCPS
Clinical Pharmacy Specialist
West Palm Beach VA Medical Center
West Palm Beach, FL
Consultant/Independent Contractor: Axial Healthcare

Chad M. Brummett MD
Associate Professor
University of Michigan Medical School
Department of Anesthesiology
Ann Arbor, MI
Consultant/Independent Contractor:
Heron Therapeutics; Recro Pharma Inc.
Other/Royalty: Peripheral Perineural Dexmedetomidine (no royalties); Application number 12/791,506; Issue Date 4/27/13; Patent Number 8,410,140

Mario E. Castellanos MD
Clinical Assistant Professor of Obstetrics and Gynecology
University of Arizona College of Medicine
Faculty Physician
St. Joseph’s Hospital and Medical Center
Phoenix, AZ
Nothing to disclose

Martin D. Cheatle PhD
Associate Professor
Director, Pain and Chemical Dependency Program
Perlman School of Medicine
University of Pennsylvania
Center for Study of Addiction
Philadelphia, PA
Nothing to disclose
<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Position</th>
<th>Institution/Department</th>
<th>City, State</th>
</tr>
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<tbody>
<tr>
<td>Paul J. Christo, MD, MBA</td>
<td>Associate Professor</td>
<td>Johns Hopkins University School of Medicine</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td></td>
<td>Consultant/Independent Contractor/Other/Royalty:</td>
<td>Aligatry LLC; Media Work</td>
<td></td>
</tr>
<tr>
<td>Michael R. Clark, MD, MPH, MBA</td>
<td>Vice Chair, Clinical Affairs</td>
<td>Johns Hopkins University School of Medicine</td>
<td>Baltimore, MD</td>
</tr>
<tr>
<td></td>
<td>Department of Psychiatry and Behavioral Sciences</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corinne Cooley, DPT, OCS</td>
<td>Physical Therapist Level III</td>
<td>Stanford Management Center Orthopedic &amp; Sports Rehabilitation</td>
<td>Stanford, CA</td>
</tr>
<tr>
<td></td>
<td>Nothing to disclose</td>
<td></td>
<td></td>
</tr>
<tr>
<td>David Cosio, PHD, ABPP</td>
<td>Psychologist</td>
<td>University of Illinois College of Medicine</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td></td>
<td>Division of Pain Medicine Psychologist</td>
<td>Jesse Brown Veterans Affairs Medical Center</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Anesthesiology/Pain Clinic Chicago, IL</td>
<td></td>
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</tr>
<tr>
<td>Ramon L. Cuevas-Trisan, MD</td>
<td>Affiliate Assistant Professor</td>
<td>University of Miami-Miller School of Medicine</td>
<td>West Palm Beach, FL</td>
</tr>
<tr>
<td></td>
<td>Chief, Physical Medicine, Rehabilitation &amp; Pain Management Service</td>
<td>West Palm Beach VA Medical Center</td>
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<tr>
<td></td>
<td>Physical Medicine &amp; Rehabilitation West Palm Beach, FL</td>
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<tr>
<td>Beth Darnall, PHD</td>
<td>Clinical Professor</td>
<td>Stanford University School of Medicine</td>
<td>Palo Alto, CA</td>
</tr>
<tr>
<td></td>
<td>Principal Investigator, Stanford Project on Opioid and Pain Reduction</td>
<td>Department of Anesthesiology, Perioperative and Pain Medicine</td>
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<td>Consultant/Independent Contractor/Other/Royalty:</td>
<td>Axial Healthcare, Advisory Board</td>
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<td>Grant/Research Support: Clinical Pain Advisor, Advisory Board</td>
<td>Pacira, Scientific Advisor</td>
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<tr>
<td>Victor Fazio, EDD</td>
<td>Vice President</td>
<td>Pharmaceutical Diversion Intelligence Network, Inc.</td>
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<tr>
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<td>Ventura County Sheriff’s Office</td>
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<tr>
<td>Frank D. Ferris, MD</td>
<td>Executive Director</td>
<td>Palliative Medicine, Research &amp; Education</td>
<td>Columbus, OH</td>
</tr>
<tr>
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<td>Nothing to disclose</td>
<td>Ohio Health</td>
<td></td>
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<tr>
<td>Roger B. Fillingim, PHD</td>
<td>Distinguished Professor</td>
<td>University of Florida College of Dentistry</td>
<td>Gainesville, FL</td>
</tr>
<tr>
<td></td>
<td>Nothing to disclose</td>
<td>Director University of Florida Pain Research</td>
<td></td>
</tr>
<tr>
<td>Colleen M. Fitzgerald, MD, MS</td>
<td>Associate Professor</td>
<td>Loyola University Stritch School of Medicine</td>
<td>Maywood, IL</td>
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<tr>
<td></td>
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<td>Department of OB/GYN, Division of FPM&amp;R,</td>
<td></td>
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<tr>
<td>Maria C. Foy, PHARM, BCPS, CPE</td>
<td>Patient Care Coordinator, Palliative Care</td>
<td>Loyola University Medical Center</td>
<td>Abington, PA</td>
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<td></td>
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<td>AstraZeneca</td>
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<tr>
<td>Jeffrey Fudin, BS, PHARM, DAAPM, FCCP, FASHP</td>
<td>Adjunct Associate Professor</td>
<td>Western New England College of Pharmacy</td>
<td>Springfield, MA</td>
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<td></td>
<td>Clinical Pharmacy Specialist, Residency Director</td>
<td>Department of Pain and Palliative Care Pharmacy</td>
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<tr>
<td>tong J. Gan, MD, MBA</td>
<td>Professor and Chairman</td>
<td>SUNY Stony Brook</td>
<td>Albany, NY</td>
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<tr>
<td></td>
<td>Department of Anesthesiology</td>
<td>Stony Brook, NY</td>
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<tr>
<td>Mark Garofoli, PHARM, MBA, BCGP, CPE</td>
<td>Assistant Clinical Professor</td>
<td>University of West Virginia School of Pharmacy</td>
<td>Morgantown, WV</td>
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<td>Consultant/Independent Contractor: Daiichi Sankyo, Clinical Pharmacists Advisory Panel, Member</td>
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<tr>
<td>Jessica Geiger-Hayes, PHARM, BCPS, CPE</td>
<td>Clinical Pharmacist, Palliative Care</td>
<td>Ohio Health Riverside Methodist Hospital</td>
<td>Columbus, OH</td>
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<td>Ansax Pharmaceuticals</td>
<td></td>
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<tr>
<td>david M. Glick, DC, DAIPM, CPE, FASPE</td>
<td>CEO &amp; Medical Director</td>
<td>Western New England College of Pharmacy</td>
<td>Richmond, VA</td>
</tr>
<tr>
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<td>Nothing to disclose</td>
<td>Western New England College of Pharmacy</td>
<td></td>
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<tr>
<td>marc S. Gonzalez, PHARM</td>
<td>President</td>
<td>Professional Diversion Intelligence Network</td>
<td>Los Angeles, CA</td>
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<td>Nothing to disclose</td>
<td>AstraZeneca</td>
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</tbody>
</table>
Burel R. Goodin PhD
Associate Professor
University of Alabama
Department of Psychology, Anesthesiology, and Postoperative Medicine
Director, Biobehavioral Pain Research Laboratory
University of Alabama at Birmingham
Birmingham, AL
Nothing to disclose

Errol M. Gould PhD
Senior Director
Medical and Scientific Affairs
Pernix Therapeutics
Morristown, NJ
Stock Shareholder: Pernix
Other/Royalty: Full time employee of Pernix Therapeutics

Douglas L. Gourlay MD, MSC, FRCP, FASAM
Educational Consultant
Former Director, Wasser Pain Centre
Pain and Chemical Dependency Division
Toronto, Ontario
Nothing to disclose

Jeffrey A. Gudin MD
Former Clinical Instructor
Icahn School of Medicine at Mount Sinai
Department of Anesthesiology
New York, NY
Director
Englewood Hospital and Medical Center
Pain Management and Palliative Care Center
Englewood, NJ
Consultant/Indendent Contractor: BDSI; Daiichi Sankyo; Kempharm; Mallinckrodt; Nektar; Pernix; Purdue;
 Quest Diagnostics; Salix; Scilex
Speakers Bureau: AstraZeneca; Daiichi Sankyo; Salix; Scilex

Jennifer M. Hah MD, MS
Instructor
Stanford University
Division of Pain Medicine, Department of Anesthesiology, Perioperative, and Pain Medicine
Stanford, CA
Nothing to disclose

Jarod A. Hall PT, DPT
Clinic Director
Greater Therapy Centers
Fort Worth, TX
Nothing to disclose

Levi M. Hall PHARMD, BCPS
Assistant Professor
Oakland University William Beaumont School of Medicine
Rochester, MI
Clinical Pharmacy Specialist
Beaumont Hospital, Royal Oak
Department of Pain & Palliative Medicine
Royal Oak, MI
Nothing to disclose

R. Norman Harden MD
Professor Emeritus - Addison Chair in Pain Studies
Northwestern University
Department of Pain Management and Rehabilitation, and Physical Therapy
Chicago, IL
Senior Associate Editor
Pain Medicine
Lead Consultant
Analgesc Research Consultants, LLC
Athens, GA
Nothing to disclose

Marie Hoeger Bement PT, PHD
Associate Professor
Marquette University
Department of Physical Therapy
Milwaukee, WI
Nothing to disclose

Jeanette Jacknin MD
CEO
Dr. Jacknin’s Skincare
Encinitas, CA
Nothing to disclose

Gary W. Jay MD, FAAPM, FACFEI
Clinical Professor
University of North Carolina
Department of Neurology
Chapel Hill, NC
Nothing to disclose

Jay Joshi MD
cEO and Medical Director
National Pain Centers
Vernon Hills, IL
Nothing to disclose

Ming-Chih Kao MD
Clinical Assistant Professor
Stanford University
Department of Orthopaedic Surgery
Stanford, CA
Nothing to disclose

Courtney M. Kominek PHARMD, BCPS, CPE
Clinical Pharmacy Specialist - Pain Management
Harry S. Truman Memorial
Veterans’ Hospital Pharmacy
Columbia, MO
Consultant/Independent Contractor: Axial Healthcare
Honoraria: American Pharmacist Association; Daiichi Sankyo

Ernest A. Kopecky PhD, MBA
Vice President, Clinical Development
Head, Global Pain Medicine
Teva Pharmaceutical Industries, Ltd.
Malvern, PA
Other/Royalty: Full time employee at Teva Pharmaceutical Industries, Ltd.

Alexis LaPietra DO, FACEP, FAAEM
Director of Emergency Medicine
Acute Pain Management Fellowship
Director of Emergency Medicine Addiction and Mental Health Fellowship
St. Joseph’s Healthcare System
Paterson, NJ
Nothing to disclose

Sean Li MD
Regional Medical Director and Partner
Premier Pain Centers, LLC
Shrewsbury, NJ
Attending Pain Physician
Riverview Medical Center
Red Bank, NJ
Consultant/Indendent Contractor:
Boston Scientific; Halyard Health; Medtronic; Nevro;
Suture Concept; Vertiflex
Grant/Research Support: Grunenthal; Halyard Health;
Nevro; Saluda; SPR Therapeutics; Vertiflex
Speakers Bureau: ElectroCore; SI-Bone
Advisory Board: Medtronic; Nevro
Stock Shareholder: Suture Concepts

Joanne V. Loewy DA, LCAT, MT-BG
Director and Associate Professor
Mount Sinai Beth Israel-Icahn
School of Medicine
The Louis Armstrong Center for Music & Medicine
New York, NY
Nothing to disclose

JEFFREY FUDIN

ALEXIS LAPIETRA
Marcos Lopez PT, DPT, OCS, TPS
Invited Lecturer
UT Southwestern School of Health Professions
Department of Physical Therapy
Physical Therapist
Texas Physical Therapy Specialists
San Antonio, TX
Nothing to disclose

Charles Louy MD, PhD
Associate Director
Pain Management Fellowship Program
Director, InPatient Pain Service
Cedars-Sinai
Los Angeles, CA
Nothing to disclose

Sean C. Mackey MD, PhD
Redlich Professor of Anesthesiology,
Perioperative and Pain Medicine,
Neurosciences and Neurology
Stanford University Medical Center
Perioperative and Pain Medicine,
Division of Pain Medicine,
Neurosciences and (by courtesy) Neurology
Palo Alto, CA
Chief, Division of Pain Management
Stanford University Pain Management Center
Pain Division
Redwood City, CA
Nothing to disclose

Theresa Mallick-Searle MS, NP-BC, ANP-BC
Nurse Practitioner - Pain Medicine
Stanford Health Care
Division of Pain Medicine
Stanford, CA
Speakers Bureau: Allergan; Pernix

Alexandra McPherson PHARM, MPH
Adjunct Professor
University of the Sciences
Philadelphia College of Pharmacy
Clinical Pharmacist
Einstein Medical Center
Intensive Care Unit Satellite Pharmacy
Philadelphia, PA
Nothing to disclose

Mary Lynn McPherson PHARM, MA, BCPS, CPE
Professor and Executive Director
Advanced Post-Graduate Education
in Palliative Care
Program Director
Online Master of Science in Palliative Care
University of Maryland School of Pharmacy
Pharmacy Practice and Science
Stevensville, MD
Nothing to disclose

Chona C. Melvin DNPC, MSN, RN, FNP-C
Inpatient Pain Service I APN Council Co-chair
Cedars-Sinai Medical Center
Los Angeles, CA
Nothing to disclose

John F. Mondanaro MA, MT-BC, LCAT
Clinical Director
Mount Sinai Beth Israel
Louis & Lucille Armstrong
Music Therapy Program
New York, NY
Nothing to disclose

Susan N. Myers MBA, RN, CCM
Complex Care Case Manager
Stanford Pain Management Division
Redwood City, CA
Nothing to disclose

Srinivas Nalamachu MD
Clinical Assistant Professor
Kansas University Medical Center
Rehabilitation Medicine
Kansas City, KS
President and Medical Director
International Clinical Research Institute
Department of Physical Medicine and Rehabilitation
Overland Park, KS
Consultant/Independent Contractor:
Collegium; DSI; Ferring; Pernix; Pfizer; Purdue
Grant/Research Support: Collegium
Honors: Collegium; DSI; Ferring; Pernix; Pfizer

Robert H. Odell MD, PhD
Owner, Founder
Neuropathy & Pain Centers of Las Vegas
Las Vegas, NV
Stock Shareholder: RST Sanexas

Steven D. Passik PhD
Vice President
Collegium Pharmaceutical, Inc.
Scientific Affairs, Education and Policy
Cantor, MA
Other/Royalty: Full time employee of Collegium Pharmaceutical, Inc.

Joseph V. Pergolizzi, Jr MD
Director, Research
NEMA Research Inc.
Senior Partner
Naples Anesthesia and Pain Associates
Naples, FL
Consultant/Independent Contractor: Adapt Pharma;
BDSI; DSI; Grunenthal; Inspiron; Insys; Mallinckrodt; Salix
Grant/Research Support: Adapt Pharma; BDSI; DSI;
Grunenthal; Inspiron; Insys; Mallinckrodt; Salix
Other/Royalty: Owner of Neumentum

Mel Pohl MD
Clinical Assistant Professor
University of Nevada School of Medicine
Department of Psychiatry and
Behavioral Sciences
Chief Medical Officer
Las Vegas Recovery Center
Las Vegas, NV
Nothing to disclose

Heather Poupore-King PhD
Clinical Assistant Professor
Stanford Pain Management Center
Division of Pain Medicine
Redwood City, CA
Nothing to disclose

Scott Powers PhD, ABPP, FAHKS
Scientific Director, Clinical Research and Trials
Cincinnati Children’s Hospital
Pediatric Psychologist, Research, Division of
Behavioral Medicine & Clinical Psychology
Cincinnati, OH
Nothing to disclose

Ravi Prasad PhD
Associate Chief
Director of Psychological Services
Division of Pain Medicine
Stanford University
Department of Anesthesiology, Perioperative,
and Pain Medicine
Stanford, CA
Consultant/Independent Contractor:
Bicycle Health; Mission LISA

Robert B. Raffa PhD
Professor Emeritus and Past Chair
Temple University School of Pharmacy
Department of Pharmaceutical Sciences
Philadelphia, PA
Nothing to disclose

Gary M. Reisfield MD
Associate Professor
Director, Forensic Pain and Psychiatry
University of Florida College of Medicine
Divisions of Addiction Medicine and Forensic Psychiatry
Director, Pain Evaluation and Management
Florida Recovery Center
Department of Psychiatry
Gainesville, FL
Nothing to disclose

STEVE PASSIK
Andrew R. Rossetti MMT, LCAT, MT-BC
Appointment Associate Professor
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KATE SCHOPMEYER
being held hostage?

use psychological strategies for resolving difficult patient behaviors

david cosio  tuesday  september 4
When the best of intentions lead to unexpected outcomes

Medical Stasi
Paul Christo ● Douglas Gourlay ● Gary Reisfield ● Stephen Ziegler

Friday September 7
pain terminology:
knowing the difference makes the difference!

jessica geiger-hayes  alexandra mopherson  mary lynn mopherson
wednesday september 5
Dangerous Liaisons

A Kenneth L. Kirsh Memorial Lecture

Steve Passik    Thursday    September 6
SATELLITE EVENTS
**PainWeek** would like to thank our corporate partners for their participation in this year’s satellite events. PainWeek is appreciative of the supportive role that members of this community continue to play in our efforts to provide frontline practitioners with quality educational programs. These satellite events are not part of the official 2018 PainWeek National Conference and are planned solely by the sponsoring organizations/companies.

These events include both certified and non-certified programs. Course descriptions for certified activities, faculty disclosures, and protocol for obtaining CE/CME credit will be provided by individual event organizers. Please contact the organizers for further details.

Seating is strictly limited for all events. Preference may be given to preregistrants. If you are registered, please still plan on arriving at the door no later than 15 minutes prior to start time to ensure that your seat is held for you. A limited number of meals or refreshments will be served where indicated.

Nonmedical professionals or members of industry may only be allowed to participate at the discretion of the program organizers. Typically organizers do not accommodate family members, office staff, or guests of healthcare professionals.

**There are no fees to attend any of these satellite events.**

Information provided and opinions expressed have not involved any verification of the findings, conclusions, and opinions by PainWeek. Opinions expressed by speakers do not necessarily reflect those of PainWeek. No responsibility is assumed by PainWeek for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instruction, or ideas contained in the material herein. Because of the rapid advances in the medical sciences, PainWeek recommends that independent verification of diagnoses and medication dosages should be made by each healthcare professional.

Information provided was accurate as of press time. For the most up-to-date information please visit m.painweek.org.
**NON-CME activities**

(Not certified for credit)

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**Breakfast PDM**

*Insights on Novel Technology in Pain Management with Abuse-Deterrent Extended-Release Opioids*

*Sponsored by Collegium Pharmaceutical, Inc.*

**Jonathan Clapp MD, MS**

**Course Code:** PDM-01

**Tuesday 9.4**  8:30a - 9:30a  
Level 3.Brera Ballroom

- Breakfast will be served

**Contact:** Alex Wriedt (617) 750-8828 awriedt@collegiumpharma.com

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**Lunch PDM**

*Rethink Relief When Treating Chronic Pain Patients*

*Sponsored by BioDelivery Sciences*

**Joseph V. Pergolizzi, Jr MD**

**Course Code:** PDM-03

**Tuesday 9.4**  12:30p - 1:30p  
Level 3.Brera Ballroom

- Lunch will be served

**Contact:** Susan Myers (919) 582-9050 smyers@bdsi.com

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**Afternoon Break PDM**

*Opioid Discontinuation - A New Treatment Option*

*Sponsored by Salix Pharmaceuticals*

**Joseph V. Pergolizzi, Jr MD**

**Course Code:** PDM-05

**Tuesday 9.4**  3:40p - 4:30p  
Level 3.Brera Ballroom

- Refreshments will be served

**Contact:** Debbie Keeffe (973) 240-0180 dkeeffe@westfieldgroupusa.com

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**Breakfast PDM**

*Salix Pharmaceuticals Invites You to a Breakfast Product Theater on Opioid-Induced Constipation*

*Sponsored by Salix Pharmaceuticals*

**Jeffrey Gudin MD**

**Course Code:** PDM-07

**Wednesday 9.5**  8:30a - 9:30a  
Level 3.Brera Ballroom

- Breakfast will be served

**Contact:** Debbie Keeffe (973) 240-0180 dkeeffe@westfieldgroupusa.com

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**Breakfast PDM**

*Legislation and Litigation: A Moving Target Impacting Patient Care*

*Sponsored by PERNIX Therapeutics*

**Michael Barnes ESQ**

**Bob Twillman PHD**

**Course Code:** PDM-08

**Wednesday 9.5**  8:30a - 9:30a  
Level 3.Castellana Ballroom

- Breakfast will be served

**Contact:** Stephanie Lee (203) 323-5945 slee@pharmacomgroup.com

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**Lunch PDM**

*A New Option in Migraine Prevention*

*Sponsored by Amgen/Novartis*

**Charles E. Argoft MD**

**Course Code:** PDM-09

**Wednesday 9.5**  12:30p - 1:30p  
Level 3.Brera Ballroom

- Lunch will be served

**Contact:** Tina C. Squillante (862) 244-3292 tina.squillante@novartis.com

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**Lunch PDM**

*My Patient's Not an Addict: Why Should I Worry About Opioid Overdose?*

*Sponsored by kaléo, Inc.*

**Michael J. Brennan MD**

**Michael E. Schatzman PHD**

**Rasheed Singleton MD**

**Course Code:** PDM-10

**Wednesday 9.5**  12:30p - 1:30p  
Level 3.Castellana Ballroom

- Lunch will be served

**Contact:** Stephanie Lee (978) 886-0064 slee@pharmacomgroup.com

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**Programs**

Product Theatre, Disease Awareness, and Medical Information

Events listed in chronological order. Check [m.painweek.org](http://m.painweek.org) for the most up to date PDM information.
Afternoon Break PDM
Rethink Relief:
A Case Study Series in Chronic Pain Patients
Sponsored by BioDelivery Sciences

Christopher A. Gilmore MD

Course Code: PDM-11
Wednesday 9.5 3:40p - 4:30p Level 3.Brera Ballroom

● Refreshments will be served

Contact: Susan Myers (919) 582-9050 smyers@bdsi.com

Breakfast PDM
Postherpetic Neuralgia Treatment:
Understanding the Neuropathic Disease
Sponsored by Arbor Pharmaceuticals

Gerald Aronoff MD

Course Code: PDM-13
Thursday 9.6 8:30a - 9:30a Level 3.Brera Ballroom

● Breakfast will be served

Contact: Wendy Yong (404) 418-5305 wendy.yong@arborpharma.com

Breakfast PDM
Opioid-Induced Constipation:
The Science, Patient Burden, and a Prescription Treatment Approach
Sponsored by AstraZeneca and Daiichi Sankyo

Gerard DeGregoris III MD

Course Code: PDM-14
Thursday 9.6 8:30a - 9:30a Level 3.Castellana Ballroom

● Breakfast will be served

Contact: Linda Corsini (888) 595-7737 lcorsini@ahmdirect.com

Lunch PDM
Understanding Migraine Pathophysiology and Disease Burden
Sponsored by Teva Pharmaceuticals

Charles E. Argoff MD, CPE
Robert Cowan MD, FAAN, FAHS

Course Code: PDM-15
Thursday 9.6 12:30p - 1:30p Level 3.Brera Ballroom

● Lunch will be served

Contact: Jordan Halter; (973) 352-6764; jhalter@hlxusa.com

Lunch PDM
An Industry-Sponsored Presentation on an Abuse-Deterrent Opioid, presented by Dr. Jeff Gudin
Sponsored by Daiichi Sankyo, Inc.

