

The Cosmopolitan of Las Vegas

Program Guide





TIME TO DUAL

TWO ONE SOURCES OF PAIN OF RELIEF

NUCYNTA® ER is the first and only FDA-approved long-acting opioid designed to control both nociceptive pain and the neuropathic pain associated with diabetic peripheral neuropathy (DPN).

Visit Nucynta.com for more information and to download a NUCYNTA® ER savings card

Limitations of Use

- Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, and because of the greater risks of overdose and death with extended-release opioid formulations, reserve NUCYNTA ER for use in patients for whom alternative treatment options (e.g., non-opioid analgesics or immediaterelease opioids) are ineffective, not tolerated, or would be otherwise inadequate to provide sufficient management of pain.
- NUCYNTA ER is not indicated as an as-needed (prn) analgesic.

NUCYNTA® ER IMPORTANT SAFETY INFORMATION

WARNING: ADDICTION, ABUSE, AND MISUSE; LIFE- THREATENING RESPIRATORY DEPRESSION; ACCIDENTAL INGESTION; NEONATAL OPIOID WITHDRAWAL SYNDROME; INTERACTION WITH ALCOHOL and RISKS FROM CONCOMITANT USE WITH BENZODIAZEPINES OR OTHER CNS DEPRESSANTS

See full prescribing information for complete boxed warning.

- NUCYNTA ER exposes users to risks of addiction, abuse, and misuse, which can lead to overdose and death. Assess each patient's risk before prescribing, and monitor regularly for development of these behaviors or conditions. (5.1)
- Serious, life-threatening, or fatal respiratory depression may occur. Monitor closely, especially upon initiation or following a dose increase. Instruct patients to swallow NUCYNTA ER tablets whole to avoid exposure to a potentially fatal dose of tapentadol. (5.2)
- Accidental ingestion of NUCYNTA ER, especially in children, can result in fatal overdose of tapentadol. (5.2)
- Prolonged use of NUCYNTA ER during pregnancy can result in neonatal opioid withdrawal syndrome, which may be lifethreatening if not recognized and treated. If opioid use is required for a prolonged period in a pregnant woman, advise the patient of the risk of neonatal opioid withdrawal syndrome and ensure that appropriate treatment will be available (5.3).
- Instruct patients not to consume alcohol or any products containing alcohol while taking NUCYNTA ER because co-ingestion can result in fatal plasma tapentadol levels. (5.4)
- Concomitant use of opioids with benzodiazepines or other central nervous system (CNS) depressants, including alcohol, may
 result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing for use in patients for
 whom alternative treatment options are inadequate; limit dosages and durations to the minimum required; and follow patients
 for signs and symptoms of respiratory depression and sedation. (5.4), (7).

Please see additional Important Safety Information, including BOXED WARNING, and Brief Summary on the following pages.

Not an actual patient.

INDICATIONS AND USAGE

NUCYNTA ER is an opioid agonist indicated for the management of:

- pain severe enough to require daily, around-the-clock, longterm opioid treatment and for which alternative treatment options are inadequate
- neuropathic pain associated with diabetic peripheral neuropathy (DPN) severe enough to require daily, around-theclock, long-term opioid treatment and for which alternative treatment options are inadequate.

NUCYNTA® ER (tapentadol) IMPORTANT SAFETY INFORMATION (continued)

CONTRAINDICATIONS

NUCYNTA ER is contraindicated in patients with:

- Significant respiratory depression
- Acute or severe bronchial asthma or hypercarbia in an unmonitored setting or in the absence of resuscitative equipment
- Known or suspected gastrointestinal obstruction, including paralytic ileus
- Hypersensitivity (e.g. anaphylaxis, angioedema) to tapentadol or to any other ingredients of the product.
- Concurrent use of monoamine oxidase inhibitors (MAOIs) or use of MAOIs within the last 14 days

WARNINGS AND PRECAUTIONS Addiction, Abuse, and Misuse

NUCYNTA ER contains tapentadol, a Schedule II controlled substance. As an opioid, NUCYNTA ER exposes users to the risks of addiction, abuse, and misuse. Because extendedrelease products such as NUCYNTA ER deliver the opioid over an extended period of time, there is a greater risk for overdose and death due to the larger amount of tapentadol present. Addiction can occur at recommended doses and if the drug is misused or abused.

Assess each patient's risk for opioid addiction, abuse, or misuse prior to prescribing NUCYNTA ER, and monitor all patients receiving NUCYNTA ER for the development of these behaviors and conditions. Risks are increased in patients with a personal or family history of substance abuse (including drug or alcohol abuse or addiction) or mental illness (e.g., major depression).

Abuse or misuse of NUCYNTA ER by crushing, chewing, snorting, or injecting the dissolved product will result in the uncontrolled delivery of tapentadol and can result in overdose and death.

Opioid are sought by drug abusers and people with addiction disorders and are subject to criminal diversion. Consider these risks when prescribing or dispensing NUCYNTA ER.

Life-threatening Respiratory Depression

Serious, life-threatening, or fatal respiratory depression has been reported with the use of opioids, even when used as recommended. Respiratory depression, if not immediately recognized and treated, may lead to respiratory arrest and death.

To reduce the risk of respiratory depression, proper dosing and titration of NUCYNTA ER are essential. Overestimating the NUCYNTA ER dosage when converting patients from another opioid product can result in fatal overdose with the first dose.

Accidental ingestion of even one dose of NUCYNTA ER, especially by children, can result in respiratory depression and death due to an overdose of tapentadol.

Neonatal Opioid Withdrawal Syndrome

Prolonged use of NUCYNTA ER during pregnancy can result in withdrawal in the neonate. Neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening if not recognized and treated, and requires management according to protocols developed by neonatology experts. Observe newborns for signs of neonatal

opioid withdrawal syndrome and manage accordingly. Advise pregnant women using opioids for a prolonged period of the risk of neonatal opioid withdrawal syndrome and ensure that appropriate treatment will be available.

Risk from Concomitant Use with Benzodiazepines or Other CNS Depressants

Patients must not consume alcoholic beverages or prescription or non-prescription products containing alcohol while on NUCYNTA ER therapy. The co-ingestion of alcohol with NUCYNTA ER may result in increased plasma tapentadol levels and a potentially fatal overdose of tapentadol.

Profound sedation, respiratory depression, coma, and death may result from the concomitant use of NUCYNTA ER with benzodiazepines or other CNS depressants (e.g., nonbenzodiazepine sedatives/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, other opioids, alcohol). Because of these risks, reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate.

If the decision is made to prescribe a benzodiazepine or other CNS depressant concomitantly with an opioid analgesic, prescribe the lowest effective dosages and minimum durations of concomitant use. In patients already receiving an opioid analgesic, prescribe a lower initial dose of the benzodiazepine or other CNS depressant than indicated in the absence of an opioid, and titrate based on clinical response. If an opioid analgesic is initiated in a patient already taking a benzodiazepine or other CNS depressant, prescribe a lower initial dose of the opioid analgesic, and titrate based on clinical response. Follow patients closely for signs and symptoms of respiratory depression and sedation.

Advise both patients and caregivers about the risks of respiratory depression and sedation when NUCYNTA ER is used with benzodiazepines or other CNS depressants (including alcohol and illicit drugs). Advise patients not to drive or operate heavy machinery until the effects of concomitant use of the benzodiazepine or other CNS depressant have been determined. Screen patients for risk of substance use disorders, including opioid abuse and misuse, and warn them of the risk for overdose and death associated with the use of additional CNS depressants including alcohol and illicit drugs.

Risk of Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients

The use of NUCYNTA ER in patients with acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment is contraindicated.

Patients with Chronic Pulmonary Disease: NUCYNTA ER treated patients with significant chronic obstructive pulmonary disease or cor pulmonale, and those with a substantially decreased respiratory reserve, hypoxia, hypercapnia, or pre-existing respiratory depression are at increased risk of decreased respiratory drive including apnea, even at recommended dosages of NUCYNTA ER.

NUCYNTA® ER (tapentadol) IMPORTANT SAFETY INFORMATION (continued)

<u>Elderly, Cachectic, or Debilitated Patients:</u> Life-threatening respiratory depression is more likely to occur in elderly, cachectic, or debilitated patients because they may have altered pharmacokinetics or altered clearance compared to younger, healthier patients. Alternatively, consider the use of non-opioid analgesics in these patients.

Serotonin Syndrome with Concomitant Use of Serotonergic Drugs

Cases of serotonin syndrome, a potentially life-threatening condition, have been reported during concomitant use of tapentadol with serotonergic drugs.Serotonergic drugs include selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs), triptans, 5-HT3 receptor antagonists, drugs that affect the serotonergic neurotransmitter system (e.g., mirtazapine, trazodone, tramadol), and drugs that impair metabolism of serotonin (including MAO inhibitors, both those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue). This may occur within the recommended dosage range.

See Warnings and Precautions in full Prescribing Information for a list of symptoms associated with Serotonin Syndrome. Discontinue NUCYNTA ER if serotonin syndrome is suspected.

Adrenal Insufficiency

Cases of adrenal insufficiency have been reported with opioid use, more often following greater than one month of use. Presentation of adrenal insufficiency may include non-specific symptoms and signs including nausea, vomiting, anorexia, fatigue, weakness, dizziness, and low blood pressure. If adrenal insufficiency is suspected, confirm the diagnosis with diagnostic testing as soon as possible. If adrenal insufficiency is diagnosed, treat with physiologic replacement doses of corticosteroids. Wean the patient off of the opioid to allow adrenal function to recover and continue corticosteroid treatment until adrenal function recovers. Other opioids may be tried as some cases reported use of a different opioid without recurrence of adrenal insufficiency. The information available does not identify any particular opioids as being more likely to be associated with adrenal insufficiency.

Severe Hypotension

NUCYNTA ER may cause severe hypotension including orthostatic hypotension and syncope in ambulatory patients. There is an increased risk in patients whose ability to maintain blood pressure has already been compromised by a reduced blood volume or concurrent administration of certain CNS depressant drugs (e.g., phenothiazines or general anesthetics). Monitor these patients for signs of hypotension after initiating or titrating the dosage of NUCYNTA ER. In patients with circulatory shock, NUCYNTA ER may cause vasodilation that can further reduce cardiac output and blood pressure. Avoid the use of NUCYNTA ER in patients with circulatory shock.

Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness

In patients who may be susceptible to the intracranial effects of $\rm CO_2$ retention (e.g., those with evidence of increased intracranial pressure or brain tumors), NUCYNTA ER may reduce respiratory

drive, and the resultant $\rm CO_2$ retention can further increase intracranial pressure. Monitor such patients for signs of sedation and respiratory depression, particularly when initiating therapy with NUCYNTA ER.

Opioids may also obscure the clinical course in a patient with a head injury. Avoid the use of NUCYNTA ER in patients with impaired consciousness or coma.

Risks of Use in Patients with Gastrointestinal Conditions

NUCYNTA ER is contraindicated in patients with known or suspected gastrointestinal obstruction, including paralytic ileus.

The tapentadol in NUCYNTA ER may cause spasm of the sphincter of Oddi. Opioids may cause increases in serum amylase. Monitor patients with biliary tract disease, including acute pancreatitis, for worsening symptoms.

Increased Risk of Seizures in Patients with Seizure Disorders

The tapentadol in NUCYNTA ER may increase the frequency of seizures in patients with seizure disorders, and may increase the risk of seizures occurring in other clinical settings associated with seizures. Monitor patients with a history of seizure disorders for worsened seizure control during NUCYNTA ER therapy.

Withdrawal

Avoid the use of mixed agonist/antagonist (e.g., pentazocine, nalbuphine, and butorphanol) or partial agonist (e.g., buprenorphine) analgesics in patients who have received or are receiving a course of therapy with a full opioid agonist analgesic, including NUCYNTA ER. In these patients, mixed agonists/ antagonists and partial agonist analgesics may reduce the analgesic effect and/or may precipitate withdrawal symptoms.

When discontinuing NUCYNTA ER, gradually taper the dose. Do not abruptly discontinue NUCYNTA ER.

Risks of Driving and Operating Machinery

NUCYNTA ER may impair the mental or physical abilities needed to perform potentially hazardous activities such as driving a car or operating machinery. Warn patients not to drive or operate dangerous machinery unless they are tolerant to the effects of NUCYNTA ER and know how they will react to the medication.

Risk of Toxicity in Patients with Hepatic Impairment

A study with an immediate-release formulation of tapentadol in subjects with hepatic impairment showed higher serum concentrations of tapentadol than in those with normal hepatic function. Avoid use of NUCYNTA ER in patients with severe hepatic impairment. Reduce the dose of NUCYNTA ER in patients with moderate hepatic impairment. Closely monitor patients with moderate hepatic impairment for respiratory and central nervous system depression when initiating and titrating NUCYNTA ER.

Risk of Toxicity in Patients with Renal Impairment

Use of NUCYNTA ER in patients with severe renal impairment is not recommended due to accumulation of a metabolite formed by glucuronidation of tapentadol. The clinical relevance of the elevated metabolite is not known.

ADVERSE REACTIONS

In clinical studies, the most common (\geq 10%) adverse reactions were nausea, constipation, vomiting, dizziness, somnolence, and headache.

NUCYNTA® ER (tapentadol) IMPORTANT SAFETY INFORMATION (continued)

Select Postmarketing Adverse Reactions

Anaphylaxis, angioedema, and anaphylactic shock have been reported very rarely with ingredients contained in NUCYNTA ER. Advise patients how to recognize such reactions and when to seek medical attention. Panic attack has also been reported.

DRUG INTERACTIONS

Alcohol

See BOXED WARNING.

Benzodiazepines and Other Central Nervous System (CNS) Depressants

See BOXED WARNING.

Serotonergic Drugs

See Warnings and Precautions.

Monoamine Oxidase Inhibitors (MAOIs) See Contraindications.

Mixed Agonist/Antagonist and Partial Agonist Opioid Analgesics

May reduce the analgesic effect of NUCYNTA ER and/or precipitate withdrawal symptoms. Avoid concomitant use.

Muscle Relaxants

See BOXED WARNING and Warnings and Precautions.

Diuretics

Opioids can reduce the efficacy of diuretics by inducing the release of antidiuretic hormone. Monitor patients for signs of diminished diuresis and/or effects on blood pressure and increase the dosage of the diuretic as needed.

Anticholinergic Drugs

The concomitant use of anticholinergic drugs may increase risk of urinary retention and/or severe constipation, which may lead to paralytic ileus. Monitor patients for signs of urinary retention or reduced gastric motility when NUCYNTA ER is used concomitantly with anticholinergic drugs.

USE IN SPECIFIC POPULATIONS

Pregnancy

<u>Pregnancy Category C.</u> NUCYNTA ER should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Prolonged use of opioid analgesics during pregnancy may cause neonatal opioid withdrawal syndrome.

Labor or Delivery

Opioids cross the placenta and may produce respiratory depression in neonates. NUCYNTA ER is not recommended for use in pregnant women during and immediately prior to labor, when use of shorter-acting analgesics or other analgesic techniques are more appropriate. Opioid analgesics, including NUCYNTA ER, can prolong labor through actions that temporarily reduce the strength, duration, and frequency of uterine contractions.

Lactation

Because of the potential for serious adverse reactions including excess sedation and respiratory depression in a breastfed infant, advise patients that breast feeding is not recommended during treatment with NUCYNTA ER.