Jeffrey A. Gudin MD

Course Code: PDM-16
Thursday 9.6 12:30p - 1:30p Level 3.Castellana Ballroom

● Lunch will be served

Contact: Virginia Lehman (908) 992-7124 vlehman@dsi.com

Breakfast PDM
An Industry-Sponsored Presentation on an Abuse-Deterrent Opioid, presented by Jeremy Adler
Sponsored by Daiichi Sankyo, Inc.

Jeremy Adler MS, PA-C

Course Code: PDM-19
Friday 9.7 8:30a - 9:30a Level 3.Brera Ballroom

● Breakfast will be served

Contact: Virginia Lehman (908) 992-7124 vlehman@dsi.com

Breakfast PDM
Adhering to the Guidelines for Neuropathic Pain:
Expanding Options to Detach from Opioids
Sponsored by SCILEX Pharmaceuticals Inc.

Jeffrey A. Gudin MD
Bill H. McCarberg MD

Course Code: PDM-20
Friday 9.7 8:30a - 9:30a Level 3.Castellana Ballroom

● Breakfast will be served

Contact: Stephanie Lee (203) 323-5945 slee@pharmacomgroup.com

Lunch PDM
Opioid-Induced Constipation: The Science, Patient Burden, and a Prescription Treatment Approach
Sponsored by AstraZeneca and Daiichi Sankyo

Jeffrey A. Gudin MD

Course Code: PDM-21
Friday 9.7 12:30p - 1:30p Level 3.Brera Ballroom

● Lunch will be served

Contact: Linda Corsini (888) 595-7737 lcorsini@ahmdirect.com
JOIN US FOR LUNCH AND A CONVERSATION ABOUT MIGRAINE

DATE: Wednesday, September 5, 2018
TIME: 12:30 PM - 1:30 PM
PLACE: The Cosmopolitan of Las Vegas, Brera Ballroom, 3rd Floor
SPEAKER: Charles Argoff, MD
        Albany Medical College and Albany Medical Center
        Albany, NY
TOPIC: Discuss recent findings on the pathophysiology of migraine and
       learn how to support patients in helping to prevent migraine

DON’T FORGET TO VISIT US AT BOOTH 305

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This is not an independent medical education program and not eligible for credit toward continuing medical
education requirements.

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Symposium

Extended-Release and Long-Acting Opioid Analgesics:
Risk Evaluation and Mitigation Strategy (REMS)
Sponsored by Global Education Group and Rockpointe.
This educational activity is supported by an independent educational grant from the Extended-Release/Long-Acting Opioid Analgesic REMS Program Companies. Please see http://ce.er-laopioidrems.com.

Bill H. McCarberg MD
Lynn Webster MD

Course Code: SYM-01

Tuesday 9.4 1:40p - 4:50p Level 3. Gracia 7

Contact: Paula Larson (908) 962-6478 plarson@rockpointe.com
Neck & Upper Extremity Pain Syndromes

David M. Glick
Tuesday
September 4
BIG NEWS
in small fiber neuropathies

CHARLES ARGOFF    THURSDAY SEPTEMBER 6
COURSE DESCRIPTIONS
Tracks

**Acu**
Acute Pain Management

**Ahs**
American Headache Society

**App**
Advanced Practice Provider

**APS**
American Pain Society

**BHV**
Behavioral Pain Management

**CBN**
Medical Cannabinoids

**CPS**
Chronic Pain Syndromes

**ENC**
Encore

**iNT**
Interventional Pain Management

**INTG**
Integrative Pain Management

**IPPS**
International Pelvic Pain Society

**Mas**
Master Class

**MDL**
Medical/Legal

**NRO**
Neurology

**PEF**
Pain Educators Forum

**PHM**
Pharmacotherapy

**POS**
Poster Session

**PTH**
Physical Therapy

**SIS**
Special Interest Session

**SYM**
Symposia

**WRK**
Workshop

*Not certified for credit*
The Role of Acute Care in the Opioid Epidemic
Chad M. Brummett MD

Wednesday 9.5  7:00a – 7:50a

MichiganOPEN—the Opioid Prescribing Engagement Network—was founded to develop a preventive approach to the opioid epidemic in the state through a focus on reducing acute care prescribing (surgery, dentistry, emergency medicine, and trauma). Addressing opioid prescribing during the acute care period among those patients not using opioids has the greatest potential to reduce the number of new chronic opioid users and minimize unintended distribution of prescription opioids into communities. Through a partnership with statewide, physician-led networks, MichiganOPEN is collecting data and identifying and disseminating best practices in acute care opioid prescribing to providers around the state. This session will describe the unique platform and approach of MichiganOPEN, launched under the leadership of 3 University of Michigan (UM) physicians with support from the Michigan Department of Health and Human Services, Blue Cross Blue Shield of Michigan (bcbsm) Value Partnerships, and the Institute for Healthcare Policy and Innovation at UM. The presenters will describe the program’s approach to understanding the impact of acute care prescribing in the opioid epidemic, as well as successes in changing prescribing practices in response to our data findings.

The Dynamics of Managing Acute Postoperative Pain in the Current Opioid Sparing Environment
Robert L. Barkin MBA, PHARMD, FCP, DAPM ● Rami Ben-Joseph PHD ●
Tong J. Gan MD, MBA ● Joseph V. Pergolizzi, JR MD ● Robert B. Raffa PHD

Wednesday 9.5  10:30a – 12:00p

Considering the significant risks of surgery, initiatives to improve safety and outcomes would have a broad impact on public health. The number of surgical procedures worldwide has grown to over 232 million annually. Studies report that Americans undergo an average of 9.2 surgical procedures per lifetime: 3.4 inpatient, 2.6 outpatient, and 3.2 nonoperating room invasive procedures. The per capita rate of surgery continues to increase through age 75, peaking at 0.16 operations per person per year. Acute pain is a consequence of most surgical interventions. Certain procedures result in higher pain trajectories that, if not adequately addressed, can lead to poorer outcomes and increased costs. Clinical pathways are being developed to address improving outcomes in the most cost-efficient manners. This program examines new options on the horizon for the management of moderate to severe in-hospital acute pain management; the impact of scheduled vs not scheduled analgesics related to the management of in-hospital acute postoperative pain management; health economic and outcomes measures related to in-hospital acute moderate to severe postoperative pain; and enhanced recovery after surgery.

Relax, All Antispasmodics Are the Same….Right?
Jessica Geiger-Hayes PHARMD, BCPS, CPE

Wednesday 9.5  11:10a – 12:00p

Antispasmodics are commonly used in managing pain from muscle spasms, cramping, and sometimes hiccups, but they aren’t a one-size-fits-all medication. Certain antispasmodics are for smooth muscle, others are for skeletal muscle. Some are more sedating. The aim of this session is to provide a high level review of the different classes and types of antispasmodics and their place in therapy. The discussion will include
pharmacokinetic profiles, side effects, and dosing pearls for the different muscle relaxers. Participants should leave the presentation with a better understanding of the appropriate place of antispasmodics in therapy and be more “relaxed” when choosing one, knowing that they are customizing their patient’s care by matching the symptom to the appropriate medication.

**Emerging Trends in Acute Pain Management**

**Alexis LaPietra** DO, FACEP, FAAEM

**Wednesday 9.5 1:40p – 2:30p**

This course will review evidence based nonopioid medications and modalities for acute pain in the acute care and primary care setting. Among the tools to be discussed are intravenous lidocaine for renal colic, topical analgesics for muscular pain, trigger point injections for acute and chronic musculoskeletal pain, and sphenopalantine ganglion blocks for refractory migraine pain. Attendees will be presented the current evidence, indications, and contraindications for each medication and modality, and be provided with appropriate tips and tricks for billing and reimbursement of bedside procedures. In the midst of the nation’s opioid crisis, practitioners must equip themselves with any and all tools available in the management of acute pain in an attempt to minimize unnecessary opioid prescribing, as well as mitigate adverse events when also managing polypharmacy in an increasingly larger aging and sick population. Come and learn practical ways to elevate management of acute pain in daily practice and build a toolbox to better tailor your approach to individual pain management needs.

**The Impact of Centralized Pain on Acute and Chronic Pain Outcomes**

**Chad M. Brummett** MD

**Wednesday 9.5 2:40p – 3:30p**

It is now recognized that the phenotypic features of centralized pain exist in many common pain conditions. The 2011 Survey Criteria for Fibromyalgia can be used as a surrogate of centralized pain to detect patients with fibromyalgia-like or centralized pain characteristics. Patients with higher fibromyalgia survey scores describe a more negative pain phenotype preoperatively, including more opioid use, higher pain scores, higher levels of anxiety and depression, and lower physical function. It is known that patients with fibromyalgia have decreased mu-opioid receptor binding availability and higher endogenous opioid levels. These data suggest that exogenous opioids may not be effective in patients with a fibromyalgia-like or centralized pain phenotype. As such, this could provide a mechanistic rationale for nonopioid, multimodal analgesia. The fibromyalgia measure was independently predictive of poorer long-term outcomes following total knee and hip arthroplasty (less change in knee/hip pain, overall body pain, and patient global impression of change). In fact, even among patients who were below the threshold for being termed “fibromyalgia-positive,” the measure was still predictive of outcomes. As a demonstration of the generalizability of the finding, the measure was also independently predictive of increased pain 6-months after hysterectomy. This course will discuss ongoing work focusing on brain imaging signatures and experimental pain testing responses of the fibromyalgia measure. Long-term goals to create a better measure of centralized pain that could be used in routine clinical care to tailor care to the individual will be presented.
American Headache Society

Chronic Migraine Education Program

Scott Powers  Juliana H. Vanderpluym  Bert B. Vargas

Parts 1 & 2
Thurs Sept 6
Developed by the American Headache Society®, the Chronic Migraine Education Program (cMEP) includes new advances and addresses acute and preventive treatment options. In addition, the cMEP highlights epidemiologic data on the scope and distribution of migraine with an emphasis on diagnosing chronic migraine. Recent insights into the mechanisms of the complaint will set the stage for improving treatment outcomes for this most disabling of headache disorders. Part 1 will cover Diagnosis of Chronic Migraine and Episodic Migraine; Transitions, Risk Factors, and Barriers to Care; and case studies and Q&A.

See AHS-01 for course description. Part 2 will cover Pathophysiology of Chronic Migraine and Episodic Migraine; Acute Treatment Strategies; and Preventative Treatment Strategies.

Increasingly widespread acceptance of the biopsychosocial model in chronic pain management, along with the relatively modest performance of monotherapies in clinical trials, has led to increased research into the effectiveness of multidisciplinary care. The greatest challenges to practicing multidisciplinary pain management in the community setting include cost, access, provider education, and patient acceptance. This presentation will explore the importance of multidisciplinary pain management, provide easy access to resources, and empower the community provider to practice comprehensive pain management for improved outcomes with some of their most challenging patients.

There are many reasons why healthcare providers choose not to manage pain, or unknowingly undertreat pain, including fear of addiction or overdose, litigation, and difficult personality types. Mostly practitioners undertreat because of a lack of knowledge, understanding, and confidence to manage such an elusive diagnosis. Have you ever asked yourself Which medication and why? Do I need an opioid agreement to prescribe hydrocodone? What about addiction? Which complementary treatment approaches are available to my patient and which ones does the evidence support? Is there anything else that I can try other than an opioid? What about behavioral management? How can my mental health colleagues help with pain management, and how do I suggest this to my patient? Improving the clinician’s knowledge and skills will help demystify and reduce the fear associated with managing such a subjective and otherwise challenging diagnosis.
PREVENTING BURNOUT

CARING FOR THE CLINICIAN & PROMOTING WELLNESS

RAVI PRASAD

THURS. SEPT. 6
This timely lecture will focus on the importance of managing pain in the biopsychosocial model from a multidisciplinary perspective. In this case based learning presentation, we will be reviewing complex case studies on common, otherwise challenging-to-manage pain syndromes including chronic low back pain, postherpetic neuralgia, and diabetic peripheral neuropathy. Focus will be placed on educating the audience about pain physiology, pharmacology, interventional management, and complementary treatment modalities. Cases will be evaluated from a multidisciplinary perspective.

APP-03 Preventing Burnout: Caring for the Clinician & Promoting Wellness
Ravi Prasad PHD

**Thursday 9.6 4:40p – 5:30p**  
**Level 3. Gracia 3**

Burnout, a phenomenon closely linked with depression and characterized by emotional exhaustion, depersonalization, and reduced self-efficacy, has increased at a disproportionate rate in physicians compared to the general US working population. While interventions have been developed to address factors that contribute to burnout among practicing physicians, there is a strong need to focus on prevention for all clinicians involved in the delivery of healthcare services. This presentation will provide information about burnout statistics, factors that contribute to it, and ways it can be prevented. Pathways to developing a work-life balance and promoting self-wellness will also be reviewed, as will a novel resident and fellow wellness program developed at Stanford University.

APP-04 Case Studies in Aberrant Drug Taking Behaviors
Jeremy A. Adler MS, PA-C

**Thursday 9.6 5:40p – 6:30p**  
**Level 3. Gracia 3**

Many healthcare professionals have experienced aberrant behaviors from patients when prescribing controlled substances. The formulation of a differential diagnosis of the behaviors and having a consistent plan of action is key. This presentation will draw upon real cases to highlight approaches that may be considered, as well as focus on some of the strengths and weaknesses of patient aberrant behavior monitoring tools. Through case studies and assessment tools, participants in this course will learn to recognize aberrant drug taking behaviors, and various approaches to patient interactions will be demonstrated.

APS-01 The Knee Bone’s Connected to the... Peripheral and Central Mechanisms in Knee Osteoarthritis
Roger B. Fillingim PHD

**Friday 9.7 7:00a – 7:50a**  
**Level 4. Nolita 3**

Musculoskeletal (MSK) pain conditions are the leading cause of disability worldwide, and this year’s American Pain Society track will explore the latest evidence addressing measurement, mechanisms, and management of MSK pain conditions. Among the most prevalent MSK pain conditions is knee osteoarthritis (OA), which is the leading cause of pain and disability among older adults. A brief overview of peripheral mechanisms and treatments, along with the epidemiology and clinical characteristics of knee OA, will be discussed in this course. Knee OA has historically been viewed as a regional pain condition driven by peripheral input due to arthritis changes in the knee joint. Accordingly, treatments have primarily focused on targeting peripheral changes. However, burgeoning evidence suggests that central pain processing is substantively altered among knee OA sufferers, raising the possibility that peripherally focused treatments may be ineffective for some proportion of these patients. Findings from studies using quantitative sensory testing and neuroimaging to examine central mechanisms related to knee OA will be reviewed.
Here a pain, there a pain, everywhere a pain pain
Widespread pain and fibromyalgia

Roland Staud  Fri. Sept. 7
OA will be presented. Because knee OA appears to disproportionately affect specific population groups, with African Americans at increased risk for OA related pain and disability, findings regarding ethnic group differences in OA pain and associated contributing factors will be discussed. The session will conclude with a summary of findings and recommendations to adopt a biopsychosocial approach to assessment and treatment of knee OA.

**APS-O2**

**Oh My Aching Back: Assessment and Management of Low Back Pain**  
*Burel R. Goodin* **PHD**

**Friday 9.7  11:10a – 12:00p**  
*Level 4. Nolita 3*

Chronic low back pain (CLBP) is a pervasive problem, consistently among the top 5 most common reasons for primary care visits and among the most prominent painful conditions. Although some patients with CLBP have clear pathoanatomic causes of pain, for many there is no clear association between pain and identifiable pathology of the spine or associated tissues. This medically unexplained pain is often termed “nonspecific” and happens to be the most common form of CLBP. Observers tend to react with uncertainty and confusion when confronted with a patient whose pain is not clearly medically understood. Previous research has shown that laypersons and providers alike are less inclined to help, feel less sympathy, dislike patients more, suspect deception, and attribute lower pain severity to patients whose pain does not have an objective basis in tissue pathology. Because of these stigmatizing responses from others, patients with CLBP may feel that their pain is being devalued and discredited. In this presentation, research addressing experiences of stigma among patients with CLBP (and other chronic pain conditions) will be reviewed. Although thorough research to-date is lacking, preliminary evidence addressing the consequences of perceived stigma on the physical and psychological well-being of patients with CLBP will be discussed. Finally, therapeutic strategies that healthcare providers can utilize to help minimize potentially stigmatizing responses to their patients’ CLBP will also be addressed.

**APS-O3**

**Here a Pain, There a Pain, Everywhere a Pain Pain: Widespread Pain and Fibromyalgia**  
*Roland Staud* **MD, FACP**

**Friday 9.7  2:40p – 3:30p**  
*Level 4. Nolita 3*

While we have increasing understanding of the mechanisms of musculoskeletal pain, this knowledge has translated into treatments that so far have left many patients and healthcare providers dissatisfied. This is particularly true for fibromyalgia syndrome (FM) and chronic widespread pain that afflicts up to 20% of the general population, mostly women. In this course, the epidemiology and clinical characteristics of FM, defined by widespread pain, tissue tenderness, and a host of somatic symptoms, will be briefly reviewed. In addition, new research over the last 10 years has identified a number of peripheral and central nervous system abnormalities. Some findings are consistent with central and peripheral sensitization; however, most of the available treatments have focused on central pain abnormalities. Much of the most recent evidence for abnormal pain mechanisms comes from the functional magnetic brain and spinal cord imaging of FM patients. A brief overview of peripheral/central mechanisms and treatments for FM will be provided, along with findings regarding abnormal connectivity between sensory and affective brain areas. The session will conclude with a summary of findings and recommendations for a comprehensive approach to the assessment and treatment of FM focusing on pain but also integrating fatigue, sleep abnormalities, and mood.
Exercise Your Demons: The Benefits of Exercise as a Treatment for Musculoskeletal Pain
Marie Hoeger Bement PT, PhD
Friday 9.7  5:40p – 6:30p  Level 4. Nolita 3

Nonpharmacological interventions are increasingly being prescribed for people with chronic musculoskeletal pain. Current evidence on the role of regular physical activity and exercise in the management of chronic musculoskeletal pain (eg, fibromyalgia, chronic low back pain, and osteoarthritis) will be discussed. We will review specific recommendations pertaining to therapeutic exercise including dose, progression, barriers to exercise adherence, and utilization of the biopsychosocial model of pain in the prescription of exercise.

The Carrot and the Stick: Values Based Interdisciplinary Pain Management
Corinne Cooley DPT, OCS • Heather Poupore-King PHD
Tuesday 9.4  7:00a – 7:50a  Level 3. Gracia 1

Current practice in the outpatient setting tends to utilize pain psychology and movement based interventions such as exercise, physical therapy, or yoga as adjuncts to care, and are often delivered separately to the patient. Healthcare providers are aware of the benefits of psychological therapies and physical therapies for patients with chronic pain; however, there is often a gap in understanding how to implement psychological therapies or movement interventions. In this session we describe empirically validated psychological flexibility interventions and functionally based exercise program outcomes. Outpatient programs that include psychological and movement interventions within the framework of improving quality of life and pain reduction are hard to implement when a person is solely seeking pain reduction. Furthermore, interdisciplinary care is often limited to inpatient programs or restricted to Workers Compensation. This course will explore the role of pain psychology and physical therapy in reducing disability in patients with chronic pain, the fundamental elements and delivery methods of acceptance and commitment therapy (ACT), pain biology education, exercise, and improved chronic pain acceptance. The speakers will cover a novel program developed at Stanford, the role of the pain psychologist and the physical therapist, and outcomes/data on pain, disability, chronic pain acceptance, and PROMIS measures from the 6 week ACT+PT program.