Females and Males of Reproductive Potential Infertility

Chronic use of opioids may cause reduced fertility in females and males of reproductive potential. It is not known whether these effects on fertility are reversible.

Pediatric Use

The safety and efficacy of NUCYNTA ER in pediatric patients less than 18 years of age have not been established.

Geriatric Use

Elderly patients (aged 65 or older) may have increased sensitivity to tapentadol. In general, use caution when selecting a dosage for an elderly patient.

Respiratory depression is the chief risk for elderly patients treated with opioids, and has occurred after large initial doses were administered to patients who were not opioid-tolerant or when opioids were co-administered with other agents that depress respiration. Titrate the dosage of NUCYNTA ER slowly in geriatric patients and monitor closely for signs of central nervous system and respiratory depression.

Hepatic Impairment

Use of NUCYNTA ER in patients with severe hepatic impairment is not recommended. In patients with moderate hepatic impairment, dosage reduction of NUCYNTA ER is recommended.

Renal Impairment

Use of NUCYNTA ER in patients with severe renal impairment is not recommended.

DRUG ABUSE AND DEPENDENCE

See BOXED WARNING

OVERDOSAGE

In case of overdose, priorities are the reestablishment of a patent and protected airway and institution of assisted or controlled ventilation, if needed. Employ other supportive measures (including oxygen, vasopressors) in the management of circulatory shock and pulmonary edema as indicated. Cardiac arrest or arrhythmias will require advanced life support techniques.

Please see Brief Summary, including BOXED WARNING, on the following pages.



NUCYNTA[®] ER TAPENTADOL EXTENDED-RELEASE





BRIEF SUMMARY OF FULL PRESCRIBING INFORMATION

This does not include all the information needed to use NUCYNTA ER safely and effectively. See full Prescribing Information for NUCYNTA ER. INDICATIONS AND USAGE

- NUCYNTA ER (tapentadol) is indicated for the management of: • pain severe enough to require daily, around-the-clock, long-term opioid
- treatment and for which alternative treatment options are inadequate neuropathic pain associated with diabetic peripheral neuropathy (DPN) severe enough to require daily, around-the-clock, long-term opioid treatment
- and for which alternative treatment options are inadequate
- Limitations of Usage
- Because of the risks of addiction, abuse, and misuse with opioids, even at recommended doses, and because of the greater risks of overdose and death with extended-release opioid formulations (see Warnings and Precautions), reserve NUCYNTA ER for use in patients for whom alternative treatment options (e.g., non-opioid analgesics or immediate-release opioids) are ineffective, not tolerated, or would be otherwise inadequate to provide sufficient management of pain.
- NUCYNTA ER is not indicated as an as-needed (prn) analgesic

WARNING: ADDICTION, ABUSE, AND MISUSE; LIFE-THREATENING RESPIRATORY DEPRESSION; ACCIDENTAL INGESTION; NEONATAL OPIOID WITHDRAWAL SYNDROME; INTERACTION WITH ALCOHOL and RISKS FROM CONCOMITANT USE WITH BENZODIAZEPINES OR OTHER CNS DEPRESSANTS

See full prescribing information for complete boxed warning

- NUCYNTA ER exposes users to risks of addiction, abuse, and misuse, which car lead to overdose and death. Assess each patient's risk before prescribing, and monitor regularly for development of these behaviors or conditions, (5.1)
- Serious, life-threatening, or fatal respiratory depression may occur. Monitor closely, especially upon initiation or following a dose increase Instruct patients to swallow NUCYNTA ER tablets whole to avoid exposure to a potentially fatal dose of tapentadol. (5.2)
- Accidental ingestion of NUCYNTA ER, especially in children, can result in fatal overdose of tapentadol. (5.2)
- Prolonged use of NUCYNTA ER during pregnancy can result in neonatal opioid withdrawal syndrome, which may be life-threatening if not recognized and treated. If opioid use is required for a prolonged period in a pregnant woman, advise the patient of the risk of neonatal opioid withdrawal syndrome and ensure that appropriate treatment will be available (5.3).
- Instruct patients not to consume alcohol or any products containing alcohol while taking NUCYNTA ER because co-ingestion can result in fatal plasma tapentadol levels. (5.4)
- Concomitant use of opioids with benzodiazepines or other central nervous system (CNS) depressants, including alcohol, may result in profound sedation, respiratory depression, coma, and death. Reserve concomitant prescribing for use in patients for whom alternative treatment options are inadequate; limit dosages and durations to the minimum required; and follow patients for signs and symptoms of respiratory depression and sedation. (5.4), (7).

CONTRAINDICATIONS

- NUCYNTA ER is contraindicated in patients with:
- Significant respiratory depression
- Acute or severe bronchial asthma or hypercarbia in an unmonitored setting or in the absence of resuscitative equipment
- Known or suspected gastrointestinal obstruction, including paralytic ileus
- Hypersensitivity (e.g. anaphylaxis, angioedema) to tapentadol or to any other ingredients of the product (see Adverse Reactions).
- Concurrent use of monoamine oxidase inhibitors (MAOIs) or use of MAOIs within the last 14 days (see Drug Interactions)

WARNINGS AND PRECAUTIONS Addiction, Abuse, and Misuse

NUCYNTA ER contains tapentadol, a Schedule II controlled substance. As an opioid, NUCYNTA ER exposes users to the risks of addiction, abuse, and misuse. Because extended-release products such as NUCYNTA ER deliver the opioid over an extended period of time, there is a greater risk for overdose and death due to the larger amount of tapentadol present (see Drug Abuse and Dependence).

Although the risk of addiction in any individual is unknown, it can occur in patients appropriately prescribed NUCYNTA ER. Addiction can occur at recommended doses and if the drug is misused or abused.

Assess each patient's risk for opioid addiction, abuse, or misuse prior to prescribing NUCYNTA ER, and monitor all patients receiving NUCYNTA ER for the development of these behaviors and conditions. Risks are increased in patients with a personal or family history of substance abuse (including drug or alcohol abuse or addiction) or mental illness (e.g., major depression). The potential for these risks should not, however, prevent the prescribing of NUCYNTA ER for the proper management of pain in any given patient. Patients at increased risk may be prescribed opioids such as NUCYNTA ER, but use in such patients necessitates intensive counseling about the risks and proper use of NUCYNTA ER along with intensive monitoring for signs of addiction, abuse, and misuse.

Abuse or misuse of NUCYNTA ER by crushing, chewing, snorting, or injecting the dissolved product will result in the uncontrolled delivery of tapentadol and can result in overdose and death (see Overdosage).

Opioid are sought by drug abusers and people with addiction disorders and are subject to criminal diversion. Consider these risks when prescribing or dispensing NUCYNTA ER. Strategies to reduce these risks include prescribing the drug in the smallest appropriate quantity and advising the patient on the

proper disposal of unused drug (see Patient Counseling Information). Contact the local state professional licensing board or state controlled substances authority for information on how to prevent and detect abuse or diversion of this product.

Life-Threatening Respiratory Depression

Serious, life-threatening, or fatal respiratory depression has been reported with the use of opioids, even when used as recommended. Respiratory depression, if not immediately recognized and treated, may lead to respiratory arrest and death. Management of respiratory depression may include close observation, supportive measures, and use of opioid antagonists, depending on the patient's clinical status (see Overdosage). Carbon dioxide (CO.) retention from opioid-induced respiratory depression can exacerbate the sedating effects of opioids

While serious, life-threatening, or fatal respiratory depression can occur at any time during the use of NUCYNTA ER, the risk is greatest during the initiation of therapy or following a dosage increase. Monitor patients closely for respiratory depression especially within the first 24-72 hours of initiating therapy with and following dosage increases of NUCYNTA ER.

To reduce the risk of respiratory depression, proper dosing and titration of NUCYNTA ER are essential (see Dosage and Administration). Overestimating the NUCYNTA ER dosage when converting patients from another opioid product can result in fatal overdose with the first dose.