Unveiling the Mask: The Relationship of Chronic Pain and Psychopathology
David Cosio PHD, ABPP
Tuesday 9.4  9:40a – 10:30a  Level 3. Gracia 1

When tapering opioid therapy, frontline practitioners may at times be faced with chronic pain patients suffering from undiagnosed mental health disorders. In most cultures, the majority of mental health cases go unrecognized in primary care settings. About 60% of previously undetected cases could have been recognized if the patients had been evaluated for a mental health disorder. Research has shown that chronic pain is most often associated with depression, anxiety, and somatoform personality, and substance use disorders, but less is known about the relationship with other conditions, such as schizophrenia spectrum/psychotic, sleep-wake, bipolar, neurocognitive, obsessive compulsive, and dissociative disorders. The purpose of this presentation is to help providers learn more about mental health disorders, how they are defined, and how the definitions have changed in the latest Diagnostic and Statistical Manual of Mental Disorders. The results of a pilot study looking at the prevalence rates of these new DSM disorders among patients who suffer from chronic pain will be delineated.
SLEEP AND PAIN
friend or foe
?
The Psychological Science of Pain Relief and Opioid Reduction  
**Beth Darnall PHD**

**Tuesday 9.4  11:10a – 12:00p**  
Level 4. Nolita 1

In this session the science of the intersection between psychological factors, pain, and relief will be reviewed. Nocebo and pain catastrophizing will be highlighted as therapeutic targets for pain control, opioid analgesia, and enhanced treatment response. Attendees will learn about cutting edge research that is leading to patient centered pain treatment, and precision pain care via targeted interventions.

*Note: Be sure to attend this session if you plan to attend WRK-02, The Patient Centered Opioid Reduction workshop.*

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**Sleep and Pain: Friend or Foe?**  
**Fiona Barwick PHD●Heather Poupore-King PHD**

**Tuesday 9.4  1:40p – 2:30p**  
Level 3. Gracia 1

Depending on the condition, over 75% of individuals who experience chronic pain also experience disrupted sleep due to both direct factors (pain itself) and indirect factors (decreased activity, increased muscle tension, heightened stress). Conversely, up to 50% of individuals who seek help for sleep problems also have chronic pain. Research has shown that nonpharmacologic treatments are highly effective for chronic pain and insomnia. Cognitive behavioral therapy (CBT), an empirically validated intervention, is among the most successful and widely used of these treatments. This presentation will review recent research on the bidirectional relationship between sleep and pain, as well as effective interventions for treating insomnia and chronic pain that go beyond basic sleep hygiene or use of pharmaceutical sleep aids. It will introduce approaches for combining CBT protocols to treat concomitant chronic pain and insomnia, addressing the limitations of these combined approaches, and offering a brief overview of the literature regarding circadian rhythmicity of sleep and pain.

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**The Psychology Toolbox: Evidence Based Treatments for Pain Management**  
**Ravi Prasad PHD**

**Tuesday 9.4  4:40p – 5:30p**  
Level 3. Gracia 1

The opioid epidemic has caused many patients, clinicians, and payers to seek nonpharmacologic options to assist with managing pain. Psychology has a well-established role in the treatment of pain conditions but familiarity with the range of pain related interventions varies widely among clinicians. The Psychology Toolbox seeks to fill the knowledge gap by briefly explaining the role of psychology in pain treatment and reviewing a range of evidence based interventions to assist this burgeoning clinical population. Although cognitive behavioral therapy based interventions are the most frequently studied and applied paradigms, a number of other treatments also have demonstrated efficacy in pain care, but are lesser known. Thus, cognitive behavioral therapy for pain will be discussed, followed by an overview of several other pain treatment modalities: biofeedback training, mindfulness based stress reduction, and acceptance and commitment therapy. At the conclusion of the session, participants should possess a greater awareness of the vast array of evidence based treatments that can be used to help this group of individuals.
Being Held Hostage?
Use Psychological Strategies for Resolving Difficult Patient Behaviors
David Cosio PhD, ABPP

Tuesday 9.4  5:40p – 6:30p  Level 3.

Many frontline practitioners often describe feeling like they are “held hostage” by their chronic pain patients. A lot can be learned from reviewing hostage negotiation techniques used in real-life crisis situations. These negotiation strategies typically yield a 95% success rate, which is a remarkable statistic for any form of intervention strategy. Hostage negotiation is all about psychology. These skills are critical for any “negotiator” faced with high-tension conflicts that occur during shared medical decision making. The goal of such negotiations is to work with people in crisis towards a peaceful resolution that previously seemed impossible. It entails influencing a behavioral change in someone in order to gain voluntary compliance. The unifying factor in crisis situations is that the person’s actions are being dictated by their emotions to the detriment of rational thinking. Therefore, an effective crisis negotiator seeks to reduce the negative emotions and bring back a more rational thinking process by employing a set of skills. Using the Behavioral Change Stairway Model developed by the FBI’s international hostage negotiation unit, 5 steps—including active-listening techniques, maintaining an open-minded approach, and building rapport—can be utilized to influence one’s counterpart.

Reefer Madness Revisited: Taking the Insanity Out of Medical Cannabinoids
Michael E. Schatman PhD, CPE, DASPE

Friday 9.7  11:10a – 12:00p  Level 4.

Medical and recreational marijuana are sources of great confusion to patients and clinicians alike. A culture of “neuromysticism” around medical marijuana has arisen, leaving patients and clinicians muddled regarding what constitutes “medical” marijuana. This is due in part to the poor quality of the available research on safety and efficacy, which is due, in turn, to the restrictive scheduling of the drug. This lecture will focus on what we know, and what we don’t know, about the efficacy and safety of medical cannabinoids. Specific recommendations regarding the safest and most effective use of medical marijuana as part of a pain management armamentarium will be provided.

An Unexpected Valentine: Cannabis for Painful Skin Conditions
Jeanette Jacknin MD

Friday 9.7  4:40p – 5:30p  Level 3.

Skin conditions can be painful too. We are fortunate to have CBD and other cannabinoids as well as THC for many skin conditions including acne, itch, eczema, psoriasis, and wounds of all sorts. The cannabinoids help not only with the signs and symptoms of the dermatologic problem, but also help alleviate any concurrent pain. Cannabis can be an excellent alternative to opioids for pain, and may help to reduce the opioid crisis. First, we will examine the difference between hemp and cannabis, chemically, medicinally, and legally. Next, we will do a brief overview of just what the endocannabinoid system is, and how it is involved in the skin, and explore recent scientific studies behind cannabinoids and skin conditions. Other characteristically painful skin conditions that are not as frequently encountered include pyoderma gangrenosum, hidradenitis suppurativa, calciphylaxis, and vasculitis. Included in this course will be a summary of what skin care and topical pain products are already on the market, and what bright options the future holds.
Medical Cannabis: Focus on Pain Management  
Theresa Mallick-Searle MS, NP-BC, ANP-BC  
**Friday 9.7  5:40p – 6:30p**  

The endocannabinoid system (ECS) is recognized as an important modulator of many physiological processes. Recently, an increasing body of evidence has been accumulated to suggest the antioxidant, anti-inflammatory, neuroprotective, and antinociceptive roles of the ECS. In 1997, the Office of National Drug Control Policy commissioned the Institute of Medicine (IOM) to conduct a comprehensive study of the medical efficacy of cannabis therapeutics. The IOM concluded that cannabis is a safe and effective medicine, patients should have access, and the government should expand avenues for research and drug development. This course will discuss cannabis as it relates to effective pain management.

The Weight of the World: Evaluation and Management of Sacroiliac Joint Dysfunction  
Ramon L. Cuevas-Trisn MD  
**Tuesday 9.4  7:00a – 7:50a**  

This presentation will discuss the basic concepts of the evaluation of patients with various degrees of sacroiliac joint dysfunction, including presenting symptoms and pain referral patterns. Basic exam findings and special tests and their respective predictive values will be demonstrated. The sensitivity and specificity of guided sacroiliac joint injections will also be discussed as part of zooming into the diagnosis of this musculoskeletal entity. Various therapeutic approaches will be illustrated, including specific physical therapy protocols, physical modalities, manipulation techniques, and interventional therapeutic procedures. The importance of guided injections will be reviewed, along with the literature for various approaches such as ultrasound, fluoroscopy, and contemporary radio frequency/denervation procedures, emphasizing neuroanatomical principles. Special attention will be paid to the importance of knowing the limitations and pitfalls of imaging tests in the evaluation of this condition. The existing relevant literature regarding the correlation between imaging and sacroiliac pain will be discussed in detail, using clinical scenarios and illustrative cases.

Neck and Upper Extremity Pain Syndromes  
David M. Glick DC, DAIPM, CPE, FASPE  
**Tuesday 9.4  11:10a – 12:00p**  

There are many potential underlying causes for neck and upper extremity pain. All too often, only the most common conditions, such as a disk herniation centrally or carpal tunnel syndrome, are explored. The purpose of this course is to review other common problems such as radiculitis, and not so common such as rib arthropathy pain syndromes that can affect the neck and upper extremities. Attention will be given to clinical pearls for recognizing when patients present with such problems, as well as treatments that may prove helpful for both differentially diagnosing and treating various neck and upper extremity pain syndromes, especially many of those that are often missed or overlooked and easily treatable to resolution when they are identified.

How Central is Central Poststroke Pain?  
Michael M. Bottros MD  
**Tuesday 9.4  2:40p – 3:30p**  

Central poststroke pain (CPSp) is a neuropathic pain disorder frequently described as burning pain associated with allodynia and hyperalgesia over affected regions of the body. The underlying mechanisms are not well understood. It has been suggested that
stroke associated loss of inhibitory neurons in the spinothalamic tract causes disinhibition of thalamic neurons, which generate ectopic nociceptive action potentials responsible for the pain experience. However, recent data suggests that pain is dependent on the peripheral afferent input and may be mediated by misinterpretation of sensory input. In this course, we review the pathophysiology, clinical presentation, and symptoms of CPSP. Recent findings may also shed light about future targets for treatment.

CPS-O4  **Mirror, Mirror on the Wall:**
Graded Motor Imagery to Treat Complex Regional Pain Syndrome
Michael M. Bottros MD

**Tuesday 9.4  4:40p – 5:30p**  
Complex regional pain syndrome (CRPS) is a painful condition localized to a limb or body region, typically in response to trauma or surgery. Although several contributing mechanisms of CRPS have been described, the exact pathophysiology of the condition is not completely known. Graded motor imagery (GMI) is a comprehensive program aimed at sequentially activating motor cortical networks of the disordered limb to improve neural reorganization. GMI includes phases of progressive sensory-motor restructuring beginning with laterality training, guided imagery, and ultimately leading to mirror therapy. In this lecture, leading mechanisms for the development of CRPS will be discussed, along with the role of reorganization of the somatosensory cortex. In addition, treatment algorithms will be included along with medications, injections, and a thorough review of GMI and its outcomes.

CPS-O5  **Pain from Head to Toe:** The Challenge of Multiple Comorbidities
Charles E. Argoff MD, CPE

**Tuesday 9.4  5:40p – 6:30p**  
Perhaps underrecognized and/or incompletely addressed when evaluating and treating a person in pain: the multiple painful conditions that a person may be experiencing concurrently and the multiple medical conditions that a person experiencing chronic pain may be diagnosed with. Without such recognition, the person in pain may neither be optimally evaluated nor treated. This course will examine this conundrum and provide practical advice.

ENC-O1  **Pain Pathways Made Simple** (Encore)
David M. Glick DC, DAIPM, CPE, FASPE

**Friday 9.7  7:00a – 7:50a**  
In order to successfully clinically manage pain, it is essential to begin with an understanding of the underlying mechanisms responsible for its generation. A skillful approach based upon better knowledge concerning the anatomical structures, pathways, and events that result in pain is more likely to lead to effective clinical management of pain. This discussion will include an overview of medication classes typically considered for pain and the pathways they affect.

ENC-O2  **Full Metal Jacket:** Examining the Psychedelic Side of Ketamine
R. Norman Harden MD

**Saturday 9.8  9:40a – 10:30a**  
Ketamine is abused as a club drug due to its potent hallucinogenic properties. What we know of the drug’s adverse events/side effects/toxicity in high dose and frequent use come from this cohort of abusers, with most of the data coming from Japan. We will examine
graded motor imagery to treat complex regional pain syndrome
the neurocognitive effects (euphoria, visual, and auditory hallucinations) that are desired by abusers, but correspond to “adverse events” (dysphoria, frightening hallucinations) in the clinical context. We will also examine the cultural framework of abuse and qualitative sociological impact of the drug used in the context of a club drug. Finally, we will examine the toxicity of high dose chronic use as a caution to frequent infusion in certain clinical situations.

ENC-03  
**The Yin and the Yang of Pain Research:**
Matching Disease Mechanisms With Interventions  
*R. Norman Harden  MD*

**Saturday 9.8  11:10a – 12:00p**  
Level 4.

The clinical ideal is to match known, objectively identified mechanisms of disease with the known mechanisms of an intervention (drug or nondrug). Of course, we are far from this ideal as our knowledge of disease mechanisms is very elementary in some cases, especially in pain, and our knowledge of drug mechanisms is rudimentary, and our knowledge of how nondrug interventions actually work is almost nil. In this course we will discuss recent progress in regards to identifying clinically significant mechanisms/pathophysiology, especially by more objective testing and biomarkers, as juxtaposed with our spare knowledge of drug mechanisms (eg, pharmacodynamics, neuropharmacology), as well as discuss some of the hypothetical mechanisms of nondrug interventions.

ENC-04  
**Pain Management at Ground Zero**  
*Mark Garofoli  PHARMD, MBA, BCGP, CPE*

**Saturday 9.8  3:00p – 3:50p**  
Level 3.

West Virginia continues to lead the nation, and world, in drug overdoses, which makes one ponder as to what is being done at the “ground zero” of the opioid epidemic to save and improve lives. Where else but where it’s “worst” should some of the possible solutions come from? In 2016, an interprofessional panel of experts in pain management—ranging from medicine, osteopathy, nursing, pharmacy, dentistry; public health; the state PDMP; and representatives from insurance providers—was developed with aims of doing just that. The West Virginia Safe & Effective Management of Pain (SEMP) Guidelines (www.semp-guidelines.org) were developed to facilitate the shift of the best practices in pain management becoming the new standard of care. SEMP Guidelines include 2 main components including the risk reduction strategy and the clinical treatment algorithms. Pain management algorithms are not available anywhere else in the entire world! So we would like to welcome you to “the West Virginia Way” and see just how the “Wild and Wonderful” state of West Virginia is approaching the opioid epidemic from a true ground zero. After all, if it works where it’s worst, how could it not help your state or your practice?

INT-01  
**Electroceuticals: The Future of Interventional Pain Management?**  
*Sean Li  MD*

**Tuesday 9.4  7:00a – 7:50a**  
Level 3.

Since the Roman Empire, electricity has been used in the field of medicine for treating pain. In the era of modern medicine, the field of neuromodulation has entered its renaissance with the introduction of novel wave forms such as HF10, burst closed loop, and noninvasive vagal nerve stimulation. This ripple effect has provided chronic pain patients with additional treatment options and challenged our current understanding of neurostimulation. Simultaneously, our society is faced with a healthcare crisis—the prescription opioid epidemic. This presentation, for all healthcare professionals in the field of pain medicine, will review the current status of the electroceutical industry as it stands to offer nonopioid and opioid sparing chronic pain treatment options.
ELECTROCHEUTICALS

The future of interventional pain management

Sean Li
Tuesday September 4
INT-02  **Injections, Nerve Blocks, Pumps, and Spinal Cord Stimulation**
*Paul J. Christo, MD, MBA*

**Tuesday 9.4  9:40a – 10:30a**  
Level 4. Nolita 1

This presentation will highlight common procedures used for pain reduction, their evidence base, and a basic description of how each procedure is performed. We will primarily review epidural steroid injections, facet joint blocks and denervation, sacroiliac joint injections and denervation, myofascial pain, spinal cord stimulation, and intrathecal pumps.

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INT-03  **Stem Cells and Regenerative Medicine for Chronic Pain**
*Jay Joshi, MD*

**Tuesday 9.4  11:10a – 12:00p**  
Level 4. Nolita 3

Humans have been searching for the Fountain of Youth for millennia, from Ponce de León to Herodotus. Some people feel that regenerative medicine, a field that encompasses stem cells, growth factors, and other cell mediating proteins, is that magical fountain, while others, including some physicians, members of various regulatory committees, and some in the media, believe it is a fad. As with many emerging topics, there is curiosity and confusion. While the regenerative medicine field is relatively new to most people, there is a wide variety of treatments and technologies available. We will discuss the various stem cell and growth factors in regenerative medicine and some conditions, such as degenerative changes, osteoarthritis, tendinitis, and neurological conditions that have been treated with them.

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INT-04  **Procedures or Medication Management? When to Refer to a Specialist**
*Sean Li, MD*

**Tuesday 9.4  1:40p – 2:30p**  
Level 4. Nolita 1

The art of treating chronic pain requires one to address both the sensory and emotional aspects of pain. Pain medicine is a relatively new field conceived out of unmet needs to help those who suffer from chronic pain. With the recent development of formal pain medicine training programs, this new specialty has promoted the application of a multidisciplinary approach to treating chronic pain conditions. Over the last decade, our treatment paradigm for chronic pain has drastically shifted from opioid based medications to nonopioid based treatments and interventions. This presentation will review the various interventional pain management treatment options and discuss when to refer to a specialist for these interventions. All healthcare professionals in the field of pain medicine, with a special emphasis for those who practice primary care medicine and noninterventional pain management, will benefit from attending this course.

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INT-05  **Central Sensitization and Ketamine Infusions**
*Jay Joshi, MD*

**Tuesday 9.4  4:40p – 5:30p**  
Level 4. Nolita 1

By now, we should all be aware of the prevalence of chronic pain. Astonishingly though, few people are aware of the central pathophysiology of why people develop chronic pain. Central sensitization is one of the key processes in which chronic pain persists. In this presentation, we will explore central sensitization, what it is, what it means, and what can be done to reduce it. We will also discuss ketamine, which has emerged as one of the most useful compounds currently available to mitigate central sensitization. This staple lecture at PAINWeek is a must for anyone who wants to learn about central pain conditions. Dr. Joshi, the presenter of this lecture, helped create the current outpatient...
this is us!

sandra m. adkinson
saturday
september 8

interdisciplinary vs integrative pain management
Kelly Armstrong

BATTLEFIELD ACUPUNCTURE PROTOCOL

Sat Sept 8

Combined with microcurrent for stress and pain reduction
protocols and philosophies on outpatient ketamine infusions. Ketamine as a treatment is becoming more popular. This lecture will help you learn top level information from one of the leading experts with ketamine infusions and central sensitization in the country so you can help your patients and evaluate legitimate ketamine infusion centers.

**INTG-01**  
**Battlefield Acupuncture Protocol Combined With Microcurrent for Stress and Pain Reduction**  
**Kelly Armstrong** OTR/L, SIPT, SRT, MPP  
**Saturday 9.8  8:40a – 9:30a**  
Level 3  
Gracia 1

Battlefield acupuncture (BFA) was developed as a standardized protocol to provide a simple, easy to apply, nonpharmaceutical solution for the military’s pain management needs in the clinical and battlefield settings. The protocol involves the application of a stimulus to 5 key acupuncture ear (auricular) points; when these points are collectively treated, pain and stress syndromes can be effectively relieved in a timely basis. Imbalances of the parasympathetic (rest and healing, calming) and sympathetic (flight/flight/stress) branches of the autonomic nervous system (ANS), called “upregulation” or stress, are directly linked to a wide variety of pain and disease. ANS testing and cortisol measurement levels are effective tools for real time measurements of several key nervous system metrics. This course will present evidence based analysis of microcurrent point stimulation applied to the BFA protocol role on stress reduction. Seven key scientific stress markers will be discussed: stress reduction, heart rate variability, vagal tone, cardiac and endothelial functioning, arterial blood flow, diabetic beta cell activity, and cortisol levels. Participants will then be able to identify the significant influence stress has on other key nervous system markers. The session will conclude with participants identifying and locating the 5 key BFA points for integration of stress and pain relief into their clinical practice.

**INTG-02**  
**Scars & Traumas: Their Hidden Influence on Chronic Pain, Health, and Disease**  
**Kelly Armstrong** OTR/L, SIPT, SRT, MPP  
**Saturday 9.8  2:00p – 2:50p**  
Level 3  
Gracia 1

It is reported in the literature that physical scars have a systemic influence on chronic pain and are linked to chronic postsurgical, back, shoulder, and neuropathic pain, and are not only physical, but emotional. Scars initiate and maintain stress on the nervous system, "locking” the sympathetic nervous system into a prolonged fight/flight phase, adversely affecting muscle tone, fascia tension, chronic pain, and functional outcomes. This course introduces the concepts of scar release, exploring the integral relationship of scars, stress, and disease. Participants will see how scars/traumas influence nervous system regulation, fascia, and chronic pain, and identify the relationship between the physical location of scars and various chronic pains throughout the body. The presentation will include scientific analysis of scar release therapy applied to various pain patient samples and the widespread implications this may have in future pain management and functional rehabilitation. The session will conclude with scar release therapy demonstration so participants will be able to witness and learn how to integrate this therapy into their clinical practice.