Accidental ingestion of even one dose of NUCYNTA ER, especially by children, can result in respiratory depression and death due to an overdose of tapentadol.

Neonatal Opioid Withdrawal Syndrome

Prolonged use of NUCYNTA ER during pregnancy can result in withdrawal in the neonate. Neonatal opioid withdrawal syndrome, unlike opioid withdrawal syndrome in adults, may be life-threatening if not recognized and treated, and requires management according to protocols developed by neonatology experts. Observe newborns for signs of neonatal opioid withdrawal syndrome and manage accordingly. Advise pregnant women using opioids for a prolonged period of the risk of neonatal opioid withdrawal syndrome and ensure that appropriate treatment will be available (see Use in Specific Populations, Patient Counseling Information).

Risk from Concomitant Use with Benzodiazepines or Other CNS Depressants

Patients must not consume alcoholic beverages or prescription or non-prescription products containing alcohol while on NUCYNTA ER therapy. The co-ingestion of alcohol with NUCYNTA ER may result in increased plasma tapentadol levels and a potentially fatal overdose of tapentadol (see Clinical Pharmacology).

Profound sedation, respiratory depression, coma, and death may result from the concomitant use of NUCYNTA ER with benzodiazepines or other CNS depressants (e.g., non-benzodiazepine sedatives/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, other opioids, alcohol). Because of these risks, reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate.

Observational studies have demonstrated that concomitant use of opioid analgesics and benzodiazepines increases the risk of drug-related mortality compared to use of opioid analgesics alone. Because of similar pharmacological properties, it is reasonable to expect similar risk with the concomitant use of other CNS depressant drugs with opioid analgesics (see Drug Interactions).

If the decision is made to prescribe a benzodiazepine or other CNS depressant concomitantly with an opioid analgesic, prescribe the lowest effective dosages and minimum durations of concomitant use. In patients already receiving an opioid analgesic, prescribe a lower initial dose of the benzodiazepine or other CNS depressant than indicated in the absence of an opioid, and titrate based on clinical response. If an opioid analgesic is initiated in a patient already taking a benzodiazepine or other CNS depressant, prescribe a lower initial dose of the opioid analgesic, and titrate based on clinical response. Follow patients closely for signs and symptoms of respiratory depression and sedation.

Advise both patients and caregivers about the risks of respiratory depression and sedation when NUCYNTA ER is used with benzodiazepines or other CNS depressants (including alcohol and illicit drugs). Advise patients not to drive or operate heavy machinery until the effects of concomitant use of the benzodiazepine or other CNS depressant have been determined. Screen patients for risk of substance use disorders, including opioid abuse and misuse and warn them of the risk for overdose and death associated with the use of additional CNS depressants including alcohol and illicit drugs (see Drug Interactions and Patient Counseling Information).

Risk of Life-Threatening Respiratory Depression in Patients with Chronic Pulmonary Disease or in Elderly, Cachectic, or Debilitated Patients The use of NUCYNTA ER in patients with acute or severe bronchial asthma in an unmonitored setting or in the absence of resuscitative equipment is contraindicated.

Patients with Chronic Pulmonary Disease: NUCYNTA ER treated patients with significant chronic obstructive pulmonary disease or cor pulmonale, and those with a substantially decreased respiratory reserve, hypoxia, hypercapnia, or pre-existing respiratory depression are at increased risk of decreased respiratory drive including apnea, even at recommended dosages of NUCYNTA ER (see Warnings and Precautions).

Elderly, Cachectic, or Debilitated Patients: Life-threatening respiratory depression is more likely to occur in elderly, cachectic, or debilitated patients because they may have altered pharmacokinetics or altered clearance compared to younger, healthier patients (see Warnings and Precautions). Alternatively, consider the use of non-opioid analgesics in these patients.

Monitor such patients closely, particularly when initiating and titrating NUCYNTA ER and when NUCYNTA ER is given concomitantly with other drugs that depress respiration (see Warnings and Precautions)

Serotonin Syndrome with Concomitant Use of Serotonergic Drugs

Cases of serotonin syndrome, a potentially life-threatening condition, have been reported during concomitant use of tapentadol with serotonergic drugs. Serotonergic drugs include selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic

antidepressants (TCAs), triptans, 5-HT3 receptor antagonists, drugs that affect the serotonergic neurotransmitter system (e.g., mirtazapine, trazodone, tramadol), and drugs that impair metabolism of serotonin (including MAO inhibitors, both those intended to treat psychiatric disorders and also others. such as linezolid and intravenous methylene blue) (see Drug Interactions). This may occur within the recommended dosage range.

Serotonin syndrome symptoms may include mental status changes (e.g., agitation, hallucinations, coma), autonomic instability (e.g., tachycardia, labile blood pressure, hyperthermia), neuromuscular aberrations (e.g., hyperreflexia, incoordination, rigidity), and/or gastrointestinal symptoms (e.g., nausea, vomiting, diarrhea). The onset of symptoms generally occurs within several hours to a few days of concomitant use, but may occur later than that. Discontinue NUCYNTA ER if serotonin syndrome is suspected.

Adrenal Insufficiency

Cases of adrenal insufficiency have been reported with opioid use, more often following greater than one month of use. Presentation of adrenal insufficiency may include non-specific symptoms and signs including nausea, vomiting, anorexia, fatigue, weakness, dizziness, and low blood pressure. If adrenal insufficiency is suspected, confirm the diagnosis with diagnostic testing as soon as possible. If adrenal insufficiency is diagnosed, treat with physiologic replacement doses of corticosteroids. Wean the patient off of the opioid to allow adrenal function to recover and continue corticosteroid treatment until adrenal function recovers. Other opioids may be tried as some cases reported use of a different opioid without recurrence of adrenal insufficiency. The information available does not identify any particular opioids as being more likely to be associated with adrenal insufficiency.

Severe Hypotension

NUCYNTA ER may cause severe hypotension including orthostatic hypotension and syncope in ambulatory patients. There is an increased risk in patients whose ability to maintain blood pressure has already been compromised by a reduced blood volume or concurrent administration of certain CNS depressant drugs (e.g., phenothiazines or general anesthetics) (see Drug Interactions). Monitor these patients for signs of hypotension after initiating or titrating the dosage of NUCYNTA ER. In patients with circulatory shock, NUCYNTA ER may cause vasodilation that can further reduce cardiac output and blood pressure. Avoid the use of NUCYNTA ER in patients with circulatory shock.

Risks of Use in Patients with Increased Intracranial Pressure, Brain Tumors, Head Injury, or Impaired Consciousness

In patients who may be susceptible to the intracranial effects of CO, retention (e.g., those with evidence of increased intracranial pressure or brain tumors), NUCYNTA ER may reduce respiratory drive, and the resultant CO₂ retention can further increase intracranial pressure. Monitor such patients for signs of sedation and respiratory depression, particularly when initiating therapy with NUCYNTA ER.

Opioids may also obscure the clinical course in a patient with a head injury. Avoid the use of NUCYNTA ER in patients with impaired consciousness or coma

Risks of Use in Patients with Gastrointestinal Conditions

NUCYNTA ER is contraindicated in patients with known or suspected gastrointestinal obstruction, including paralytic ileus.

The tapentadol in NUCYNTA ER may cause spasm of the sphincter of Oddi. Opioids may cause increases in serum amylase. Monitor patients with biliary tract disease, including acute pancreatitis, for worsening symptoms.

Increased Risk of Seizures in Patients with Seizure Disorders

The tapentadol in NUCYNTA ER may increase the frequency of seizures in patients with seizure disorders, and may increase the risk of seizures occurring in other clinical settings associated with seizures. Monitor patients with a history of seizure disorders for worsened seizure control during NUCYNTA ER therapy.