**INTG-03**  
**This is Us! Interdisciplinary vs Integrative Pain Management**  
**Sondra M. Adkinson** PHARMD, DAAPM, CPE, BSPH  
**Saturday 9.8  3:00p – 3:50p**  
Level 3  
Gracia 1

Chronic pain continues to be one of the most challenging and often comorbid conditions to manage. Both psychological and medical conditions escalate the symptoms
and chronicity of pain. Scholarly evidence suggests multimodal treatment approaches that focus on biopsychosocial factors offer the best success. A collaborative approach for managing patients with chronic pain offers many opportunities with a team based approach, while at the same time mitigating the challenges associated with designing these programs. This presentation will offer an opportunity for conference members through facilitated discussion to share best practices and potential pitfalls related to implementing this team based integrative pain care.

**IPPS-O1**

**A Spy in the House of Love:**
Unraveling the Mysteries of Misplaced Cells and Cyclical Pain in Endometriosis  
*Sawwan As-Sanie* MD, MPH  
**Wednesday 9.5 7:00a – 7:50a**  
Level 3. Gracia 1

Although endometriosis is the most common condition identified among women with dysmenorrhea and chronic pelvic pain, its evaluation and management presents many challenges to practicing clinicians. This lecture will provide participants with a practical and state-of-the-art approach to the care of endometriosis patients that reviews the clinical evaluation, appropriate multidisciplinary diagnostic workup, and innovations in medical and surgical treatment options. We will emphasize diagnostic and treatment strategies for the primary care clinician, and when to refer to a gynecologic surgeon or other specialist. At the conclusion of this activity, the participant will be able to describe the epidemiology and common clinical presentation of endometriosis, describe the diagnosis and evaluation of women with suspected endometriosis, and review medical and surgical treatment options for endometriosis associated pelvic pain.

**IPPS-O2**

**Sciatica My Ass!** Pregnancy Related Pelvic Girdle Pain  
*Colleen M. Fitzgerald* MD, MS  
**Wednesday 9.5 9:40a – 10:30a**  
Level 3. Gracia 1

This session will describe the impact and prevalence of pelvic girdle pain (PGP) in pregnancy and the postpartum period. Anatomic, biomechanical, and hormonal influences in the etiology of pain will be explored. The most common diagnoses in pain presentation will be highlighted, debunking the common notion that pain in pregnancy is normal, and the erroneous assumption that sciatica/sciatic neuropathy is usually the primary cause. Attendees will gain an understanding of the diagnostic and evidenced based practical treatment options for pregnancy related PGP. Overall, the course aims to describe the impact and prevalence of PGP in pregnancy and postpartum; present the musculo-skeletal pelvic anatomy and anatomic changes during this life stage and the proposed mechanisms in the etiology of PGP; outline the differential diagnosis, physical examination, and diagnostic work-up of PGP; and highlight rehabilitation and other treatment approaches in the management of pregnancy related PGP.

**IPPS-O3**

**Fear & Loathing in the Bedroom:** A Savage Journey Into Sexual Pain  
*Meryl J. Alappattu* PT, DPT, PHD  
**Wednesday 9.5 2:40p – 3:30p**  
Level 3. Gracia 1

When sexual pain strikes, the impact goes beyond pain during intercourse. Painful sex is associated with significant cognitive, emotional, and physical consequences that affect women even outside the bedroom. This common condition, affecting nearly 45% of older women and 34% of younger women, is linked to local (ie, pelvic) and widespread pain sensitivity, in addition to other areas of bodily pain. Sexual pain is also associated with significant intercourse related distress, including fear and anxiety which may be present before, during, or after vaginal penetration. Unfortunately, this topic remains
unraveling the mysteries of misplaced cells and cyclical pain in endometriosis

A SPY IN THE HOUSE OF LOVE

sawsan as-sanie

wednesday september 5
taboo among patients and providers—patients often suffer in silence for years before receiving treatment from a provider with knowledge of sexual pain. This presentation will cover the proposed mechanisms of sexual pain and how this type of pain impacts sexual and physical function, partner dynamics, and health related quality of life. Participants will learn the key components of a musculoskeletal pelvic examination for sexual pain, how to screen for sexual pain, and how to engage other providers to provide the multidisciplinary care warranted for managing this condition.

IPPS-04  
The Razor’s Edge: Evaluating Pelvic Pain Caused by Peripheral Nerve Injury  
Mario E. Castellanos MD  
Wednesday 9.5  4:40p – 5:30p  
Level 3. Gracia 1

Pelvic peripheral neuralgias may be a cause of pain in 6% of women with chronic pelvic pain. This type of pain is neuropathic and typically follows the distribution of specific peripheral nerves. Common causes of neuropathic pain include trauma and visceral pathology, and the diagnosis can be confirmed by performing selective peripheral nerve blocks. Treatment options include medication, nerve blocks, nerve ablation, and surgical resection or decompression. The objectives of this lecture are to enable providers to recognize peripheral neuropathic pelvic pain, identify the affected peripheral nerve based on the distribution of the pain, and develop strategies for conservative and surgical management.

KEY-01  
Jennifer Bolen JD • Michael R. Clark MD, MPH, MBA • Jay Joshi MD • Kevin L. Zacharoff MD, FACIP, FACEP, FAAP  
Wednesday 9.5  5:45p – 7:00p  
Level 4. Mont-Royal Ballroom

Who amongst the many types of clinicians in the pain management community hasn’t felt the weight of the ongoing battle for balance in pain management and the use of opioid therapy? Clinicians deserve to have their questions answered and yet, to get these answers and avoid mistaken identities, clinicians must commit to changing the conversation with patients, payers, and peers. This session will address these issues and more and focus on reframing the questions with a call to action: reframe, reboot, and recommit to quality pain care.

Note: This session is available for CE/CME credit.

MAS-01  
When Stars Collide: Diagnosis and Pathophysiology of Minor Traumatic Brain Injury and Posttraumatic Headache  
Gary W. Jay MD, FAAPM, FACFEI  
Tuesday 9.4  1:40p – 3:30p  
Level 4. Nolita 3

This course will cover the pathophysiology and the diagnosis of minor traumatic brain injury, including the major factors which, together, make the diagnosis and treatment difficult and time dependent. We will also look at the concept of posttraumatic headache. After describing the phenotypic posttraumatic headache types, including the most common 3 headache types or phenotypes, we will explore treatments not including pain medication. Also to be discussed: the similarities and differences between posttraumatic headache in the US population vs that in our veteran population (where and how a headache exists), and who may have posttraumatic headache secondary to an explosive blast.
**MAS-O2**  
**Back Pain: It’s All About the Diagnosis**  
*David M. Glick DC, DAIPM, CPE, FASPE*

*Friday 9.7  1:40p – 3:30p*  
**Level 3. Gracia 3**

The prevalence of back pain continues in spite of the many treatments available, without any single treatment being a panacea. In routine clinical practice there has been a tendency of clinical examinations to become more cursory, largely influenced by increasing demands of time and arguably an overreliance upon technology. It has been suggested that the failure to adequately differentially diagnose the cause of back pain can account for clinical failures in treatment. The purpose of this discussion is to assist clinicians in the development of a more specific problem focused examination to enhance the differential diagnosis of specific pain generators, and therefore lead to more patient specific treatment. Attention will be given to considering all aspects of the examination, including physical assessment as well as imaging studies, and the ability to rationalize when pathologies seen on imaging studies may or may not be clinically significant. The importance of considering how failed treatments influence the differential diagnosis will also be discussed.

**MDL-O1**  
**Get Your Specimens in Order:**  
The Importance of Individualized Test Orders and Timely Test Utilization  
*Jennifer Bolen JD*

*Thursday 9.6  9:40a – 10:30a*  
**Level 4. Mont-Royal Ballroom**

The government has ramped up its efforts in 2018 to connect claims of inappropriate opioid prescribing to financial gain, including gain from urine drug testing. While most physicians do not have a financial interest in a clinical laboratory, the government’s decision to highlight an opioid prescriber’s failure to timely utilize drug test results is significant, and suggests the government is looking at other factors tied to medical decision making. Thus, prescribers should pay attention to licensing board, payer, and professional society guidance on ordering drug tests and how to use drug test results when treatment involves opioid prescribing. Attendees will learn how to identify the core elements of medical necessity and document an individualized testing plan for each patient. This course will cover critical areas of medical record documentation, including the decision to drug test, when and how often; determining which drugs to test and why; and how to coordinate timely review and use of drug test results in connection with the patient’s plan of care. Attendees will gain additional insight into these issues through position papers, published late 2017 and early 2018, by the American Academy of Pain Medicine and the American Association for Clinical Chemistry. The overall goal of the course is to assist prescribers in their quest to provide quality pain care to their patients and to document their rationale for drug testing and their treatment decisions.

**MDL-O2**  
**Embrace Changes and Prevent Overdose:**  
A Basic Blueprint for Legal Risk Mitigation and Response  
*Jennifer Bolen JD*

*Thursday 9.6  2:40p – 3:30p*  
**Level 4. Mont-Royal Ballroom**

Overdose—a small word that packs a major punch, and a big reason for many recent legal regulatory changes in controlled substance prescribing and pain management. Too many physicians and allied healthcare practitioners are caught unawares by the legal issues surrounding overdose events, fatal and nonfatal. Often, prescribers are the last to learn about an overdose event and, worse yet, fail to take action once notified. Through a series of case examples, attendees will learn how to develop and implement overdose event policies and protocols. Attendees will receive copies of sample policies
the importance of individualized test orders and timely test utilization
and protocols and learn how to tailor them to their respective practices and state licensing board framework. Professional licensing board and criminal cases involving overdose events do not usually end well for the prescriber, but there is much the prescriber can do proactively to signal his/her intent to get things right. While prescribers cannot control what their patients do once they leave the medical office, they are responsible for establishing a safe framework for opioid prescribing, including a proper response when something goes wrong.

**MDL-O3**

**Trusted But Not Busted: Staying Compliant in a Litigious Environment**

**Michael C. Barnes JD, MIEP**

**Thursday 9.6 4:40p – 5:30p**

To provide high-quality care for individuals with pain, a healthcare practitioner should have current knowledge of clinical standards, analyze each patient’s medical needs, and create an individualized treatment plan. Providing such care to patients who often present with complex histories, unique needs, and comorbid conditions can be more of an art than a science, as practitioners must base decisions on their formal education and training, medical literature, and practical experience. Given the ever-changing regulatory environment and increasing scrutiny by public and private payers alike, practitioners must also be keenly aware of the laws, regulations, payer standards, and enforcement trends affecting pain management today. This presentation, led by an experienced healthcare attorney, will provide a timely update on criminal enforcement and payer recoupment actions, and highlight their impact on pain practitioners and clinical laboratories. Drawing from the law and his practical experience in advising pain care providers on compliance matters, the presenter will also recommend safeguards practitioners and laboratories can put in place to remain compliant in an era of increasing litigiousness when prescribing controlled medications, conducting urine drug testing, and structuring payment arrangements between ordering providers and laboratories.

**NRO-O1**

**Initial Evaluation and Management of Common Neuromusculoskeletal Painful Conditions**

**Ramon L. Cuevas-Trisan MD**

**Thursday 9.6 7:00a – 7:50a**

Musculoskeletal pain complaints are among the most common problems encountered by any clinician in an ambulatory care practice, yet many clinicians lack basic training and knowledge about the proper evaluation of these conditions. This course will discuss concepts of the evaluation, including the appropriate and directed history and exam findings that should be evaluated. A great deal of emphasis will be placed on the importance of the clinical evaluation as opposed to ancillary testing such as imaging tests. There will be special attention paid to the importance of knowing the limitations and pitfalls of imaging tests in the evaluation of spinal pain conditions, particularly in the setting of chronic spinal pain, and potential secondary gains/disability. The existing relevant literature regarding this correlation between spinal imaging and pain will be discussed in detail, using clinical scenarios and illustrative cases. Initial general primary management principles—illustrated through common injuries/complaints such as neck pain, low back pain, joint pain (shoulder, hip, knee), and common focal and generalized neuropathies—will be presented, along with clear indications and clinical pearls for specialist referral.
TRUSTED BUT NOT BUSTED

Staying compliant in a litigious environment

Michael Barnes
Thurs  Sept 6
The not so silent SCREAM
managing pain in demyelinating disorders

charles e. argoff
thurs. sept. 6
the POMPATUS of Pain
living through postherpetic neuralgia
The Not So Silent Scream: Managing Pain in Demyelinating Disorders

Charles E. Argoff MD, CPE

Thursday 9.6  11:10a – 12:00p  Level 3. Gracia 1

Multiple sclerosis may be the most common demyelinating disorder clinicians are likely to encounter. The fact that nearly 50% of patients diagnosed with multiple sclerosis will experience moderate to severe chronic pain is often underappreciated and not addressed. This course will describe the multiple chronic painful conditions that may affect people diagnosed with multiple sclerosis as well as other less common demyelinating disorders. Emphasis will be placed on practical approaches to recognizing the condition, and treatment.

Big News in Small Fiber Neuropathies

Charles E. Argoff MD, CPE

Thursday 9.6  4:40p – 5:30p  Level 3. Gracia 1

During the past 10 years, small fiber neuropathy has become increasingly associated with a seemingly expanding number of medical conditions. This course will review the condition in general as well as the most recent advances in our understanding of its pathophysiology and how we can treat patients diagnosed with small fiber neuropathy.

The Pomputus of Pain: Living Through Postherpetic Neuralgia

Gary W. Jay MD, FAAPM, FACFEI

Thursday 9.6  5:40p – 6:30p  Level 3. Gracia 1

Postherpetic neuralgia is a not uncommon problem found typically in the aging patient, although it can also be found in younger patients. We will discuss the clinical picture as well as the pathophysiology of postherpetic neuralgia and describe appropriate treatment protocols for this problem which, if chronic, can be a major life impediment.

Pain Terminology: Knowing the Difference Makes a Difference!

Jessica Geiger-Hayes PHARM, BCPS, CPE • Alexandra McPherson PHARM, MPH • Mary Lynn McPherson PHARM, MA, BCPS, CPE

Wednesday 9.5  7:00a – 7:50a  Level 3. Gracia 3

The Pain Educators Forum presents this course because there are so many different levels of practitioner experience with pain management. Specifically, inspiration came from someone who, after attending one of our courses, had a burning question for our faculty: “What do sodium channels have to do with pain?” Yikes!!! After attending this humorous, informative course you will definitely know the difference between paresthesia and dysesthesia, allodynia and hyperalgesia, and how sodium channels confer excitability on neurons in nociceptive pathways. In sum, after this course, you'd be a fierce and worthy contestant on Jeopardy!

Pain Pathways Made Simple

David M. Glick DC, DAIPM, CPE, FASPE

Wednesday 9.5  9:40a – 10:30a  Level 4. Nolita 1

In order to successfully clinically manage pain, it is essential to begin with an understanding of the underlying mechanisms responsible for its generation. A skillful approach based upon better knowledge concerning the anatomical structures, pathways, and events that result in pain is more likely to lead to effective clinical
pain educators forum

michael r. clark
jessica geiger-hayes
david m. glick
alexandra mcpherson
mary lynn mcpherson
susan n. myers
kathryn schopmeyer
karen sugarman

wed/thurs
sept 5–6
management of pain. This discussion will include an overview of medication classes typically considered for pain and the pathways they affect.

*Note: An encore will be presented on 9/7; see ENC-01.*

**PEF-03**  
**Chronic Pain Assessment**  
**Michael R. Clark** MD, MPH, MBA  
**Wednesday** 9.5  **11:10a – 12:00p**  
**Level 4. Nolita 1**

Effective clinical interviewing and pain assessment are critical to the appropriate diagnosis and management of pain. In this presentation, attendees will learn how to apply principles of effective communication and also ascertain how to evaluate available assessment tools.

**PEF-04**  
**Pain Therapeutics**  
**Alexandra McPherson** PHARMD, MPH  
**Wednesday** 9.5  **1:40p – 3:30p**  
**Level 4. Nolita 1**

Pain therapy is a challenge and requires special approaches. This course, as part of the Pain Educators Forum (PEF), will build on information provided in other PEF sessions and focus on the prevalence and impact of unrelieved pain, pathogenesis, and treatments of pain. Participants will learn about approaches and advances in therapy of common acute and chronic pain syndromes, and evidence based recommendations for pharmacotherapy of pain will be provided. Pain Therapeutics examines current trends in pain relief, which can be implemented into practice as soon as attendees return to work.

**PEF-05**  
**Clinical Pearls: Unraveling the Secrets of Imaging Studies**  
**David M. Glick** DC, DAIPM, CPE, FASPE  
**Wednesday** 9.5  **4:40p – 5:30p**  
**Level 4. Nolita 1**

Diagnostic testing is an integral component for the differential diagnosis. In routine clinical practice there has been a tendency for clinical examinations to become more cursory, largely influenced by increasing demands on a practitioner’s time and the patient’s expectations of technological advances. The end result may arguably lead to an overreliance on technology for basic clinical diagnosis. This session is meant to provide a review of, for some, an introduction to basic structural and functional studies used for the diagnosis of pain related problems. Attention will also be given to the limitations of such studies and the importance of establishing clinical relevance to their findings. Factors that adversely affect clinical management potentially resulting in failed treatment will be discussed, as well as best practices when utilizing such studies to help enhance clinical outcomes for treatment.

**PEF-06**  
**Teamwork Through Common Language—**  
**A CPE Approach to Engaging Patients in a Multimodal Care Plan**  
**Kathryn A. Schopmeyer** PT, DPT, CPE  
**Thursday** 9.6  **7:00a – 7:50a**  
**Level 3. Gracia 1**

To quote a contemporary leader in pain care, “Treating pain is a team sport.” Although our healthcare system is still disjointed, causing many clinicians to operate in what may feel like a lonely silo, we can support each other and bolster our patients’ confidence in their prognosis by communicating all elements of a care plan to patients that we have in common. By using terminology that de-threatens confusing aspects of a plan, encourages behavior change, and reinforces colleagues in other disciplines, we can all make a difference. This course is taught by a Certified Pain Educator (CPE) and is intended for clinicians who may occasionally feel they operate on a deserted island of healthcare.
Plan Before You Leap! Instructional Design for Clinicians
Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Thursday 9.6  2:40p – 3:30p  Level 3. Gracia 3

Education is a powerful weapon in the management of pain. But an educational intervention must be carefully planned to be effective. The purpose of this presentation is to prepare clinicians to plan and develop education ranging from the curbside consult to an entire course. Participants will learn about the ABCDs of learning objectives, how to select learning activities to achieve the desired outcomes, and appropriate formative and summative assessments to demonstrate these achievements. Investing your time in this presentation will pay dividends for years to come!

It’s a Bird! It’s a Plane! No, it’s a Case Manager!
Utilizing Complex Care Case Managers in a Pain Clinic Setting
Susan N. Myers MBA, RN, CCM • Karen Sugarman MSW, LCSW


Stanford Pain Management Clinic was one of the first programs of its kind to recognize that having complex care case managers could have a significant impact on care coordination for patients, resulting in more successful and positive patient outcomes. In the pain clinic, complex care case managers act as liaisons between patients, pain management providers, and other members of the multidisciplinary care team (both within a practice/hospital and in collaboration with community organizations) to ensure clear communication and coordination of care. This course will explore all the ingredients combining case managers and optimal pain management.

Walking the Line: Opioid Dose De-escalation
Abigail T. Brooks PHARMD, BCPS • Courtney M. Kominek PHARMD, BCPS, CPE

Friday 9.7  7:00a – 7:50a  Level 3. Gracia 3

The shift away from opioid use in medication management for chronic pain has changed the dynamic of opioid prescribing in many ways. Now, more than ever, prescribers are under the microscope regarding selection of opioids and doses as well as clinical documentation and appropriate action based on findings during the patient visit. Risks of opioids outweighing the benefits due to lack of effect, adverse effects, or aberrant behavior are just some of the possible justifications when considering opioid tapering. There are other instances when there is outright dangerous or illegal behavior that justifies discontinuation of opioids. This lecture will review different patient situations and discuss when to taper or discontinue opioids and how to implement the change in opioid therapy.

Opioid Conversion Calculations
Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Friday 9.7  9:40a – 10:30a  Level 3. Gracia 3

A perennial PAINWeek favorite returns! Many patients receiving opioids will need to be switched from one to another during therapy, or at least from one dosage formulation or route of administration to another. During this session, practitioners learn to recognize clinical situations in which opioid switching would be appropriate. Attendees will also work on a problem set designed to sharpen their skills in opioid conversion calculation.

Note: Dr. McPherson will be conducting a book signing at the conclusion of this program.
WALKING THE LINE
opioid dose de-escalation

abigail t. brooks • courtney m. kominek • friday sept 7
GIMMICK OR GODSEND

ADFs

Jeffrey Fudin Michael Schatman Fri Sept 7
**Thug Drugs**  
Mark Garofoli PHARMD, MBA, BCGP, CPE

**Friday 9.7**  
Level 3. Gracia 1

Throughout the course of history, mankind has experienced heightened effects from natural sources, and even delved into creating or modifying substances to the same accord. In our society we have a very “objective” classification of materials based on generally accepted medical use and propensity to become habit forming. However, as one can recall with ethyl alcohol (such as beer, wine, and hard liquor), a substance may never actually chemically change, yet can move across legal classifications. How does that happen? Well, join our discussion to learn how numerous illicit substances have similar, if not the same, mechanisms of action as legal prescription medications readily available today. One may even walk away with a few pointers from “street chemists” that are not easily available in any of our professional textbooks.