Withdrawal

Avoid the use of mixed agonist/antagonist (e.g., pentazocine, nalbuphine, and butorphanol) or partial agonist (e.g., buprenorphine) analgesics in patients who have received or are receiving a course of therapy with a full opioid agonist analgesic, including NUCYNTA ER. In these patients, mixed agonists/ antagonists and partial agonist analgesics may reduce the analgesic effect and/or may precipitate withdrawal symptoms (see Drug Interactions).

When discontinuing NUCYNTA ER, gradually taper the dose (see Dosage and Administration). Do not abruptly discontinue NUCYNTA ER (see Drug Abuse and Dependence).

Risks of Driving and Operating Machinery

NUCYNTA ER may impair the mental or physical abilities needed to perform potentially hazardous activities such as driving a car or operating machinery. Warn patients not to drive or operate dangerous machinery unless they are tolerant to the effects of NUCYNTA ER and know how they will react to the medication (see Patient Counseling Information).

Risk of Toxicity in Patients with Hepatic Impairment

A study with an immediate-release formulation of tapentadol in subjects with hepatic impairment showed higher serum concentrations of tapentadol than in those with normal hepatic function. Avoid use of NUCYNTA ER in patients with severe hepatic impairment. Reduce the dose of NUCYNTA ER in patients with moderate hepatic impairment (see Dosage and Administration and Clinical Pharmacology). Closely monitor patients with moderate hepatic impairment for respiratory and central nervous system depression when initiating and titrating NUCYNTA ER.

Risk of Toxicity in Patients with Renal Impairment

Use of NUCYNTA ER in patients with severe renal impairment is not recommended due to accumulation of a metabolite formed by glucuronidation of tapentadol. The clinical relevance of the elevated metabolite is not known (see Clinical Pharmacology)

ADVERSE REACTIONS

The following serious adverse reactions are described, or described in greater detail, in other sections:

- Addiction, Abuse, and Misuse (see Warnings and Precautions)
- Life-Threatening Respiratory Depression (see Warnings and Precautions)
- Neonatal Opioid Withdrawal Syndrome (see Warnings and Precautions)
 Interaction with Benzodiazepine or Other CNS Depressants (see Warnings)
- and Precautions)

- Serotonin Syndrome (see Warnings and Precautions)
- Adrenal Insufficiency (see Warnings and Precautions)
- Severe Hypotension (see Warnings and Precautions) Gastrointestinal Adverse Reactions (see Warnings and Precautions)
- Seizures (see Warnings and Precautions) • Withdrawal (see Warnings and Precautions)

Clinical Trial Experience

Commonly-Observed Adverse Reactions in Clinical Studies with NUCYNTA ER in Patients with Chronic Pain due to Low Back Pain or Osteoarthritis

The most common adverse reactions (reported by ≥10% in any NUCYNTA ER dose group) were: nausea, constipation, dizziness, headache, and somnolence. The most common reasons for discontinuation due to adverse reactions in eight Phase 2/3 pooled studies reported by ≥1% in any NUCYNTA ER dose group for NUCYNTA ER- and placebo-treated patients were nausea (4% vs. 1%), dizziness (3% vs. <1%), vomiting (3% vs. <1%), somnolence (2% vs. <1%), constipation (1% vs. <1%), headache (1% vs. <1%), and fatigue (1% vs. <1%), respectively.

Please see full Prescribing Information for ADRs occurring in $\ge 1\%$ of patients.

Commonly-Observed Adverse Reactions in Clinical Studies with NUCYNTA ER in Patients with Neuropathic Pain Associated with Diabetic Peripheral Neuropathy The most commonly reported ADRs (incidence ≥10% in NUCYNTA ER-treated subjects) were: nausea, constipation, vomiting, dizziness, somnolence, and

Please see full Prescribing Information for ADRs occurring in ≥ 1% of patients. Postmarketing Experience

The following adverse reactions have been identified during post approval use of tapentadol.

Psychiatric disorders: hallucination, suicidal ideation, panic attack Serotonin syndrome: Cases of serotonin syndrome, a potentially life-

threatening condition, have been reported during concomitant use of opioids with serotonergic drugs.

Adrenal insufficiency: Cases of adrenal insufficiency have been reported with opioid use, more often following greater than one month of use

Anaphylaxis: Anaphylaxis has been reported with ingredients contained in NUCYNTA ER.

Androgen deficiency: Cases of androgen deficiency have occurred with chronic use of opioids (see Clinical Pharmacology).

DRUG INTERACTIONS

headache.

Clinically Significant Drug Interactions with NUCYNTA ER

Alcohol							
Clinical Concomitant use of alcohol with NUCYNTA ER can result in an increase of tapentadol plasma levels and potentially fatal overdose of tapentadol.							
Intervention:	prescription or non-prescription products containing alcohol while on NUCYNTA ER therapy.						
Benzodiazepi	nes and Other Central Nervous System (CNS) Depressants						
Clinical Impact:	Due to additive pharmacologic effect, the concomitant use of benzodiazepines or other CNS depressants, including alcohol, car increase the risk of hypotension, respiratory depression, profound sedation, coma, and death.						
Intervention:	Reserve concomitant prescribing of these drugs for use in patients for whom alternative treatment options are inadequate Limit dosages and durations to the minimum required. Follow patients closely for signs of respiratory depression and sedation [see Warnings and Precautions (5.4)].						
Examples:	Benzodiazepines and other sedatives/hypnotics, anxiolytics, tranquilizers, muscle relaxants, general anesthetics, antipsychotics, other opioids, alcohol.						
Serotonergic	Drugs						
Clinical Impact:	The concomitant use of opioids with other drugs that affect the serotonergic neurotransmitter system has resulted in serotonin syndrome [see Warnings and Precautions 5.6].						
Intervention:	If concomitant use is warranted, carefully observe the patient, particularly during treatment initiation and dose adjustment. Discontinue NUCYNTA ER if serotonin syndrome is suspected.						
Examples:	Selective serotonin reuptake inhibitors (SSRIs), serotonin and norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs), triptans, 5-HT3 receptor antagonists, drugs that affect the serotonin neurotransmitter system (e.g., mirtazapine, trazodone, tramadol), monoamine oxidase (MAO) inhibitors (those intended to treat psychiatric disorders and also others, such as linezolid and intravenous methylene blue).						
Monoamine O	xidase Inhibitors (MAOIs)						
Clinical Impact:	MAOI interactions with opioids may manifest as serotonin syndrome or opioid toxicity (e.g., respiratory depression, coma [see Warnings and Precautions (5.2)].						
Intervention:	Do not use NUCYNTA ER in patients taking MAOIs or within 14 days of stopping such treatment						
Examples:	phenelzine, tranylcypromine, linezolid						
Mixed Agonist	Antagonist and Partial Agonist Opioid Analgesics						
Clinical Impact:	May reduce the analgesic effect of NUCYNTA ER and/or precipitate withdrawal symptoms.						
Intervention:	Avoid concomitant use.						
Examples:	butorphanol, nalbuphine, pentazocine, buprenorphine						
Muscle Relaxa	nts						
Clinical Impact:	Tapentadol may enhance the neuromuscular blocking action o skeletal muscle relaxants and produce an increased degree of respiratory depression.						

Muscle Relaxants (continued)								
Intervention: Monitor patients for signs of respiratory depression that may be greater than otherwise expected and decrease the dosage of NUCYNTA ER and/or the muscle relaxant as necessary.								
Diuretics								
Clinical Impact:	Opioids can reduce the efficacy of diuretics by inducing the release of antidiuretic hormone.							
Intervention:	Monitor patients for signs of diminished diuresis and/or effects on blood pressure and increase the dosage of the diuretic as needed.							
Anticholinergi	c Drugs							
Clinical Impact:	The concomitant use of anticholinergic drugs may increase risk of urinary retention and/or severe constipation, which may lead to paralytic ileus.							
Intervention:	Monitor patients for signs of urinary retention or reduced gastric motility when NUCYNTA ER is used concomitantly with anticholinergic drugs.							