**ADFs: Gimmick or Godsend?**  
Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP • Michael E. Schatman PHD, CPE, DASPE

**Friday 9.7**  
Level 3. Gracia 1

Currently there are more than a dozen abuse deterrent formulations (ADF) on the market, and several formulations that have abuse deterrent properties but do not carry the official FDA designation. This session will highlight what constitutes an ADF, and the benefits, pitfalls, and drawbacks for prescribing ADF opioid products. The ADF product is novel, expensive, and unproven by category 4 status to have a real-world impact on curtailing opioid abuse. While abuse deterrent opioid formulations purportedly meet the FDA demand for safer opioid medications, the expense of these new medications is rarely supported by third-party insurance payers. Consequently, the practitioner is faced with the FDA stating that ADF opioid medications should be considered, yet the patient’s insurance often will not pay for new ADF medications, and there are no corresponding generic medications available. Drs. Schatman and Fudin will highlight data to support ADF use, discuss the lack of evidence to support their use, and the ethical dilemmas associated with prescribing or withholding ADFs from the standpoint of practitioners, patients, and third-party payers.

**Nonopioid Analgesics, Adjuvants, and Antidepressants**  
Annas Aljassem MD • Levi M. Hall PHARMD, BCPS

**Friday 9.7**  
Level 3. Gracia 3

When treating acute and chronic pain conditions, there is a need for “balanced” analgesia or multimodal analgesia. These are cases in which opioids as monotherapy are rarely appropriate. The therapeutic role of adjuvant analgesics is to increase the therapeutic index of opioids by producing an opioid-sparing effect. The use of nonopioid analgesics, adjuvant agents, and, in some cases antidepressants, may provide additional pain relief by opioid-sparing effects. Many of these agents have additional benefits in treating other related comorbid conditions present in those who suffer from chronic pain. Newer regulatory guidelines, like the CDC Guideline for Prescribing Opioids for Chronic Pain, recommend that first-line treatment for acute and chronic pain should be nonopioid analgesics as an initial trial, emphasizing the need to optimize multimodal analgesia including nonpharmacologic interventions to improve outcomes. It is vital to have an appreciation and knowledge of alternative pain treatments in an era where mass opioid use has been the norm. During the so-called opioid epidemic, practitioners should provide patients with effective tools to help manage pain while minimizing the negative effects of opioid exposure. Adjuvant agents are not primarily identified as analgesic...
THUG

DRUGS

mark garofoli  friday  september 7
pregabalin and gabapentin abuse • abigail brooks • courtney kominek • sat. sept. 8

what’s ALL the "GABA" ’bout?
in nature but have been found in clinical practice to have either an independent analgesic effect or additive analgesic properties when used with opioids. Adjuvants add a unique action in opioid-resistant pain and can play a role in reducing opioid side effects. Knowledge of this class of medications is critical for the prescriber to be able to document their thought process in treatment plan development in the event of regulatory review. The goal of this course is to provide you with the tools to successfully evaluate the appropriate role of these agents in your practice.

**Topical Analgesics: Perfect “Solution” for Reducing Systemic Opioid Exposure**

*Annas Aljassem MD • Levi M. Hall PHARMD, BCPS*

**Friday 9.7 5:40p – 6:30p**

Many states are in the midst of an epidemic and, during the past decade, the number of hospitalizations for opioid dependence, abuse, and overdose has more than doubled. The federal response was to limit production and distribution of opioid medications. This knee-jerk reaction has negatively affected patient and provider relationships. This singular intervention from the US DEA lacked the necessary training and guidance to taper off these medications successfully. Topical analgesics have provided effective analgesia without significant adverse effects in adult patients with painful conditions. Their use may be a promising alternative for pain treatments to limit systemic exposure and decrease any undesired effects, at the same time providing significant pain relief. These drugs are used in a variety of both acute and chronic conditions. Several small case series have shown rapid relief using topical opioids in patients with pain due to skin infiltration of tumors, skin ulcers of malignant and nonmalignant origin, severe oral mucositis, and knee arthritis. There is also some evidence that indicates NSAID preparations diclofenac and ketoprofen can be useful for sprains or strains with low number needed to treat values. The insight that opioids exert a local analgesic effect is based on several observations: opioid receptors have been found on peripheral nerves and inflamed tissue; morphine and its metabolites are largely undetectable systemically when applied topically to skin ulcers, suggesting the analgesic effect is local; and peripheral opioid injections for local analgesia, such as intra-articular morphine after knee surgery, have been found to be effective in several trials. Topical opioid gels are not available commercially and need to be prepared by pharmacy. In this course we will explore the logistics of compounding within a hospital system. We will summarize current literature supporting topical opioid administration for pain and explore logistics of adding topical morphine to a health system formulary, establishing medication prescribing guidelines, developing an order set in an electronic health record, and identifying a list of approved prescribers.

**What’s All the “GABA” About? Pregabalin and Gabapentin Abuse**

*Abigail T. Brooks PHARMD, BCPS • Courtney M. Kominek PHARMD, BCPS, CPE*

**Saturday 9.8 8:40a – 9:30a**

The gabapentinoids are a popular class of medications among prescribers for use in chronic pain and various other neurological conditions. In fact, prescription rates for both gabapentin and pregabalin have increased in the United States and other countries in recent years. However, these medications have a street value to a newer niche of users, including patients taking them at mega doses to enhance the effects of other psychotropic drugs, and others taking them to manage or mitigate opioid withdrawal symptoms and possibly even opioid cravings. While pregabalin is already classified as a controlled substance, gabapentin does not yet carry this classification in most states. In response to rising abuse, various states and regulatory bodies are considering changes to enhance patient safety and protect the provider’s license. Learn what changes you should make to your practice, if any, in light of the growing abuse of gabapentinoids and how to identify patients who are potentially abusing these medications.
In professional practice, numerous medications are disguised as "muscle relaxants"; however, just how many actually are true relaxants of peripheral muscle? In this discussion on the overall classes of muscle relaxants, we will endeavor to evaluate these medications based on respective mechanisms of action and truly decipher just what type of medications the stereotypical "muscle relaxants" actually are. We will also aim to improve patient care by providing a strategic thought process into the appropriate selection of these medications for use in patients with muscle spasticity and/or muscle spasms. At the conclusion of our discussion, we will be able to declare that "The jig is up!" and reveal the true identity of these so-called muscle relaxants.

Are Bootleg Fentanyl the New Pill Mills?
Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP

The number of deaths from prescription opioids from 2014 to 2016 were essentially unchanged, but deaths from illicit fentanyl derivatives over the same time period increased by almost 650%. Between 2010 and 2015, we know that by county, prescribed morphine equivalent daily dose (MEDD) per capita decreased by about 50% and remained stable in about 30%. We also know that during the same time span, overall opioid prescribing rates by county decreased about 50% and remained stable at 34%. Additionally, between 2010 and 2015, the average daily MEDD per prescription within the U.S. decreased overall by 72% in all counties; it remained unchanged in 26% of counties; and increased in only 2% of counties. Heroin related deaths have skyrocketed over the last 2 years and, in certain states, up to 70% of the presumed heroin related deaths in fact are attributable to heroin laced with illicit carfentanil or similar ultrahigh-potent derivatives. The CDC has often lumped aggregated data for opioids into various reports without consideration of combined prescription related opioids that were obtained illegally and used in combination with illicit opioids plus or minus other sedative hypnotics including alcohol. This data has unfortunately mushroomed into lay press (false) claims that prescription opioids are synonymous with the devil. This session will provide an overview of the data, separate fact from fiction, and provide a comprehensive overview of illicit fentanyl derivatives, relative potencies, and dangers. Participants will gather the necessary information to intelligently separate alternative facts from the real facts as they relate to opioid related deaths.

The Trifecta: Central Sensitization, Opioid Tapering, and Educational Support for Chronic Pain Management
Maria C. Foy PHARMD, BCPS, CPE • Tanya J. Uritsky PHARMD, BCPS

Chronic pain involves a complex process, with an underlying pathophysiology that is now understood to involve a sensitized state. Understanding the etiology is essential to selecting appropriate treatment modalities. It is also essential to educate patients in a way that can be understood and incorporated into their lives and treatment plans. In this session, cases will be used to highlight clinical decision making and pain management options for patients experiencing chronic pain and central sensitization. We will focus on tapering opioids as part of this management plan, discuss how to taper and which supportive measures assist in developing an effective taper, including best practices around the use of nonopioid analgesics and withdrawal management, as well as effective patient education and programming.
spasms vs. spasticity
causes and treatments

mark garofoli
saturday september 8
**To Dream the Impossible Dream:** Acute Pain Management for Patients on Buprenorphine  
*Maria C. Foy PHARMD, BCPS, CPE ● Tanya J. Uritsky PHARMD, BCPS*

**Saturday 9.8  2:00p – 2:50p**  
Level 3. Gracia 3

With our current climate of opioid overuse and increasing opioid related deaths, alternatives to pure mu opioids are necessary. Buprenorphine, an important weapon in the arsenal for management of substance use disorder, is now rising in popularity as an opioid option for chronic pain. Evidence has demonstrated efficacy for various chronic pain conditions with less risk of adverse effects, such as the development of tolerance and respiratory depression. With increasing utilization, patients on chronic buprenorphine therapy are now more frequently being admitted to hospitals with severe acute pain due to surgery or trauma. A partial opioid agonist, buprenorphine has unique pharmacokinetic properties that differ from pure mu opioid agonists. Challenges with pain control can occur when acute pain treatment with a pure opioid is used in patients receiving buprenorphine due to its strong affinity to the mu receptor. This session will review the unique characteristics of buprenorphine and offer options for treatment of severe acute pain in patients receiving buprenorphine therapy.

**POS-O1 Scientific Poster Session and Reception**  
*Co-Chairs: Srinivas Nalamachu MD ● Joseph V. Pergolizzi, JR MD*

**Thursday 9.6  6:30p – 8:30p**  
Level 2. Condesa Commons

*Note: This session is not certified for credit.*

**POS-O2 Poster/Podium Presentations**  
*Co-Chairs: Srinivas Nalamachu MD ● Joseph V. Pergolizzi, JR MD*

**Friday 9.7  7:00a – 7:50a**  
Level 3. Gracia 5

This session presents posters selected for oral presentations.  
*Note: This session is not certified for credit.*

**PTH-O1 Change the Narrative for Improved Outcomes—Words Matter in Pain Care**  
*Kathryn A. Schopmeyer PT, DPT, CPE*

**Saturday 9.8  9:40a – 10:30a**  
Level 4. Nolita 3

Clinicians have a responsibility to educate and reassure patients who live with pain so they can overcome barriers, such as fear of movement, and re-engage in healthy behaviors. Despite the progressive embrace of a biopsychosocial framework in pain care, most patients conceptualize their persisting pain symptoms as an isolated biomechanical/structural problem. Words such as *degeneration, wear and tear, unstable, and impingement* have an emotive impact, and can negatively affect a patient’s self-efficacy, which sabotages individual functional outcomes. Clinicians have a significant influence over the beliefs of their patients, and words used in clinical interactions can deeply shape health beliefs. This course will provide arguments in favor of using words that promote health, resilience, and adaptability rather than descriptors consistent with destruction and injury. Research to support an alternate approach when discussing pain with patients will be presented, and practical alternative narratives will be offered.
Dry Needling and Trigger Points: The Science Behind How Dry Needling Might “Work”
Jarod A. Hall PT, DPT
Saturday 9.8 1:00p – 1:50p

The trigger point phenomena and dry needling as an approach to treat myofascial pain has gained much interest in recent years. However, the popularity of these topics has been rivaled by the controversy surrounding them within the medical and rehab community. Considering the rapid rise in continuing education courses marketed to clinicians, the media hype in the professional sports and chronic pain arenas, and the informed consumer seeking less invasive alternatives to surgery, having an in depth understanding of the current state of the literature on these topics is paramount. This course is designed to delve into the literature surrounding the reliability and validity of the trigger point hypothesis, the efficacy of dry needling and acupuncture, and how these may or may not fit into a biopsychosocial approach to treating pain.

Addressing Altered Sensory Perception: A Missing Piece to the Pain Puzzle
Marcos Lopez PT, DPT, OCS, TPS
Saturday 9.8 2:00p – 2:50p

Emerging literature is demonstrating the effects of sensory acuity disturbances on pain and altered motor performance. Altered sensory acuity occurs at spinal and supraspinal levels via sensitization and chronicity. Cortical changes including imprecision of the somatosensory homunculus have been evidenced with fMRI and identified in a wide variety of musculoskeletal and neuropathic pain. However, these changes can occur in acute instances of pain as well. Literature is demonstrating that addressing these sensory disturbances can decrease pain and improve mobility. This course will provide an overview of how pain facilitates plastic changes at spinal and supraspinal levels, a literature review identifying pain conditions that demonstrate sensory acuity disturbances, and show how to incorporate multisensory discrimination treatment into clinical practice in 5 minutes or less.

Unstable Core or Unstable Theories?
Jarod A. Hall PT, DPT
Saturday 9.8 3:00p – 3:50p

Low back pain is one of the most prevalent, costly, and complex issues we face in rehab and medicine as a whole. It has been proposed that a large portion of back pain cases are due to core weakness or, as it’s commonly referred to, instability. This idea originated from the work of Paul Hodges and Peter O’Sullivan in the early 1990s. The idea caught like wild fire, infiltrating university level classes, continuing professional education courses, and subsequently shaping societal beliefs about backs and back pain causes. Fitness, rehabilitation, and medical professionals frequently blame back pain on an unstable or weak core. Consequentially, patients believe that, if they experience back pain, they must be weak and unstable in their spines. Yet, what does the current best evidence tell us about this topic? Has this theory strengthened, or has it failed to keep up with more rigorous investigation? Finally, what implications could this clinical framework have on patient outcomes and resilience surrounding the most common musculoskeletal complaint in the world?
Using functional magnetic resonance imaging (fMRI) techniques, we have been able to open windows to the brain, to noninvasively study its structure and function. Pain processing within the central nervous system (CNS), brain and spinal cord, and how it is disrupted in chronic pain has been increasingly characterized using neuroimaging. However, to date, fMRI has provided minimal direct clinical application for pain. We believe that will soon change. Furthermore, the use of more sophisticated analysis techniques is providing us with greater mechanistic understanding of the role of the brain in pain. The purpose of this course is to provide an overview of recent advances in the development of brain based biomarkers for pain that hold the potential for advancing the goal of precision pain management: finding the specific treatment for the specific person with the specific painful condition. We expect that brain based biomarkers will be used to help predict those who develop chronic pain or persistent opioid use after surgery, as well as for prognosis to identify who will respond to a particular treatment. The topic of brain based biomarkers has generated much controversy over the past several years in the media, legal community, and even in our own scientific community. We have recently published a consensus statement from the International Association for the Study of Pain that will be reviewed. We hope to engender good discussion and help attendees understand that no single region within the CNS is responsible for the brain representation of acute or chronic pain. Also to be discussed is how machine learning is a new and powerful technology allowing for a whole-brain identification of altered brain structure and function in chronic pain. It may ultimately help to develop brain based biomarkers of pain and advance the goal of precision pain management.

In the Emperor’s tale, 2 weavers promise an emperor a new suit of clothes that, they say, is invisible to those who are incompetent or unfit for their positions. When the emperor parades before his subjects nude, no one dares to say anything for fear that they will be seen as such. This is a similar sentiment many providers have towards our current healthcare system. The causes of chronic pain are many, and the remedies are complicated and oftentimes not available. Providers may also fail to explore other modalities because “access” is a barrier to care. This topic area of access to care focuses on 3 components: insurance coverage, health services, and timeliness of care. These are going to require outside-the-box solutions by medical systems, including using shared medical appointments, telehealth, investing in and expanding the workforce, and reducing administrative burden. However, there are things providers can do in their practice to address these access issues, including keeping track, being proactive, and prioritizing less invasive/intense treatments over the most invasive/intense treatments. This presentation will help practitioners figure out which resources are available to help their patients address chronic pain. Providers also need to reach out to specialists personally, so communication skills are key to ensure the best possible outcome.
the emperor’s new clothes

multimodal engagement & improving access to care
Hello Darkness My Old Friend
Tapping into temperament and pain with music psychotherapy
Involuntary Tapers: Legal, Ethical, and Clinical Concerns
Douglas L. Gourlay MD, MSC, FRCP, FASAM • Stephen J. Ziegler PhD, JD


On March 15, 2016, the Centers for Disease Control and Prevention released their guideline with recommendations for primary care clinicians who prescribe opioids for chronic pain outside of active cancer treatment, palliative care, and end-of-life care. Although most of the recommendations were supported by weak or very weak evidence, Recommendation #7 stated that “clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue opioids” if the harms outweigh the benefits. At least a year after the release of the CDC guideline, several states have implemented dosage triggers, ceilings, and involuntary tapers, and some healthcare professionals have reportedly subjected their patients to involuntary tapers because they believed the CDC guideline required it. Consequently, this session will explore the ethical, legal, and clinical concerns and potential harms associated with the involuntary tapering of patients on long-term opioid therapy as a result of a state law, regulation, or out of fear of regulatory sanction by the healthcare provider.

Hello Darkness My Old Friend:
Tapping Into Temperament and Pain With Music Psychotherapy
Joanne V. Loewy DA, LCAT, MT-BC • John F. Mondanaro MA, MT-BC, LCAT • Andrew R. Rossetti MMT, LCAT, MT-BC

Tuesday 9:4 4:40p – 6:00p Level 4. Nolita 3

A myriad of medical conditions are accompanied by depression. Somatic pain is frequent in major depression and is found in 50% to 90% of depressed patients. Assessing pain accurately and, most particularly, knowing the trauma history and acknowledging its impact on functionality, may provide key information on how to most effectively treat pain associated with depression. The criteria for major depression is inclusive of symptoms that can be directly impacted by music psychotherapy: pain, fatigue, agitation, feelings of worthlessness, impeded thinking/concentration. This presentation will address common diseases such as heart disease, cancer, neurologic dysfunction, and multiple sclerosis, in which depression is a frequent secondary/contingent diagnosis. We will provide research substantiated clinical interventions that support ways in which music psychotherapy can work on a neuro/physiological level to increase endorphins, oxytocin, immunoglobins, and T cells, while reducing cortisol and stress hormones, enhancing quality of life as a central part of the treatment trajectory. We will also explore the significance of the interactive pain-anxiety-depression connection in clinical applications for this fragile population.

Neurogenic Thoracic Outlet Syndrome
Paul J. Christo MD, MBA


Pain represents a foremost feature of neurogenic thoracic outlet syndrome (NTOS). Symptoms include ipsilateral upper extremity pain, sensory loss, shoulder and neck discomfort, arm paresis or edema, headache, and even sympathetic nervous system impairment. This presentation will cover an evidence based review of the classification, etiology, clinical presentation, diagnostic measures, and surgical treatment of NTOS with a focus on nonoperative therapies such as physical modalities, pharmacological therapies, and more contemporary minimally invasive, cervicothoracic intramuscular treatments with botulinum toxin.
**sis-06**  
**Full Metal Jacket:** Examining the Psychedelic Side of Ketamine  
*R. Norman Harden* MD  
**Wednesday 9.5  11:10a – 12:00p**  
*Level 4.*  
**Nolita 3**

Ketamine is abused as a club drug due to its potent hallucinogenic properties. What we know of the drug’s adverse events/side effects/toxicity in high dose and frequent use come from this cohort of abusers, with most of the data coming from Japan. We will examine the neurocognitive effects (euphoria, visual, and auditory hallucinations) that are desired by abusers, but correspond to “adverse events” (dysphoria, frightening hallucinations) in the clinical context. We will also examine the cultural framework of abuse and qualitative sociological impact of the drug used in the context of a club drug. Finally, we will examine the toxicity of high dose chronic use as a caution to frequent infusion in certain clinical situations.

*Note: An encore will be presented on 9/8; see ENC-02.*

**sis-07**  
**The Outer Limits:** Analgesics of the Future  
*Jeffrey A. Gudin* MD  
**Wednesday 9.5  1:40p – 2:30p**  
*Level 3.*  
**Gracia 1**

Medicine and science builds and grows on the foundations of those who came before. Although pain management discoveries have been at a relative snail’s pace, there have been recent advances in existing medications and analgesic devices, as well as exciting new molecules and formulations on the horizon. With progressive changes in technology come advances in medicine. Inasmuch, this lecture will discuss newer formulations of older molecules (NSAIDs, local anesthetics, opioids, gabapentinoids), touch on developments in the abuse deterrent opioid space, and introduce some exciting animal based, preclinical, and early phase molecules in development. Come hear a discussion of the future of analgesics including topics such as NMDA, TRK-A, NOS, beta-arrestin, ORL-1, kappa, GABA, liposomes, and more!

**sis-08**  
**The Other Opioid Crisis:** Fentanyl and Heroin  
*Kevin L. Zcharoff* MD, FACIP, FACPE, FAAP  
**Wednesday 9.5  1:40p – 2:30p**  
*Level 4.*  
**Mont-Royal Ballroom**

There is a significant amount of media, political, and public attention paid to the opioid crisis/opioid epidemic in the United States. With the seemingly ever-increasing number of opioid related overdoses and fatalities, there has been a feverish push by stakeholders to diminish the amount of opioids prescribed in order to help stem these worrisome trends. Unfortunately, there may be a lack of focus regarding the true definition and characterization of the opioid epidemic. There may also be a rush to judgment about the role of appropriately prescribed opioid analgesics in the addiction crisis we face today. This presentation will discuss the roles and statistics of both prescription and illicit opioids—namely fentanyl and heroin—in today’s “opioid overdose epidemic” with the intention of clarifying important differences and similarities between these competing epidemics including concerns and clinical considerations specific to each of them. Additionally, this program will examine and identify how these medications and drugs share potentially tragic adverse effect profiles in many cases. However, it is important for clinicians to make sure that appropriate chronic pain patients who may be candidates for opioid analgesic therapy aren’t penalized, and still get the treatment they deserve.
The Yin and the Yang of Pain Research: Matching Disease Mechanisms With Interventions

**R. Norman Harden** MD  

**Wednesday** 9.5  2:40p – 3:30p  

The clinical ideal is to match known, objectively identified mechanisms of disease with the known mechanisms of an intervention (drug or nondrug). Of course, we are far from this ideal as our knowledge of disease mechanisms is very elementary in some cases, especially in pain, and our knowledge of drug mechanisms is rudimentary, and our knowledge of how nondrug interventions actually work is almost nil. In this course we will discuss recent progress in regards to identifying clinically significant mechanisms/pathophysiology, especially by more objective testing and biomarkers, as juxtaposed with our spare knowledge of drug mechanisms (eg, pharmacodynamics, neuropharmacology), as well as discuss some of the hypothetical mechanisms of nondrug interventions.

**Note:** An encore will be presented on 9/8; see ENC-03.

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From Here to Infirmity

**Kevin L. Zacharoff** MD, FACIP, FACPE, FAAP  

**Wednesday** 9.5  4:40p – 5:30p  

The reality of chronic pain can be sobering and depressing. The term “empathy” in the context of medical care may sometimes be confusing and misunderstood. This often results in the conveyance of sympathy—the “I’m sorry approach”—to patients suffering from chronic pain, which does not achieve the same goals as providing a compassionate, meaningful, and empathic relationship. Empathy is often defined as the capacity to understand or feel what another person is experiencing from their frame of reference: to “put oneself in someone else’s shoes.” Empathic listening may not be easy to achieve, but often may result in a much more gratifying level of communication for patients and healthcare professionals. In a time where it seems as if we are being told more now than ever about documentation, regulatory scrutiny, and taking a detailed history, it can be quite difficult to take the patient’s narrative into account, and truly reflect and understand the life and context that people with chronic pain experience. This session will focus on these topics as well as strategies to implement in clinical practice to help identify the patient’s individualized needs and integrate them into the most targeted assessment and pain treatment plan possible.

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Year of the Locusts: The Impact of the CDC Guidelines on Practitioners and Patients

**Robert L. Barkin** MBA, PHARMd, FCP, DAPM  

**Gary W. Jay** MD, FAAPM, FACEI  

**Thursday** 9.6  9:40a – 11:00a  

The CDC guidelines have caused controversy and spurred heated discussion. Produced with a paucity of evidence based medicine, they were never evaluated and iterated in the manner of more appropriate guidelines. In this course, we will examine the guidelines and their effect on practitioners—primary care physicians, pain specialists, etc—and chronic pain noncancer patients as well as some chronic cancer patients. Many functioning patients have had their opioid dosages diminished, either in concert with their physician or forcibly, without any say in the matter. This, along with a marked reduction in the amount of legal opioid medications that can be produced, has led to significant unintended consequences: practitioners are leaving the field; some refuse to even prescribe opioids, mostly due to fear of overregulation; once-functional patients are being abandoned by the medical field; patients are searching for something to return them to functionality, which can lead to overdose and death, particularly from heroin and illicit fentanyl. Indeed, the opioid crisis has now become the heroin and fentanyl crisis. During this presentation, solutions, and the changes necessary to bring them about, will be discussed.
matching disease mechanisms with interventions
DO AS I SAY!

Treatment adherence in pain medicine
Martin Cheatle
Thurs Sept 6
from here to infirmity
kevin zacharoff
wednesday
september 5
Pain, Drugs, and Ethics

Kevin L. Zacharoff MD, FACIP, FACPE, FAAP

Thursday 9.6 11:10a – 12:00p

Pain remains one of the most common reasons that people seek medical attention in the United States. When pain was designated as the fifth vital sign, people were given the right to have their pain assessed and effectively treated by their healthcare professionals. A number of ethical dilemmas have surfaced since, including the increased prescribing of opioid medications for patients with chronic pain, in the face of also increasing rates of abuse, misuse, and addiction related to these medications. The “opioid overdose epidemic/crisis” has led us to the challenge of balancing the safe, compassionate, and effective treatment of chronic pain against serious negative outcomes associated with the increased abuse and misuse of these medications. With overdose death rates increasing, tensions running high, a multitude of political and regulatory involvement, and knee-jerk reactiveness, it seems as if the only thing being forgotten is the needs of chronic pain patients and the core ethical principles intended to help clinicians maintain the highest standards of care. This session will describe these principles and clarify their role in determining reproducible courses of action that maximize safety, efficacy, and compassionate pain care, regardless of the direction the “opioid pendulum” is swinging.

Dangerous Liaisons: Regimens, Regimes, and Rapprochements

A Kenneth L. Kirsh Memorial Lecture

Steven D. Passik PHD

Thursday 9.6 1:40p – 2:30p

Along with regimen change often comes regime change. And with regime change there is a tendency to abandon all tenets of prior prevailing thought. With the changes in the mores surrounding opioid prescribing, is it really the case that observations grounded in the clinical work of experts about the nature of pain management with opioids needs to be ignored, superseded, or abandoned? Some were true but taught incorrectly. Some were overly simplified and tied too closely to raising or lowering doses; some were quite possibly overly naïve with regard to taking subjective pain reports at face value. Doing so led to clinical problems that are well known, such as escalation of doses in nonadherent patients or clinicians being too quick to escalate opioids rather than consider other adjuvant treatments. What is not well known is what will happen if we ignore some of these notions, many of them as wise as they were self-effacing, taking the onus for poor outcomes on ourselves as clinicians. Do we risk worsening the lot of people with severe pain? Losing our empathy? Failing in our roles as advocates? Quite possibly. Perhaps this session will lead to a rapprochement and rethinking of where we have been and where we are going philosophically and with opioid policy.

Do As I Say! Facilitating Treatment Adherence in Pain Medicine

Martin D. Cheatle PHD

Thursday 9.6 1:40p – 2:30p
Co-Chairs
Srinivas Nalamachu
Joseph Pergolizzi

Errol Gould
Rami Ben-Joseph
Ernest Kopecky
Robert Raffa
Robert Taylor

Thursday September 6
taught in medical, nursing, or dental school. This presentation will review the ethical considerations and current models and predictors of adherence in pain care and provide practical tools to improve adherence to medication management, exercise, nutrition, and weight loss.

**Pain Clinical Trials**

*Rami Ben-Joseph PHD ● Errol M. Gould PHD ● Ernest A. Kopecky PHD, MBA ● Srinivas Nalamachu MD ● Joseph V. Pergolizzi, JR MD ● Robert B. Raffa PHD ● Robert Taylor PHD*

**Thursday 9.6 1:40p – 3:30p**  

There are studies that must be performed in order to determine their clinical relevance. The process extends from bench top to bedside and includes various special populations like pediatrics and geriatrics. This course addresses various elements related to the study of analgesics. Novel improved preclinical animal models in analgesic studies will be examined. The unique issues of unusually high placebo and nocebo effects in analgesic, which can lead to confusing results, will be discussed along with the role and responsibilities of acting as a principal investigator in an analgesic trial. This course will review the practical impact of new healthcare measures and the increased importance of comparative effectiveness trials, health and pharmacoeconomic outcomes, and the process of publishing data and determining authorship. At the conclusion of the program participants shall have a comprehensive understanding of analgesic trials.

**Pain Management at Ground Zero**

*Mark Garofoli PHARM, MBA, BCGP, CPE*

**Thursday 9.6 2:40p – 3:30p**  

West Virginia continues to lead the nation, and world, in drug overdoses, which makes one ponder what is being done at the “ground zero” of the opioid epidemic to save and improve lives. Where better than where it’s worst should some of the possible solutions come from? In 2016, an interprofessional panel of experts in pain management—ranging from medicine, osteopathy, nursing, pharmacy, dentistry; public health; the state PDMP; and representatives from insurance providers—was put together with aims of doing just that. The West Virginia Safe & Effective Management of Pain (SEMP) Guidelines (www.semp-guidelines.org) were developed to facilitate the shift of the best practices in pain management becoming the new standard of care. The SEMP Guidelines include 2 main components including the risk reduction strategy and the clinical treatment algorithms. Pain management algorithms are not available anywhere else in the entire world! So we would like to welcome you to “the West Virginia Way” and see just how the “Wild and Wonderful” state of West Virginia is approaching the opioid epidemic from a true ground zero. After all, if it works where it’s worst, how could it not help your state or your practice?

*Note: An encore will be presented on 9/8; see ENC-04.*

**Applying Mechanism Based Classification to Clinical Reasoning for Complex Persistent Pain**

*Miroslav Backonja MD ● Kathryn A. Schopmeyer PT, DPT, CPE*

**Thursday 9.6 4:40p – 5:30p**  

Understanding the mechanisms that drive a persistent pain process is critical for effectively treating pain in any patient. While it is common to treat pain from a primary nociceptive perspective, this approach often fails in patients with central sensitization. Pain mechanism based classifications can help clinicians make recommendations that may improve functional outcomes and enhance patient adherence by identifying
PAIN MANAGEMENT
AT
GROUND ZERO

MARK GAROFOLI
THURS SEPT 6
ENCORE SAT SEPT 8
primary pain mechanisms. This course will offer practical tips for evaluation of patients with mixed pain mechanism presentations and include an interactive discussion of multimodal treatment options for each.

**SIS-18**

**Solutions to Counterfeit Medicine**  
Jay Joshi MD

**Thursday 9.6  5:40p – 6:30p**  
Level 4. Nolita 1

Counterfeit medicine and counterfeit medical services pose a clear and present danger to our society. While we have all heard of the opioid epidemic, many of us are not aware that a great deal of the morbidity and mortality within the opioid epidemic is caused by legal and illegal counterfeit medicine and counterfeit pain providers. According to the World Health Organization, global sales of counterfeit products in the pharmaceutical industry alone accounted for $431 billion in 2012. Counterfeit pharmaceuticals alone account for up to $200 billion in losses per year. Over the last few years, I have discussed this topic in detail and helped bring national attention to this "silent epidemic." For the first time ever within an accredited CME conference, we will discuss solutions and technologies available TODAY that are aimed at fighting counterfeit medicine.

**SIS-19**

**Policies and Practicalities: Focusing on the Patient, Not the Opioid**  
Jennifer M. Hah MD, MS • Ravi Prasad PHD

**Friday 9.7  9:40a – 10:30a**  
Level 4. Nolita 1

The current opioid epidemic has resulted in numerous professional and society guidelines focused on safe opioid prescribing. In addition, policymakers have focused on state legislation to limit the duration of opioid prescribing for acute pain. As a result of the increased scrutiny, prescribers have shifted their focus to limiting opioid prescribing for patients with chronic noncancer pain. Now, more than ever, evidence based behavioral treatment modalities are essential for fostering pain coping skills and providing support as part of optimal interdisciplinary pain management. This course will begin with a brief review of the opioid epidemic. Current opioid prescribing guidelines will be discussed with a particular emphasis on indications for opioid tapering. Strategies for the medical management of opioid tapering will be presented, along with a detailed discussion of evidence based psychotherapeutic interventions known to result in improvements in physical and emotional functioning while promoting opioid tapering.

**SIS-20**

**The Medical Stasis: When the Best of Intentions Lead to Unexpected Outcomes**  
Paul J. Christo MD, MBA • Douglas L. Gourlay MD, MSC, FRCPC, FASAM • Gary M. Reisfield MD • Stephen J. Ziegler PHD, JD

**Friday 9.7  9:40a – 11:00a**  
Level 4. Mont-Royal Ballroom

The debate over the existence of an opioid crisis should be over: With more than 150 deaths per day being attributed to the use of opioids, there clearly IS an opioid crisis in America. The debate, however, continues to rage over the cause. Little attention has been paid to forming a clear definition of intended consequences of proposed guidelines, nor has there been a willingness to examine unintended consequences of solutions that have been proposed. Guidelines are being enshrined in state regulations and, in some cases, being elevated in criminal proceedings as "standards of care," even though there is little evidence to suggest—no matter how desperate the need or how well intentioned the effort—that they are helping. Worse still, these guidelines are being implemented with no provision for review to examine intended/unintended consequences, which would allow for iterative changes to be made. Note: the position of this panel is neither pro, nor con, opioid use.
The Right Drug, the Right Patient, the Right Time
Robert L. Barkin MBA, PHARMD, FCP, DAPM ● Gary W. Jay MD, FAAPM, FACFEI

Friday 9.7 10:30a – 12:00p  Level 3. Gracia 3

The content of this presentation will encourage audience participation. The “rights” section—drug, patient, time—will enable participants to reflect on medical malpractice cases where these rights were initiated in less than adequate outcomes and fell below the standard of care. Additionally, attendees will come to understand the pharmacokinetic challenges often reflected in the treatment of the geriatric patient, and there will be discussion of the various opioid metabolism routes of substrate, inducer, and inhibitor pathways.

The Intersection of Law Enforcement and Healthcare: Increased Utilization of PDMPs
Victor Fazio EDD ● Marc S. Gonzalez PHARMD

Friday 9.7 11:10a – 12:00p  Level 4. Mont-Royal Ballroom

In this presentation, prescription drug monitoring programs (PDMP) and their value to law enforcement and dispensers will be discussed. California maintains the Controlled Substances Utilization and Review Evaluation System (CURES) as one method to mitigate harms caused by opioids. Use of this system by physicians has been shown to decrease their writing of opioid medication prescriptions, potentially reducing the number of fatal overdoses of both Rx opioids and heroin. Additional benefits of PDMP utilization include physicians being more aware of the criminal act of patient “doctor shopping,” potentially irresponsible prescribing by fellow healthcare professionals, or other forms of pharmaceutical diversion such as fraud and forgeries. This presentation will highlight findings from an academic project that aimed to understand physician underutilization of CURES and evaluate an opioid reduction workgroup’s progress toward its goal of 100% of physicians in its geographical area using CURES. In this course, the project will be presented in the context of the workgroup’s diverse efforts at reducing death by overdose through a multidisciplinary approach involving key stakeholders from behavioral health, public health, law enforcement, education, and the community.

IV Naloxone Infusion: A Hidden Gem
Charles Louy MD, PHD

Friday 9.7 1:40p – 2:30p  Level 4. Nolita 3

Despite the current opioid crisis, opioids remain the mainstay of analgesic therapy. They are associated with a multitude of side effects, including respiratory depression, pruritus, nausea, vomiting, urinary retention, ileus, and constipation. Beyond certain doses and duration of intake that vary from patient to patient, opioids can also induce a state of paradoxical hyperalgesia. Among these side effects, opioid induced ileus, urinary retention, and opioid induced hyperalgesia contribute to unnecessary prolongation of hospital length of stay. Naloxone is a well known antagonist used to reverse opioid induced respiratory depression. There is evidence supporting the use of low dose IV naloxone to prevent and reverse all of the above mentioned opioid induced side effects without reversing the analgesia. However, low dose IV naloxone appears to be underutilized. In addition to reviewing the literature, we will share our experience and clinical results from the implementation of low dose IV naloxone protocols at Cedars Sinai Medical Center in Los Angeles.
common threads

IN PAIN AND CHEMICAL DEPENDENCY

DOUGLAS GOURLAY • MEL POHL • GARY REISFIELD

FRIDAY • SEPTEMBER 7
benzodiazepines and "Z" drugs for pain patients:

the problems with prolonged withdrawal syndrome

joseph pergolizzi  robert raffa  steven wright

friday september 7
SIS-24  
**Common Threads in Pain and Chemical Dependency**  
**Douglas L. Gourlay** MD, MSC, FRCP, FASAM • **Mel Pohl** MD • **Gary M. Reisfield** MD  
**Friday 9.7** 1:40p – 3:30p  
**Level 4. Mont-Royal Ballroom**  
The overuse of opioids and, to some extent, the solutions proposed to curtail the misuse of prescription drugs has clearly led to a shift in how we diagnose and how we treat substance use disorders in this often challenging patient population. This session will explore some of these challenges resulting from the recent Decade of Pain.

SIS-25  
**Benzodiazepines and 'Z' Drugs for Pain Patients:**  
The Problem of Prolonged Withdrawal Syndrome  
**Joseph V. Pergolizzi, Jr** MD • **Robert B. Raffa** PHD • **Steven L. Wright** MD, FAAP, FASAM  
**Friday 9.7** 2:40p – 3:30p  
**Level 4. Nolita 1**  
Benzodiazepines and ‘Z’ drugs are frequently coprescribed to pain patients. They were developed for legitimate medical needs, but unbridled success and application has led to serious problems, some of which are known. The potential extreme duration of the withdrawal syndrome, however, is virtually unknown by providers and regulators. Patients suffer, not knowing the symptoms have a cause and not having medical professionals to turn to for help. They may become “difficult” patients, marginalized, or told that their symptoms are psychological. Paradoxically, the simplicity and success of GABA-A receptor knowledge has distracted from studying other pharmacology of these drugs. A glaring example is the almost universal lack of awareness of peripheral benzodiazepine receptors. Despite the higher risk, benzodiazepines have not been increased in scheduling per the DEA’s Controlled Substances Act. This course will address the unmet and largely unrecognized medical need of overprescription, dependence, and withdrawal, and discuss actionable change to improve the knowledge, attitudes, preemptions, and practices of stakeholders.

SIS-26  
**Bridges to Babylon: Assessing & Managing Comorbidities in Chronic Pain Patients**  
**Martin D. Cheatle** PHD  
**Friday 9.7** 4:40p – 5:30p  
**Level 3. Gracia 1**  
Individuals who suffer from chronic pain often present with significant medical and psychiatric comorbidities that can exacerbate the pain experience and contribute to a further erosion of quality of life and disability. In this current climate of reducing the reliance on opioids or opioid sparing it is essential that clinicians effectively and efficiently identify and manage these comorbidities. This presentation will provide an overview of the prevalence of common comorbidities, assessment strategies, and pharmacologic and nonpharmacologic interventions in patients with chronic pain.

SIS-27  
**Fudin vs Gudin: Debate on 4 HOT Topics!**  
**Jeffrey Fudin** BS, PHARMD, DAAPM, FCCP, FASHP • **Jeffrey A. Gudin** MD  
**Friday 9.7** 4:40p – 5:30p  
**Level 4. Nolita 1**  
Topics to be deliberated, with direct audience participation: defending high-dose opioids; Kratom or bait ’em; universal opioid monitoring for cancer patients; TIRF legality for noncancer pain; and medical marijuana and driving. Fudin and Gudin will argue one side but may have to switch their position at the sound of the buzzer, as they debate limiting daily morphine equivalent doses. What about Kratom? It has gained much popularity as a natural food product to mitigate withdrawal from opioids, reduce pain, and improve energy and mood. Fudin and Gudin will battle it out and expose the good, the bad, and ugly. Do patients diagnosed with cancer get a “free pass”? Gudin says “Let
BRIDGES TO BABYLON
ASSessing & Managing CoMOrbidities in CHronic Pain Patients
MARTIN D. CHEATLE  FRI. 9.7
Nontraditional Law Enforcement Solutions to Misuse, Abuse, and Diversion of Opioids

Victor Fazio EDD • Marc S. Gonzalez PHARMD

Friday 9/7 5:40 p – 6:30 p 

Problems related to prescription painkillers and heroin lead the news almost every night. Tens of thousands of Americans die every year from unintentionally overdosing on these drugs. Attendees of this class will leave with an understanding of why we have this current problem through an assessment of the drug problem in the United States. This presentation begins with a video highlighting the real world toll of opioid abuse, showing the horrors of drug addiction and providing statistics about the problem facing our state and nation. Next, we’ll provide a 38 year history regarding the aggressive marketing of pharmaceuticals and the subsequent transition to heroin using both real world stories and clips from television shows and news stories. Then, we provide predictive analysis using rules that were later turned into algorithms for predicting potential future addicts before they become addicts. Finally, we offer case studies presenting evidence based solutions for turning the tide of death from overdose and highlight the ability to reduce fatal overdoses while the rest of the nation sees a rise in deaths related to painkillers and heroin. Evidence based solutions will be offered that involve nontraditional law enforcement strategies and tactics as well as proven collaborative efforts with other stakeholders in fighting the opioid epidemic.

Clinical Applications of Electronic Signal Treatment and the Combined Electrochemical Treatment

Robert H. Odell MD, PHD

Saturday 9/8 8:40 a – 9:30 p 

Combined electrochemical treatment (CET) uses local anesthetics and with electronic signal treatment (EST) to mitigate/eliminate pain, allodynia, numbness, and other symptoms of neuropathic and chronic pain. Its physiological actions are understood using the principles of physics, not pharmacology. CET treats all causes of peripheral neuropathy and patients experience reduction of pain, dysesthesias, allodynia, numbness; an increase in strength; improvement in motor function, balance, and improved QoL. EST provides an alternative to steroids due to profound anti-inflammatory effects with evidence showing boosting of immune function. Central pain can be treated utilizing CET and EST. A case report of phantom limb pain illustrates the potential for sophisticated multiplexed electric energy signaling to treat central pain. Sports medicine care includes application of physical modalities to treat acute injuries so patients can remain active and competitive. This course will examine how EST provides risk free and cost effective treatments for the aches and pains of life by reducing muscle spasm, blocking pain, and allowing function to be restored more quickly than with many existing modalities.
Fri. Sept. 7

Nontraditional law enforcement solutions to misuse, abuse, and diversion of opioids

Victor Fazio  Marc Gonzalez
Pain Management Strategies for the Geriatric Population:
How to Live in Your Discomfort Zone Without Opioids
Winifred Bragg MD

Saturday 9.8  11:10a – 12:00p  Level 3  Gracia 1

This session will examine pain relief options for the elderly population, focusing mainly on the use of spinal orthoses as a way to reduce or eliminate the use of opioids in the elderly. Statistics have shown, in no uncertain terms, the aging of the American population. With this increase in the elderly population comes a substantial rise in the number of patients living in pain due to various spinal afflictions, from fractures to scoliosis to kyphosis, disc issues, and beyond. Due to the aging population plus the widespread opioid epidemic, practitioners need to explore viable alternative methods to assist elderly patients without the use of opioids. Spinal bracing is an effective alternative for relieving pain and providing a better quality of life for the elderly and may reduce the need for opioids. In this program, we will examine advances in spinal bracing as well as the recent medical literature supporting its safety, efficacy, and pain relieving capabilities. In addition, we will look at the role that bracing can and should play in reducing the need for opioids in your practice.