USE IN SPECIFIC POPULATIONS

Pregnancy

Pregnancy Category C

Risk Summary

Prolonged use of opioid analgesics during pregnancy may cause neonatal opioid withdrawal syndrome (see Warnings and Precautions).

The background risk of major birth defects and miscarriage for the indicated population is unknown. Adverse outcomes in pregnancy can occur regardless of the health of the mother or the use of medications.

Clinical Considerations

Fetal/neonatal adverse reactions

Prolonged use of opioid analgesics during pregnancy for medical or nonmedical purposes can result in physical dependence in the neonate and neonatal opioid withdrawal syndrome shortly after birth. Neonatal opioid withdrawal syndrome presents as irritability, hyperactivity and abnormal sleep pattern, high pitched cry, tremor, vomiting, diarrhea, and failure to gain weight Observe newborns for symptoms of neonatal opioid withdrawal syndrome and manage accordingly (see Warnings and Precautions).

Labor or Delivery

Opioids cross the placenta and may produce respiratory depression and psychphysiologic effects in neonates. An opioid antagonist, such as naloxone, must be available for reversal of opioid-induced respiratory depression in the neonate. NUCYNTA ER is not recommended for use in pregnant women during and immediately prior to labor. Opioid analgesics, including NUCYNTA ER, can prolong labor.

Lactation

Risk Summary There is insufficient/limited information on the excretion of tapentadol in human or animal breast milk. Physicochemical and available pharmacodynamic/toxicological data on tapentadol point to excretion in

breast milk and risk to the breastfeeding child cannot be excluded. Because of the potential for serious adverse reactions including excess sedation and respiratory depression in a breastfed infant, advise patients that breast feeding is not recommended during treatment with NUCYNTA ER.

<u>Clinical Considerations</u> Monitor infants exposed to NUCYNTA ER through breast milk for excess sedation and respiratory depression. Withdrawal symptoms can occur in breastfed infants when maternal administration of an opioid analgesic is stopped, or when breast-feeding is stopped.

Females and Males of Reproductive Potential

Infertility

Chronic use of opioids may cause reduced fertility in females and males of reproductive potential. It is not known whether these effects on fertility are reversible

Pediatric Use

The safety and efficacy of NUCYNTA ER in pediatric patients less than 18 years of age have not been established.

Geriatric Use

Of the total number of patients in Phase 2/3 double-blind, multiple-dose clinical studies of NUCYNTA ER, 28% (1023/3613) were 65 years and over, while 7% (245/3613) were 75 years and over. No overall differences in effectiveness or tolerability were observed between these patients and younger patients.

Elderly patients (aged 65 or older) may have increased sensitivity to tapentadol. In general, use caution when selecting a dosage for an elderly patient, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function and of concomitant disease or other drug therapy.

Respiratory depression is the chief risk for elderly patients treated with opioids, and has occurred after large initial doses were administered to patients who were not opioid-tolerant or when opioids were co-administered with other agents that depress respiration. Titrate the dosage of NUCYNTA ER slowly in geriatric patients and monitor closely for signs of central nervous system and respiratory depression (see Warnings and Precautions).

Hepatic Impairment

Use of NUCYNTA ER in patients with severe hepatic impairment (Child-Pugh Score 10-15) is not recommended. In patients with moderate hepatic impairment (Child-Pugh Score 7 to 9), dosage reduction of NUCYNTA ER is recommended (see Dosage and Administration).

Renal Impairment

Use of NUCYNTA ER in patients with severe renal impairment (creatinine clearance less than 30 mL/minute) is not recommended.

DRUG ABUSE AND DEPENDENCE **Controlled Substance**

NUCYNTA ER contains tapentadol, a Schedule II controlled substance.

Abuse

NUCYNTA ER contains tapentadol, a substance with a high potential for abuse similar to other opioids including fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, and oxymorphone. NUCYNTA ER can be abused and is subject to misuse, addiction, and criminal diversion (see Warnings and Precautions).

The high drug content in extended-release formulations adds to the risk of adverse outcomes from abuse and misuse.

All patients treated with opioids require careful monitoring for signs of abuse and addiction, because use of opioid analgesic products carries the risk of addiction even under appropriate medical use.

Prescription drug abuse is the intentional non-therapeutic use of a prescription drug, even once, for its rewarding psychological or physiological effects. Drug addiction is a cluster of behavioral, cognitive, and physiological phenomena that develop after repeated substance use and includes: a strong desire to take the drug, difficulties in controlling its use, persisting in its use despite harmful

consequences, a higher priority given to drug use than to other activities and obligations, increased tolerance, and sometimes a physical withdrawal.

"Drug-seeking" behavior is very common in persons with substance use disorders. Drug-seeking tactics include emergency calls or visits near the end of office hours, refusal to undergo appropriate examination, testing, or referral, repeated "loss" of prescriptions, tampering with prescriptions, and reluctance to provide prior medical records or contact information for other treating healthcare provider(s). "Doctor shopping" (visiting multiple prescribers to obtain additional prescriptions) is common among drug abusers, and people suffering from untreated addiction. Preoccupation with achieving adequate

pain relief can be appropriate behavior in a patient with poor pain control. Abuse and addiction are separate and distinct from physical dependence and tolerance. Healthcare providers should be aware that addiction may not be accompanied by concurrent tolerance and symptoms of physical dependence in all addicts. In addition, abuse of opioids can occur in the absence of true addiction. NUCYNTA ER, like other opioids, can be diverted for non-medical use into illicit channels of distribution. Careful record-keeping of prescribing information, including quantity, frequency, and renewal requests, as required by state and federal law, is strongly advised.

Proper assessment of the patient, proper prescribing practices, periodic re-evaluation of therapy, and proper dispensing and storage are appropriate measures that help to limit abuse of opioid drugs.

Risks Specific to Abuse of NUCYNTA ER

NUCYNTA ER is for oral use only. Abuse of NUCYNTA ER poses a risk of overdose and death. The risk is increased with concurrent use of NUCYNTA ER with alcohol and other central nervous system depressants.

With intravenous abuse the inactive ingredients in NUCYNTA ER can result in local tissue necrosis, infection, pulmonary granulomas, embolism and death, and increased risk of endocarditis and valvular heart injury. Parenteral drug abuse is commonly associated with transmission of infectious diseases such as hepatitis and HIV.

Dependence

Both tolerance and physical dependence can develop during chronic opioid therapy. Tolerance is the need for increasing doses of opioids to maintain a defined effect such as analgesia (in the absence of disease progression or other external factors). Tolerance may occur to both the desired and undesired effects of drugs, and may develop at different rates for different effects.

Physical dependence results in withdrawal symptoms after abrupt discontinuation or a significant dosage reduction of a drug. Withdrawa also may be precipitated through the administration of drugs with opioid antagonist activity, (e.g., naloxone, nalmefene), mixed agonist/antagonist analgesics (e.g., pentazocine, butorphanol, nalbuphine), or partial agonists (e.g., buprenorphine). Physical dependence may not occur to a clinically significant degree until after several days to weeks of continued opioid usage

NUCYNTA ER should not be abruptly discontinued (see Dosage and Administration). If NUCYNTA ER is abruptly discontinued in a physically dependent patient, a withdrawal syndrome may occur. Some or all of the following can characterize this syndrome: restlessness, lacrimation, rhinorrhea, yawning, perspiration, chills, piloerection, myalgia, mydriasis, irritability, anxiety, backache, joint pain, weakness, abdominal cramps, insomnia, nausea, anorexia, vomiting, diarrhea, increased blood pressure, respiratory rate, or heart rate.

Infants born to mothers physically dependent on opioids will also be physically dependent and may exhibit respiratory difficulties and withdrawal symptoms (see Use in Specific Populations).