Ketamine in the Acute Care Setting: What’s Old is New Again
Charles Louy MD, PHD ▪ Chona Melvin DNPC, MSN, RN, FNP-C

Saturday 9.8  3:00p – 3:50p  Level 3  Gracia 3

Ketamine, initially developed and still used as an anesthetic, is finding its way in other applications, including acute and chronic pain management and treatment of psychiatric conditions. In spite of the evidence regarding the beneficial effects of ketamine, many healthcare providers, including anesthesiologists, are reticent and even opposed to using it in their practice. At the other end of the spectrum, ketamine clinics are attracting more and more cash paying patients to undergo continuous infusions of IV ketamine. So what is the evidence for and against the use of ketamine? After covering the most recent literature, we will review the use of ketamine and present our experiences at Cedars-Sinai Medical Center in Los Angeles, including the creation of ketamine infusion protocol, hydromorphone-ketamine and morphine-ketamine patient controlled analgesia (PCA). We will discuss the barriers that confronted us, and how we overcame them. We will also present typical patients who we’ve treated, and conclude with future directions, such as our recent implementation of pure ketamine PCAs.

Extended-Release and Long-Acting Opioid Analgesics: Risk Evaluation and Mitigation Strategy (REMS)
Bill McCarberg MD ▪ Lynn Webster MD

Tuesday 9.4  1:40p – 4:50p  Level 3  Gracia 7

Pain is a significant public health problem, affecting more than 100 million adults in the US. The use of narcotic medications for pain management has increased dramatically in the US over the past two decades. However, pain patients are often undertreated due to a variety of physician- and patient-related concerns and barriers.

Jointly sponsored by Global Education Group and Rockpointe. This educational activity is supported by an independent educational grant from the Extended-Release/Long-Acting Opioid Analgesic REMS Program Companies.
**WRK-01**  **Cannabis and Cannabinoids: Kissing Cousins or Good Cop/Bad Cop?**
*Douglas L. Gourlay MD, MSc, FRCPC, FASAM●*
*Mary Lynn McPherson PHARM, MA, BCPS, CPE*

**Tuesday 9.4  9:40a – 12:30p**

This fast paced, case based course will take learners on a journey exploring scientific evidence that supports or refutes the use of cannabinoids, including clinical pharmacology, acute and chronic adverse effects, and the appropriate use of FDA-approved and other cannabinoids. Also to be explored: the interrelationship between cannabis and opioids, the management of long-term consequences of cannabis use, and how practitioners can use our growing evidence base to recommend cannabis products in states where cannabis is approved for medical use. Participants will leave this session with a commonsense approach to this complicated topic—complications being both therapeutic and regulatory!

*Please note that this course requires a separate registration fee of $165.*

**WRK-02**  **Patient Centered Opioid Reduction**
*Beth Darnall PHD ● Ming-Chih Kao MD ● Sean C. Mackey MD, PHD*

**Tuesday 9.4  1:40p – 4:40p**

Come learn strategies to enhance your partnership with patients as a pathway to reduce their opioid health risks. This workshop will introduce critical behavioral and medical aspects of an evidence based patient centered approach to voluntary opioid reduction, including transforming the messaging in the clinic environment, using the right approach and language, partnering with patients, setting them up for success with a tapering schedule, and helping patients feel and be in control. Both provider-level and clinic-level strategies will be discussed. This course will be led by faculty who received national funding to implement a patient centered voluntary opioid reduction clinical program. To encourage active participation in behavioral pain management, several tip sheets will be provided, and an audience Q&A is sure to enlighten.

*Please note that this course requires a separate registration fee of $165.*

**WRK-03**  **Working With Buprenorphine and Methadone: Lipstick on the Pig? Or Mama’s Got a Brand New Bag?**
*Douglas L. Gourlay MD, MSc, FRCPC, FASAM●*
*Mary Lynn McPherson PHARM, MA, BCPS, CPE*

**Wednesday 9.5  9:40a – 12:30p**

Practitioners today are fairly comfortable dealing with traditional opioids such as morphine, oxycodone, hydromorphone, and fentanyl. But what about buprenorphine and methadone? This case based session will provide attending practitioners with hard and fast skills that can be implemented immediately upon returning to work! Contemporary issues with monitoring and dosing methadone will be addressed, including risk stratification for candidate selection, the implication of drug interactions, and the nuances of monitoring. Buprenorphine’s intriguing pharmacology will be covered, along with dosing guidance for chronic pain. Importantly, participants will learn how to treat acute pain in a patient receiving methadone or buprenorphine as part of an opioid agonist recovery program.

*Please note that this course requires a separate registration fee of $165.*
Palliative Care Bootcamp: You’re in the Army Now!

Frank D. Ferris MD • Jessica Geiger-Hayes PHARMD, BCPS, CPE •
Alexandra McPherson PHARMD, MPH • Mary Lynn McPherson PHARMD, MA, BCPS, CPE

**Saturday 9.8  9:30a – 4:30p**

Soldier up! This all-day program is jam packed with clinical pearls to manage pain and nonpain symptoms associated with advanced illness. Taught by leading experts, you will learn how to conduct a thorough assessment of pain in a verbal and nonverbal patient (with plenty of practice!) and how to use this information to determine the most likely pathogenesis of pain, which drives drug therapy decision making. Considerable time will be spent exploring difficult-to-control syndromes, including painful wound care and complicated neuropathic/multipathology pain. The use of ketamine, methadone, and lidocaine will be addressed. Importantly, tips and tricks to develop and support informal caregivers in the medication management process will also be explored.