OVERDOSAGE **Clinical Presentation**

Acute overdosage with NUCYNTA ER can be manifested by respiratory depression, somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, constricted pupils, and, in some cases pulmonary edema, bradycardia, hypotension, partial or complete airway obstruction, atypical snoring and death. Marked mydriasis rather than miosis may be seen with hypoxia in overdose situations.

Treatment of Overdose

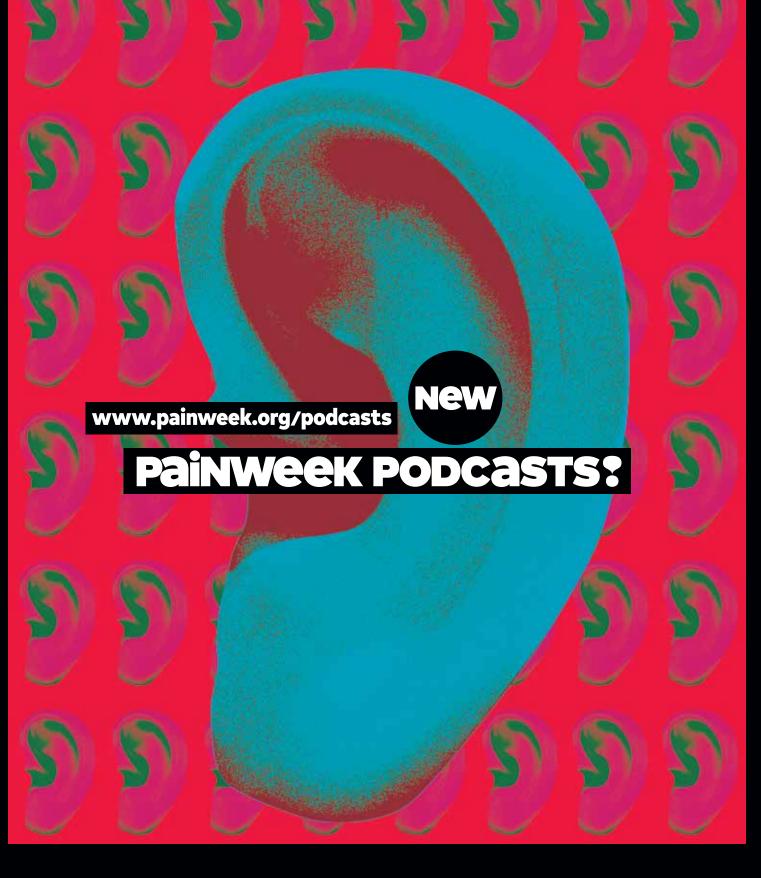
In case of overdose, priorities are the reestablishment of a patent and protected airway and institution of assisted or controlled ventilation, if needed. Employ other supportive measures (including oxygen, vasopressors) in the management of circulatory shock and pulmonary edema as indicated. Cardiac arrest or arrhythmias will require advanced life support techniques.



© May 2017, Depomed, Inc.



NUCYNTA[™] ER TAPENTADOL EXTENDED-RELEASE



Not only can you take our faculty home with you—now you can also bring them to the gym 365 days a year!



Painweek Mobiles

Everything you need to know about PaiNWeek on your smartphone, tablet, or laptop.



- Get maps of the conference venue
- Stay up-to-date on PaiNWeek announcements
- Access the conference schedule
- Link to session slides
- View course credit procedures
- View and plan a visit to the Exhibit Hall
- Complete session evaluations

2 Easy ways to use PaiNWeek Mobile:

- Download from Google Play
- Visit m.painweek.org on your iPhone or other device*

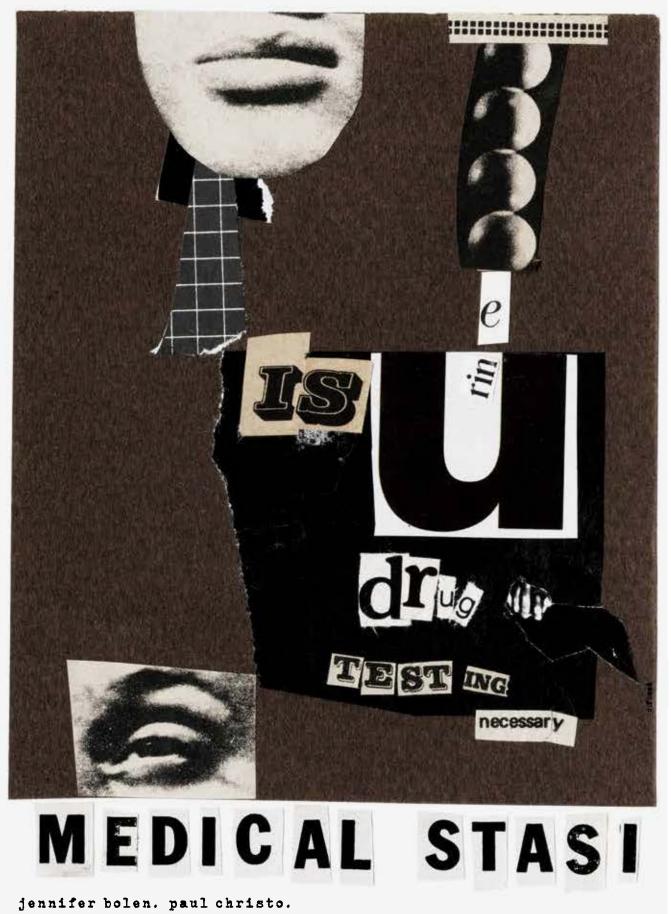
*Native iOS version currently unavailable due to recent changes in App Store Guidelines

PaiNWeek would like to thank these organizations for their contribution to the success of the 2017 Conference.



Satellite Event Sponsors

Arbor Pharmaceuticals AstraZeneca BioDelivery Sciences International Cara Therapeutics Collegium Pharmaceutical, Inc. Depomed, Inc. Daiichi-Sankyo Nektar Therapeutics PERNIX Therapeutics Salix Pharmaceuticals



douglas gourlay. howard heit. gary reisfeld.

fri. sept.8



PAINWeek Administration

ART DIRECTION AND GRAPHIC DESIGN Darryl Fossa

> BUSINESS DEVELOPMENT Sean Fetcho Steve Porada

> > EDITORIAL SERVICES Holly Caster

FINANCE Heather Woolf

MEDIA MANAGEMENT AND PRODUCTION
Patrick Kelly

MEDIA RELATIONS

OPERATIONS AND TECHNOLOGY Jeffrey Tarnoff

> PROGRAM DEVELOPMENT Debra Weiner

> PROGRAM MANAGEMENT Alyssa Pack

SATELLITE EVENTS AND EXHIBIT MANAGEMENT Redza Ibrahim

PAINWeek

6 Erie Street Montclair, NJ 07042 USA Т (973) 415-5100

F (973) 233-9383

info@painweek.org www.painweek.org

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.

Copyright © 2017, PAINWeek, a division of Tarsus Medical Group. The PAINWeek logo, and "The National Conference on Pain for Frontline Practitioners" are trademarks of PAINWeek. All other trademarks are the property of their respective owners.

All rights reserved.