*Please note that this course requires a separate registration fee of $195.*

*There will be a break for lunch between 12:30 and 1:40.*
Not only can you take our faculty home with you—now you can also bring them to the gym 365 days a year!
EXHIBITORS
Please note: There are concurrent educational sessions taking place while the Exhibit Hall is open. Exhibit Hall hours are subject to change. Floorplan and listings are accurate as of printing. Please refer to m.painweek.org or exhibit passport for most up-to-date information.
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<td>427</td>
<td>Abbott</td>
<td>Visit booth for more information.</td>
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<tr>
<td>343</td>
<td>ABO Footwear</td>
<td>Visit booth for more information.</td>
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<td>237</td>
<td>Acadian Diagnostic Laboratories</td>
<td>Visit booth for more information.</td>
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<tr>
<td>137</td>
<td>ADAPT Pharma</td>
<td>Visit booth for more information.</td>
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<tr>
<td>433</td>
<td>Advanced Pathology Solutions</td>
<td>Visit booth for more information.</td>
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<td>296</td>
<td>Advin Biotech</td>
<td>Visit booth for more information.</td>
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<td>340</td>
<td>Alpine Health &amp; Wellness</td>
<td>Visit booth for more information.</td>
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<tr>
<td>338</td>
<td>Alternative Biomedical Solutions</td>
<td>Visit booth for more information.</td>
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<tr>
<td>442</td>
<td>American Academy of Anti-Aging Medicine</td>
<td>Visit booth for more information.</td>
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<tr>
<td>15</td>
<td>American Headache Society</td>
<td>Visit booth 305 for more information.</td>
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<td>305</td>
<td>Amgen / Novartis Aimovig™</td>
<td>Visit booth 305 for more information.</td>
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<td>Booth</td>
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| 331   | AnazaoHealth Corporation  
www.anazaohealth.com | AnazaoHealth is a full-service nationwide compounding pharmacy specializing in Intrathecal pain pump medications as well as 503A Traditional Pharmacy and a 503B FDA-Registered Outsourcing Facility. We provide patient-specific and office-use preparations that are not commercially available for aesthetics, age management, HRT, men’s and women’s health, mesotherapy, urology, vitamin injectables, weight management and more. |
| 113   | Arbor Pharmaceuticals, LLC  
www.arborpharma.com | Arbor Pharmaceuticals, headquartered in Atlanta, Georgia, is a specialty pharmaceutical company currently focused on the cardiovascular, hospital, neuroscience and pediatric markets. The company has over 700 employees including approximately 600 sales professionals promoting its products to physicians, hospitals, and pharmacists. Arbor currently markets over twenty NDA or ANDA approved products with over 35 more in development. For more information regarding Arbor Pharmaceuticals or any of its products, visit www.arborpharma.com or send email enquiries to info@arborpharma.com. |
| 233   | Aspen Medical Products  
www.aspenmp.com | Aspen Medical Products is a leader in the development of innovative spinal bracing for post-trauma stabilization, pre-and-post surgical stabilization, pain management and long-term patient care. Aspen Medical Products offers multiple orthotic options that provide unsurpassed motion restriction, superior comfort and an economic advantage, encouraging better patient compliance. |
| 231   | Assertio Therapeutics  
www.assertiotx.com | Assertio's mission is to advance patient care in our core areas of neurology, orphan and specialty medicines. |
| 443   | AXIS Toxicology & Clinical Lab Services  
axisclinicalsusa.com/labservices | AXIS Toxicology & Clinical Lab Services is a full service clinical laboratory specializing in medical drug monitoring in the arena of controlled medications and illicit substances. We provide flexibility in our options to enable the provider to make decisions and choose monitoring that is compliant and medically necessary. Illicit and prescription drug misuse and patient non-compliance are growing issues for today’s healthcare professionals. We believe toxicology and clinical monitoring has become an integral tool in helping physicians achieve the highest level of patient care. |
| 246   | Baxter, T. Inc  
lomedpain.com | Baxter, T. Inc. provides the safest, strongest pain relief CDC compliant program available, based on the specific needs of the 77 million people in the United States coping with chronic pain. That is why we created the LoMed Program. We believe that pain management should be safe, effective, and in compliance with regulatory standards. LoMed provides significant pain relief with the absence of withdrawal symptoms, dysphoria, constipation and a significantly reduced risk of overdose and addiction. |
| 301   | BioDelivery Sciences  
bdsi.com | BioDelivery Sciences ("BDSI®") is a specialty pharmaceutical company with a focus in the areas of pain management and addiction medicine. We are utilizing our novel and proprietary BioErodible MucoAdhesive (BEMA®) and other drug delivery technologies to develop and commercialize, either on our own or in partnership with third parties, new applications of proven therapies aimed at addressing important unmet medical needs. |
| 423   | BioPharma Services Inc.  
www.biopharmaservices.com | Since our inception in 2006, BioPharma Services has conducted clinical studies in opioids, narcotics and cannabinoid products at our state of the art facilities. Our locations in Canada and USA both have controlled substances licenses and access to recreational drug user populations with long-term confinement capabilities. As part of our Human Abuse Liability (HAL)/Abuse Potential (HAP) programs, we have strived to create innovative and safe solutions to conduct studies such as propofol in healthy volunteers. To this end, the BioPharma HAL team has been outfitted with a core team of AL experts dedicated to do their part to aid the opioid crisis taking place today. |
| 243   | BioPhysics Labs  
www.b-physics.com | Visit our booth for more information. |
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<tr>
<th>Booth</th>
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<tbody>
<tr>
<td>230</td>
<td>Bioventus LLC</td>
<td>Bioventus LLC is an orthobiologics company that delivers clinically proven, cost-effective products that help people heal quickly and safely. Its mission is to make a difference by helping patients resume and enjoy active lives. Bioventus has two product portfolios for orthobiologics, Bioventus Active Healing Therapies and Bioventus Surgical that make it a global leader in active orthopaedic healing. Built on a commitment to high quality standards, evidence-based medicine and strong ethical behavior, Bioventus is a trusted partner for physicians worldwide.</td>
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<tr>
<td>347</td>
<td>Carolina Liquid Chemistries Corp.</td>
<td>Carolina Liquid Chemistries, known for its clinical chemistry analyzers and reagents, announces the successful launch of Medica Corporation’s high-speed benchtop analyzer, the EasyRA®. The refreshed EasyRA clinical chemistry analyzer now offers double the throughput, operating at a photometric rate of up to 240 tests per hour or up to 480 tests per hour with iSE. The EasyRA urine drug screening and general chemistry reagents are CLIA categorized as moderately complex. The test menu consists of 14 urine drugs of abuse tests and 35 general chemistry tests. The EasyRA is well suited for a variety of test centers including pain management clinics, STAT labs, physician office laboratories, and urgent care centers. This all-in-one system allows clinical laboratories to screen for drugs of abuse in urine while also allowing healthcare providers to assess routine chemistry panels including CMPs, lipids and liver enzymes on a single, easy-to-use analyzer.</td>
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<tr>
<td>133</td>
<td>Center for Pain and Stress Research Ltd.</td>
<td>Center for Pain and Stress Research Ltd. (CPSR) is an educational and research based company focused on studying the effect and magnitude nervous system regulation has on health, cognitive functioning and human longevity. CPSR Research is currently exploring stress and cortisol reduction for management chronic pain.</td>
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<tr>
<td>428</td>
<td>CGM LABDAQ</td>
<td>CGM LABDAQ®, from CompuGroup Medical (cGM), is a laboratory information system (LIS) that empowers labs of all sizes and specialties to optimize revenue and improve customer satisfaction by increasing efficiency and promoting patient safety. CGM LABDAQ allows seamless connectivity with EHR and billing systems and provides business decision support through advanced analytics.</td>
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<tr>
<td>132</td>
<td>Clarius Mobile Health</td>
<td>Clarius is the only handheld wireless ultrasound machine that doesn’t compromise on image quality. It offers high-resolution ultrasound images that are as good as the best traditional point-of-care systems. Clarius handheld ultrasound scanners wirelessly connect to most iOS and Android smart devices. Clarius C3 Ultrasounds Scanners image the abdomen and lungs, and work as a virtual phased array for cardiac imaging. Clarius L7 linear array ultrasound scanners are ideal for guiding procedures. Learn more by visiting us at <a href="http://www.clarius.com">www.clarius.com</a>.</td>
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<tr>
<td>330</td>
<td>Clear Assessments</td>
<td>Visit our booth for more information.</td>
</tr>
<tr>
<td>240</td>
<td>Clinical Pain Advisor</td>
<td>Clinical Pain Advisor offers pain medicine healthcare professionals a comprehensive knowledge base of practical pain and pain management information and resources, with noteworthy daily news, conference coverage, case studies, concise drug monographs, practice management information, and more. This content, available on web and app, is developed by clinicians and supported by our editorial board comprised of pain management experts from around the United States, to help healthcare professionals optimize patient outcomes.</td>
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<tr>
<td>344</td>
<td>Clio Laboratories, LLC</td>
<td>Laboratory specializing in urine and oral toxicology, oncogenetics testing, pharmacogenetics testing, and testing of specialized panels for urinary tract infections, vaginal microbiota, and respiratory pathogen detection.</td>
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<td>131</td>
<td>CoachCare</td>
<td>The CoachCare technology platform powers pain management clinics focused on tackling their patients’ weight management problems related to nutrition and lifestyle. A custom-branded mobile app, clinic dashboard and connected devices combine in one integrated platform to improve patient care and increase clinic revenues. Benefits to your clinic: Increased revenues for over 2500 clinics; Extend patient retention and reactivate patients; Drive referrals to your clinic. Benefits for providers and patients: Patient journal and progress data improves outcomes; Monitor personalized patient programs in real time; Stay connected to your patients between clinic visits.</td>
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<tr>
<td>103</td>
<td>Collegium Pharmaceutical, Inc.</td>
<td>Collegium Pharmaceutical, Inc. is a specialty pharmaceutical company focused on becoming the leader in responsible pain management by developing and commercializing innovative, differentiated products for patients suffering from pain.</td>
</tr>
<tr>
<td>333</td>
<td>Compulink Healthcare Solutions</td>
<td>With over 33 years of experience, Compulink is a recognized leader in ONC Certified EHR and practice management systems for pain management specialists. We offer the most complete and best supported all-in-one solution for EHR, practice management, RCM, patient engagement, analytics, and telehealth, and operate on both the server and cloud platforms. We help more than 10,000 providers nationwide increase efficiency, get paid more, and improve outcomes. For more information, please visit <a href="http://www.compulinkadvantage.com">www.compulinkadvantage.com</a>.</td>
</tr>
<tr>
<td>419</td>
<td>Confirm BioSciences</td>
<td>When it comes to pain management &amp; drug monitoring, we recognize your pain points and want to provide you with a seamless experience. Whether you’re looking to buy drug tests in bulk, you need a laboratory partner or custom point-of-care testing bundles, we can help you choose the products and services best suited for you. Let’s work together to create a drug testing solution that fits your needs and budget.</td>
</tr>
<tr>
<td>446</td>
<td>CoxHealth</td>
<td>CoxHealth a Top 100 Integrated Healthcare System in Springfield, Missouri, is seeking a BC/BE physician with pain medicine fellowship to join a multi-modal, multi-disciplinary program. Our approach utilizes minimally invasive procedures, medication management rehabilitation therapy, behavioral medicine, counseling full scope. Attractive comprehensive package. Contact Paula Johnson 417-880-7727 booth 446.</td>
</tr>
<tr>
<td>349</td>
<td>CureRx Pharmacy</td>
<td>A turn-key compounding pharmacy focusing on pain management with end-to-end service and quality to improve overall patient experience. Our knowledgeable staff specializes in 3rd-party reimbursement. PCAB and UCM accredited institution, providing only the highest quality of patient care.</td>
</tr>
<tr>
<td>200</td>
<td>Daiichi Sankyo, Inc.</td>
<td>Daiichi Sankyo, Inc. headquartered in Basking Ridge, New Jersey, is the U.S. subsidiary of Daiichi Sankyo Co., Ltd. and a member of the Daiichi Sankyo Group. Global clinical development and regulatory activities are headquartered at Daiichi Sankyo Pharma Development, also located in Basking Ridge. Our team of more than 1,400 U.S. employees is dedicated to the creation and supply of innovative pharmaceutical products to address diversified, unmet medical needs. We currently market therapies in hypertension, thrombotic disorders, stroke risk reduction, dyslipidemia, diabetes, acute coronary syndrome, opioid-induced constipation, IV iron therapy and metastatic melanoma.</td>
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<tr>
<td>241</td>
<td>DocRx</td>
<td>Visit our booth for more information.</td>
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<td>126</td>
<td>DrFirst</td>
<td>DrFirst pioneers software solutions and services that provide real-time access to patient data, improve communication and collaboration at the point of care and across the patient’s circle of caregivers, and enhance the doctor's clinical view of the patient to help drive better health outcomes. Our growth is driven by a commitment to innovation and reliability across a wide array of clinical software and support services. We empower medical and dental practices, hospitals, pharmacies, and EMR/EHR/HIS systems with integrated technologies, stand-alone solutions, and consulting services related to medication management, care collaboration and clinical data sharing, and medication adherence and behavioral support.</td>
</tr>
<tr>
<td>416</td>
<td>DRUGSCAN</td>
<td>DRUGSCAN offers timely, accurate, state-of-the-art testing solutions for medication monitoring and addiction treatment, with 24/7 access to a toxicologist. As a nationally certified SAMHSA and CAP accredited laboratory, our reputation is renowned. In addition, DRUGSCAN CAT.one is a leader in conducting in vitro manipulation and extraction studies for abuse-deterrent products which further enhances our understanding of drug use and abuse.</td>
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<tr>
<td>225</td>
<td>DTPM</td>
<td>Serving over 600 labs in 47 states, DTPM is a leading provider of turnkey laboratory solutions. Trusted since 1993 to provide a comprehensive array of drug testing equipment, supplies, and services, DTPM is your total solution provider. &quot;One Stop Shop&quot;</td>
</tr>
<tr>
<td>401</td>
<td>i8 Health Medical</td>
<td>i8 Health Medical is one of the leading manufacturers of Dipcard and Integrated Cup drug testing diagnostic products. The available drug screening products are designed for healthcare professionals in laboratories, rehabilitation centers, treatment centers, hospitals, clinics, private practices, human resource departments, and the judicial system. To lower costs, we work with manufacturers directly while maintaining high standard products. The factories are audited to standards: ISE, EC, FDA, etc. We also conduct on sight visits and audits of the factories multiple times per year. Our promise is to provide you expertise in the drug screening and testing administration. Our team of specialists has over 30+ combined years of experience working in the industry, providing you with the highest quality and savings. We value our customers and are here to help you get the results you want.</td>
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<tr>
<td>426</td>
<td>Enhanced Clinical Nutrition</td>
<td>Visit our booth for more information.</td>
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<td>429</td>
<td>Fidia Pharma USA Inc.</td>
<td>Fidia Pharma USA Inc. is pleased to bring to the orthopaedic community information on our newly launched product Hymovis® as well as our long standing viscosupplement, Hyalgan®. The booth will display the unique attributes of Hymovis which stem from the molecular modification of the HA backbone; adding an alkyl side chain to give increased viscosity and elasticity in a 2-dose regimen. Hylgan product and medical information will be available.</td>
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<tr>
<td>407</td>
<td>1st Providers Choice Pain Medicine EMR</td>
<td>IMS for Pain Management is a user-friendly, Fully Certified EMR and Practice Management Software System designed for pain management providers. Pain management doctors across the country have helped us to design the procedure templates to save you time while documenting the encounters with your patients. We have also focused on customizing the software for maximum efficiency and profitability in your practice, hospital or ambulatory surgery center.</td>
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<td>145</td>
<td>Galt Pharmaceuticals</td>
<td>Galt was founded with the premise of contributing to patient therapeutic needs by acquiring older proven yet viable pharmaceutical products which still address unmet needs in the current healthcare environment. The company applies superior pharmaceutical, managed care, clinical and marketing expertise to acquire, license and develop niche pharmaceutical products for distribution through a unique industry disrupting sales model. Galt currently owns FDA approved assets in the insomnia and pain markets, with products offering clinical advantages compared to currently promoted products in their respective therapeutic classes.</td>
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<tr>
<td>232</td>
<td>Gensco Pharma</td>
<td>Gensco® Pharma is a specialty pharmaceutical company focusing on research, development and marketing of transdermal prescription products. As an innovator of pharmaceutical products, Gensco® Pharma currently manufactures non-narcotic transdermal analgesic gels utilizing our patented drug delivery solutions. Gensco® Pharma’s airless, closed-system, metered dose technology, MDose™, dispenses the exact amount of medication per application, yielding maximized results and minimized side effects. As a healthcare partner, Gensco® is in continual pursuit of novel and effective therapies designed to improve health.</td>
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<tr>
<td>143</td>
<td>GoHealthcare Consulting and Business Development, Inc.</td>
<td>We are a leader in revenue cycle management and business development. We are a team of experienced and professional medical practice consultants. We focus on: revenue cycle management solutions; credentialing and fee negotiations; coding guidance consulting; compliance program office workflow optimization. Our goal is for you to be able to: maximize reimbursement; stay compliant; focus more on patient quality care.</td>
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<td>239</td>
<td>HaloDoc</td>
<td>HaloDoc, LLC (&quot;HaloDoc&quot;) is establishing itself as a healthcare group purchasing organization (&quot;GPO&quot;). As a healthcare GPO, HaloDoc will help leverage the purchasing power of healthcare providers, enabling such providers to realize savings and efficiencies, thereby reducing their overall costs and subsequently the costs to their patients.</td>
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<td>439</td>
<td>Hamilton Company</td>
<td>Hamilton Company designs and manufactures liquid handling robotics, process analytics, and automated storage solutions. Chronic pain is a major health issue and Hamilton Company provides diverse automation tools for low-high throughput testing and help guide the treatment and personalized patient care. Our workstations serve as a high precision base upon which to conduct research in neurology, pharmacotherapy, pain management and biological sample processing for clinical diagnostics. To this end we employ teams of highly skilled and experienced application and hardware specialists around the world to provide our customers with unique solutions to automate their assays successfully and within budget.</td>
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<td>402</td>
<td>H-Wave</td>
<td>H-Wave® is a multi-functional electrical stimulation device intended to speed recovery, restore function, and manage chronic, acute or post-operative pain. It’s a non-invasive drug-free alternative treatment option that can be used in a clinical setting, but is most effective when used on a regular basis. Patients can easily use the Home H-Wave® device on their own several times per day or per week. H-Wave’s unique technology stands apart from other electrotherapy modalities since it’s rehabilitative and focuses on addressing the root cause of symptoms to provide lasting, cumulative benefits; which patients can feel long after the device is taken off.</td>
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<td>224</td>
<td>Infinity Massage Chairs</td>
<td>Infinity Massage Chairs is the fastest-growing massage chair brand in North America, with an A+ rating with the Better Business Bureau. Our mission is to deliver innovative solutions to unlimited wellness for all lifestyles by engineering durable, customizable, and user-friendly products. Elevate your wellness and live your best life with Infinity Massage Chairs.</td>
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<td>342</td>
<td>Innovida Pharmaceutique Corporation</td>
<td><a href="http://www.innovidax.com">www.innovidax.com</a></td>
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<td>T18</td>
<td>International Pain Foundation</td>
<td><a href="http://www.internationalpain.org">www.internationalpain.org</a></td>
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<td>345</td>
<td>Ipsum Diagnostics</td>
<td><a href="http://www.ipsumdiagnostics.com">www.ipsumdiagnostics.com</a></td>
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<td>244</td>
<td>Kaia Health</td>
<td><a href="http://www.kaiahealth.com">www.kaiahealth.com</a></td>
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<td>kaléo</td>
<td><a href="http://www.kaleopharma.com">www.kaleopharma.com</a></td>
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<td>139</td>
<td>Kashi Clinical Laboratories</td>
<td><a href="http://www.kashilab.com">www.kashilab.com</a></td>
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<td>226</td>
<td>K-Laser USA</td>
<td><a href="http://www.k-laser.com">www.k-laser.com</a></td>
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| 128   | L ASR Clinics International  
LASRclinics.com | Introducing L ASR® Therapy: a new class of regenerative medicine with a proven pain treatment protocol used by physicians for patients with chronic spine and joint disorders. Proven effective in more than 1,000 cases over a 10 year period without addictive medication or invasive procedures. Reimbursable by Medicare and most private insurance. An alternative to the limits and risks of pain medication. Add services that do not conflict or interfere with your existing practice. No marketing required. Full program licensing and training for providers and staff. 35 patients receiving L ASR® Therapy in a typical pain practice can generate $100K per month in added revenue. |
| 341   | Las Vegas HEALS  
lasvegasheals.org | Consider expanding or relocating your practice to one of the most dynamic cities in the World, Las Vegas, Nevada. Representatives from Las Vegas HEALS (Health, Education, Advocacy, and Leadership in Southern Nevada) are on-site to share the benefits of becoming a provider in Las Vegas where Practice Makes Perfect. Expand or relocate your practice to a global market place serving 2.4 million residents and 43 million annual visitors. Learn about tax incentives and the financial benefits of practicing in our dynamic city. |
| 245   | Medterra  
www.medterracbd.com | Started by a group of individuals passionate about the power of CBD products, Medterra believes CBD should be available to all those in need at an affordable price. |
| 421   | Millennium Health  
www.millenniumhealth.com | Millennium Health is transforming the way medications are prescribed by providing accurate, timely and actionable information that helps clinicians optimize treatment decisions for their patients. We offer a suite of services that includes Millennium uDT, Millennium pGT and Millennium oFT. Our genetics brand, CogenDx, offers DxWound and DxSurgical. Millennium Health’s comprehensive health solutions provide personalized medication intelligence. |
| 238   | Multi Radiance Medical  
www.multiradiance.com | Multi Radiance manufactures FDA-cleared super pulsed laser devices for non-invasive drug-free pain relief; the answer for chronic pain with the new opioid restrictions. MRM Lasers are used by professional and college teams, PTs, MDS, DOS, ATCs, and MTs for managing injuries and maximizing recovery, and are the only therapeutic lasers validated in-vitro, in-vivo, in laboratory trials, and in clinical trials. Console models for the clinic, and cordless models for anywhere, including home care patient rentals. |
| 425   | National Medication Management  
natmm.com | National Medication Management is the nation’s largest physician office dispensing organization, providing seamless in-office dispensing solutions that simplify administration and enhance revenue. Physicians can dispense to their Workers’ Compensation and personal injury patients regardless of their claim status. We provide solutions that can be successfully integrated into your practice in as little as one week. NMM also offers toxicology management and DME. |
| 332   | Nova Labs  
www.noalabs.co | Nova Labs is a CAP/CLIA accredited clinical testing reference laboratory. We specialize in ENFD testing focused on the diagnosis of small fiber neuropathy, commonly found in patients with chronic pain. We are excited to be bringing online our new Genomic Analysis Division. Nova Labs will be using the newest in DNA analytical equipment focusing on rapid identification of several different disease pathogens. |
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<tr>
<td>147</td>
<td>OpiSafe</td>
<td>OpiSafe is all-in-one support for opioid prescribers, with the best way to prescribe and monitor opioids. Our solution performs risk stratification and monitoring based on opioid misuse risk scores, MME (opioid dosage), pain and function scores, automated PDMP checks, toxicology lab integration, and dynamic provider-patient agreements. Decision support and practice efficiency tools make OpiSafe integrate seamlessly into existing workflows, allowing prescribers to provide best practice, guideline adherent care. Automated monitoring and alerts assure providers that their patients are being followed closely, and that aberrations or side effects are detected early, allowing for adjustments to therapy to optimize patient outcomes.</td>
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<tr>
<td>120</td>
<td>PainCare Health Records™</td>
<td>Developed by leading pain management specialists, PainCare Health Records™ is a cloud-based system that delivers tools, templates, and workflow specific to the needs of pain management practices. Our bundled solution delivers EHR, practice management, billing and collections, increases revenues, speeds collections, and supports all aspects of your computing infrastructure. It’s a unique combination of comprehensive billing and IT expertise bundled with EHR, all for a small percentage of the collected revenue.</td>
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<td>T1</td>
<td>PainCareLabs</td>
<td>PainCareLabs is the industry leader in noninvasive pain relief. Established in 2006 by emergency physician and pain researcher, Amy Baxter, PainCareLabs is dedicated to effective, reusable, affordable solutions to pain. PainCareLabs products are based on a patented neuromodulation platform. PainCareLabs offers Cool-Pulse™ solutions for needle pain (Buzzy®), for chronic and acute injuries (VibraCool® Vibrating Cryotherapy), and—coming soon—for low back pain (DuoTherm™ Vibrating Back Relief).</td>
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<tr>
<td>339</td>
<td>Pain Medicine News</td>
<td>Pain Medicine News is the most-read pain publication in the United States according to Kantar Media. It is mailed 10 times annually to 47,440 pain-treating physicians in the United States and twice annually to 46,761 pain-treating nurse practitioners and physician assistants.</td>
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<tr>
<td>116</td>
<td>Parkway Clinical Laboratories</td>
<td>Parkway Clinical Laboratories (PCL) is a College of American Pathologists (CAP) accredited, CLIA certified, full service specialty toxicology laboratory. PCL has been a trusted partner in delivering in-vitro diagnostic services for more than four decades. We are a global provider of addiction screening and opioid prescription monitoring service including designer drugs primarily focused on serving behavioral health, addiction and chronic pain management specialists. Located outside Philadelphia, Pennsylvania, PCL is fully equipped to perform the following tests on urine and saliva specimens: semi-quantitative drug screening using enzyme immunoassay (EIA) methodology and LC/MS/MS quantitative confirmations.</td>
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<tr>
<td>211</td>
<td>PERNIX Therapeutics, LLC</td>
<td>PERNIX Therapeutics is a specialty pharmaceutical business with a focus on acquiring, developing and commercializing prescription drugs primarily for the U.S. market. The Company is currently focused on the therapeutic areas of pain and neurology, and has an interest in expanding into additional specialty segments.</td>
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<tr>
<td>430</td>
<td>Practical Pain Management</td>
<td>Practical Pain Management (PPM), in its 18th year, is the nation’s premier teaching journal for more than 40K practitioners who are helping patients manage chronic pain. PPM provides the tools, insights, and resources to help HCPs treat their chronic pain patients and to navigate the ever-shifting landscape of pain management. PPM articles are authored by leading clinicians from across the country. PPM also publishes companion websites for HCPs and patients.</td>
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| 325   | Predictive Biotech  
www.predictivebiotech.com | Predictive Biotech, Inc. is a leader in human cell and tissue products for regenerative medicine. A growing national network of clinics, health systems, researchers and physicians leverage Predictive’s four main placental and Wharton’s Jelly umbilical cord-derived products. The FDA regulates Predictive’s products as minimally manipulated allografts intended for homologous use. |
| 141   | Promius Pharma  
promiuspharma.com | Promius Pharma designs personal and practical health care solutions for people. Through robust dialogue with patients and health care providers, we understand and try to address the most important unmet needs by creating tailored solutions to help people better manage disease. Promius Pharma is working on numerous research and development programs with the hope of introducing therapies to help people with medical conditions. |
| 436   | ProveIt!  
www.drproveit.com | ProveIt! is a patent-pending technology platform that evaluates and mitigates risk factors associated with opioid-induced accidental overdose through education. We provide patients with information on how to use opioids safely and how the medication works in their bodies. Our product provides streamlined education and additional care to patients without disrupting clinic flow. The platform is entirely automated, and it allows for the ability to customize the program to fit the needs of any practice. |
| 337   | Quell by NeuroMetrix  
www.quellrelief.com | Activate the power inside with Quell® Wearable Pain Relief Technology™ and reclaim your life from chronic pain. Quell is a revolutionary 100% drug free system that uses prescription strength nerve stimulation to block chronic pain. Quell is FDA cleared for use during the day while active and at night while sleeping. Quell users can personalize and manage therapy discreetly via the Quell app. The Quell app also offers relevant health tracking information to chronic pain sufferers including pain, sleep, activity, and gait. |
| 311   | Quest Diagnostics  
QuestDrugMonitoring.com | Quest Diagnostics is a trusted laboratory committed to providing responsible, cost-conscious clinical drug monitoring services. For more than 50 years, we’ve been a leader in diagnostics testing and offer a comprehensive test menu to help identify use or non-use of prescription, illicit, and designer drugs. We make it easy to work with us and offer seamless connectivity with more than 650 EHRs, dedicated Rx Tox consultative support to help with interpreting results, easy-to-read laboratory reports, an online portal for easy test ordering and tracking, ordering supplies, scheduling specimen pick-up, and more. When you need clinical drug monitoring services, choose Quest. |
| 329   | Randox Toxicology  
www.randoxtoxicology.com | With over 30 years’ experience in the manufacture of high quality products, we have created a number of advancements in the field of toxicology. We deliver innovative solutions for fast and accurate drug detection. As the inventor of Biochip Array Technology for clinical and forensic toxicology, we have the world’s largest toxicology test menu, detecting over 500 drugs and drug metabolites. Patented Biochip Array Technology, designed to work across multiple matrices, boasts cutting-edge multiplex testing capabilities facilitating simultaneous drug detection from a single sample. Significant re-investment in R&D has allowed Randox Toxicology to transform the landscape of drug testing forever. |
| 424   | Recro Pharma, Inc.  
www.recropharma.com | A specialty pharmaceutical company focused on hospital/acute care settings, developing non-opioid products for acute pain and neuromuscular blockers and related compounds for rapid induction and reversal of neuromuscular blockade. Recro’s acute pain products include meloxicam IV, a proprietary, long-acting treatment for moderate to severe pain and Dex-IN, a proprietary intranasal form of dexmedetomidine, for peri-procedural pain. In 2H 2017, Recro submitted the New Drug Application for meloxicam IV and are currently in discussions with FDA regarding the safety and effectiveness of the product. |
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| 432   | Regenesis Biomedical  
www.regensibio.com | Regenesis Biomedical offers the Provant™ Therapy System, which is safe, non-drug pain management. This non-invasive medical device is an alternative to opioids and other pain medications. Provant Therapy has been used by over 16,000 patients in the Veterans Affairs health system. Patients typically self-treat at home. |
| 431   | Resonant Specific Technologies, Inc.  
www.rstsanexas.com | RST-Sanexas is the recognized leader in quantum-based electric cell signaling technology for pain and circulatory management. RST-Sanexas produces several models for treating acute and chronic pain, severe neuropathic pain, as well as most physical medicine and rehabilitation conditions. Patented, communications-level technology includes new Electronic Signal Intonation (ESI) for unprecedented patient outcomes. There are numerous published medical journal studies proving patient treatment efficacy, as well as substantial opioid reduction. |
| 242   | Royal Bee | Visit our booth for more information. |
| 119   | Salix Pharmaceuticals  
www.salix.com | Salix Pharmaceuticals is one of the largest specialty pharmaceutical companies in the world committed to the prevention and treatment of gastrointestinal diseases. For almost 30 years, Salix has licensed, developed, and marketed innovative products to improve patients’ lives and arm healthcare providers with life-changing solutions for many chronic and debilitating conditions. Salix currently markets its product line to U.S. healthcare providers through an expanded sales force that focuses on gastroenterology, hepatology, pain specialists, and primary care. Salix is headquartered in Bridgewater, New Jersey. |
| 109   | SCILEX Pharmaceuticals  
www.scilexpharma.com | SCILEX Pharmaceuticals, Inc. is committed to responsibly developing branded pharmaceutical products for pain management using innovative technologies that maximize quality of life. |
| 127   | Southwest Labs  
www.southwestlab.com | Visit our booth for more information. |
| 444   | Taylor & Francis Group  
www.taylorandfrancis.com | Taylor & Francis Group is at the centre of a worldwide research network. We are publishing experts with over 2,500 journals and a leading medical portfolio, including titles such as Postgraduate Medicine which publishes an annual special issue on pain management as well as the newly acquired Dove Medical Press. We work with authors every step of the way from providing access to the content they need to carry out research, to choosing the right journal, through the submission process, and finally supporting post-publication promotion so our content reaches the right audience, at the right time. |
| 413   | Teva  
www.tevapharm.com | At Teva, we’re passionate about improving quality of life and healthcare globally. This is our ongoing mission as we touch the lives of millions of patients every day, and billions of patients every year. |
| 229   | Thermo Fisher Scientific  
thermofisher.com/clinical | Thermo Fisher Scientific™ is the world leader in serving science. Your clinical research changes the world one life at a time. And we share that quest with you, leveraging our years of experience to help advance clinical research to routine testing with the most comprehensive, most innovative mass spectrometry-based workflows. |
| 403   | UCP Biosciences, Inc.  
www.ucpbiosciences.com | UCP Biosciences, Inc. is a leading supplier of drug testing devices providing high quality, completely customizable and innovative products with competitive prices in the US and global markets since 2003. It has a very rich product line in the US and around the world where drugs of abuse are the mainstream products with FDA, ISO13485, 510K, OTC and CLIA certifications, and Infectious Disease (ID), women’s health (WH), cardiac markers (CM), and tumor markers (TM) are international CE marked products. Moreover, it offers automated, forensic use only (RFO) devices that include u-Reader and ultrafast quantitative biomarker scanner based on novel Fluorescence nanotechnology. |
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<td>T8</td>
<td>University of Maryland Baltimore Graduate School</td>
<td>The University of Maryland offers an interprofessional, exclusively online Master of Science in Palliative Care degree, and five specialized post-graduate certificates in Palliative Care. All health care providers are invited to apply—physicians, nurses, advance practice nurses, pharmacists, social workers, chaplains, administrators and more. Wide variability in elective offerings to achieve personal educational goals. Program utilizes cutting-edge teaching methods that are highly practical and geared to the adult learner. Don't miss this exceptional educational opportunity! Dr. Mary Lynn McPherson, Program Director. <a href="http://www.graduate.umaryland.edu/palliative">www.graduate.umaryland.edu/palliative</a></td>
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<td>440</td>
<td>US Army Medical Recruiting Brigade</td>
<td>Visit our booth for more information.</td>
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<td>326</td>
<td>U.S. Pain Foundation <a href="http://www.uspainfoundation.org">www.uspainfoundation.org</a></td>
<td>Created in 2011, the U.S. Pain Foundation is a 501(c)(3) organization established by people with pain for people with pain. The organization’s mission is to educate, connect, inform, and empower individuals who live with chronic conditions that cause pain while advocating on behalf of the pain community at the state and federal levels. U.S. Pain currently is made up of more than 90,000 members and a network of 1,500 volunteers. It offers dozens of resources, programs, campaigns, and events—including its flagship program, the INvisible Project, that highlights real stories of people living with pain.</td>
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<td>125</td>
<td>US WorldMeds <a href="http://usworldmeds.com">usworldmeds.com</a></td>
<td>US WorldMeds develops, licenses, and markets meaningful and accessible healthcare products that improve lives and result in a thriving community of patients, employees, and shareholders.</td>
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<td>207</td>
<td>Versea/MedArbor <a href="http://www.medarbor.com">www.medarbor.com</a></td>
<td>Visit our booth for more information.</td>
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<td>410</td>
<td>West Therapeutic Development <a href="http://www.Lazanda.com">www.Lazanda.com</a></td>
<td>LAZANDA is an opioid agonist indicated for the management of breakthrough pain in cancer patients 18 years of age and older who are already receiving and who are tolerant to around-the-clock opioid therapy for their underlying persistent cancer pain. Patients considered opioid tolerant are those who are taking, for one week or longer, around-the-clock medicine consisting of at least 60 mg of oral morphine per day. Patients must remain on around-the-clock opioids while taking LAZANDA.</td>
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<td>T2</td>
<td>WHERE Las Vegas</td>
<td>Just ask. WHERE. Provides complimentary concierge assistance offering the following services: show tickets, restaurant reservations, transportation services, tours, spa, shopping, golf, nightclubs/gentlemen’s clubs, attractions, discounts, and more!</td>
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<td>324</td>
<td>ZC Lab Services <a href="http://www.ZCLabServices.com">www.ZCLabServices.com</a></td>
<td>ZC Lab Services is the complete solution for your medical facility and laboratory needs. We provide lab management, staffing, equipment and consumables, proficiency testing, method development and validation, and consulting on a wide range of subjects. Healthcare is a dynamic and ever-changing marketplace that is highly competitive and can be difficult to navigate. Our market insights and expertise will provide you with all the information you need to make the best decisions for your company.</td>
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