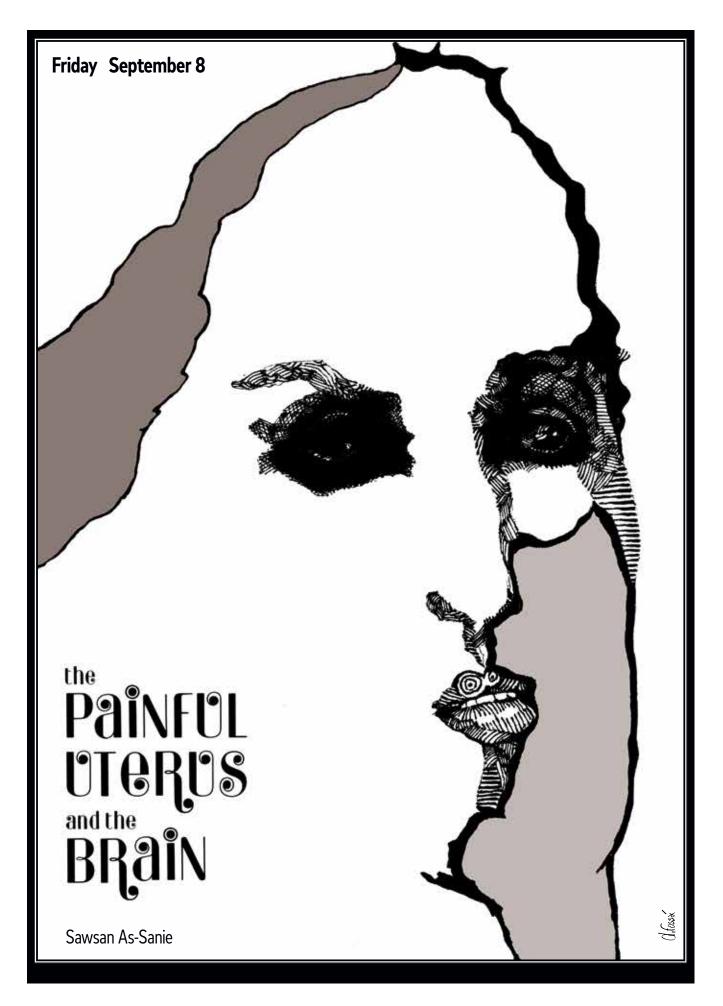
CONTENTS

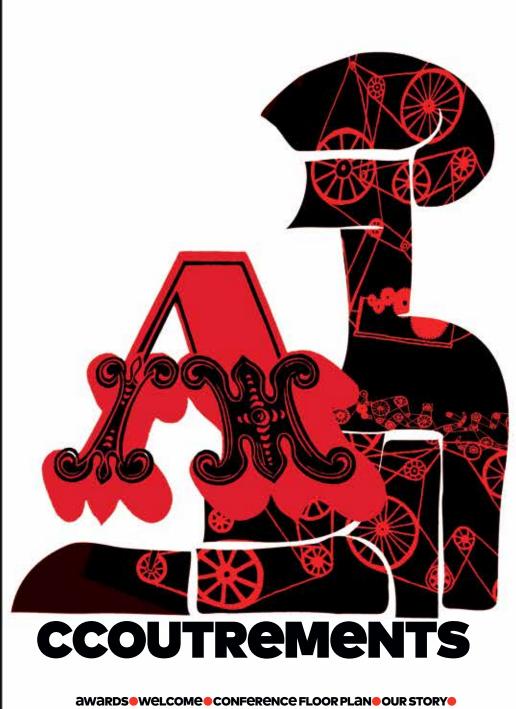
accoutre	ments .		•••		••		••			• •	••		••	• •		• •	• •	• 3
awards			•••		••		• •			••	••		••	• •		• •	• •	• 4
welcon	ne		• • •		••		••			••	••		••	••		• •	• •	• 6
confere	ence floo	r plar	1.		••		••			••	• •		••					. 8
our sto	• ry				••		• •			••	• •		••					13
accred	itation .		• • •		••		• •			••	• •		• •					18
keynot	e		• • •		••		••			••	••		• •					20
welcom	ne recep ¹	tion			••		••						••	••				21
🔵 agenda .	•••••		• • •		••		••			••	• •		••					23
faculty .					••		• •			••	• •		••					37
satellite	events.		•••		••		••			• •	• •		••	••		• •	•••	47
course de	escriptio	ns	• • •		• •		• •			• •	• •		• •	• •		•		53
exhibitor	'S		•••	• • •		• •		• •	•			• •		•	• •		• 1	121

TH ANNUAL

The front of the PAINWeek name badge contains both attendee information and a bar code that can be scanned quickly to capture data. Information that is collected by scanning into PAINWeek core sessions will only be utilized by PAINWeek and Global Education Group for the purpose of processing your CME application and certificate. If you scan your badge at a satellite event or exhibit booth, your contact information (name, address, degree, specialty, company, telephone, fax, NPI, and email) will be provided to the respective party who scanned your badge. Please note that to comply with Sunshine Act reporting and corporate policies, third-party program organizers may not allow access to their program without scanning. Name badges must be worn for admittance to all PAINWeek 2016 events. Please return to registration if you have lost your name badge. There is a \$50 fee for replacement badges. A photo ID is required.

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





KEYNOTE WELCOME RECEPTION

<u>awards</u>

LIFETIME ACHIEVEMENT

Forest Tennant MD, FACPM, MPH, DRPH



A Doctor's Doctor for Pain Patients

By Kevin L. Zacharoff

Despite all of the advances we see taking place around us at a dizzying pace, every now and then we use the phrase "They don't make them like they used to." Generally, this may be rooted in the sentiment that some level of quality exists which just can't be reproduced in today's mechanized, mass produced, and sometimes robotic world. Back in the day, being a "Doctor's Doctor" was that nebulous, intangible goal of becoming the type of physician whom physicians would want to have as their own healthcare provider. The kind of doctor that listened, digested, and most importantly *invested* in their patients, their patient's problems, and those of society.

To me, with all of the dazzling minds in pain medicine today, all working towards improving quality of care, disseminating knowledge, educating healthcare providers and patients, and looking towards new and innovative solutions, the true Doctor's Doctor is Forest Tennant. His contributions, too numerous to mention them all, include being the owner of Veract Intractable Pain Clinic; the editor of Practical Pain Management; and the president of the Tennant Foundation, which awards charitable gifts within the local community for educational, cultural, and historical endeavors. Additionally, Dr. Tennant has served as a Major and Medical Officer in the US Army; a professor at UCLA School of Public Health; and Drug Advisor for the National Football League, LA Dodgers, and NASCAR. Dr. Tennant's numerous handbooks, poster presentations, articles, and editorials number in the hundreds, with almost 130 articles written as editor of *Practical Pain Management* alone.

Most importantly though, what makes Dr. Tennant so deserving of this lifetime achievement honor are these qualities:

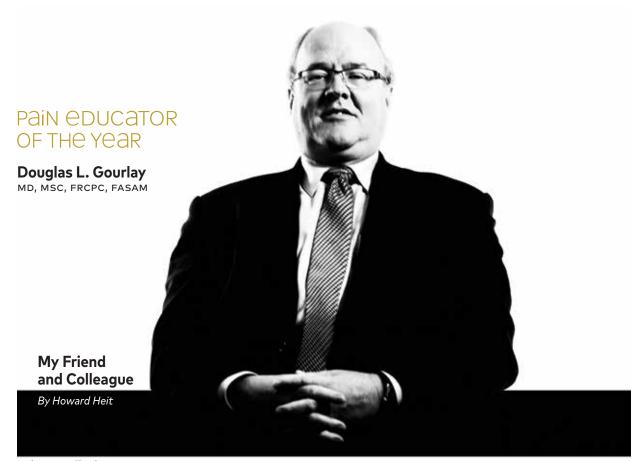
• An unwavering level of professionalism and respect for everyone he meets

• The persistent desire to help patients with chronic pain, and the willingness to stand shoulder to shoulder with them throughout the course of their treatment as a true advocate

• The capacity to carry "old world" paradigms forward in the search for progressive new, modern, and ground breaking approaches to pain treatment

• The devoted spirit to share his years of experience and information with the intention of helping people learn

Those of us who have the privilege of knowing Dr. Tennant personally can attest to the fact that all of these statements are accurate. He has been a tireless proponent of pain education and a true role model for many, including me. There are few more deserving of this esteemed recognition than Forest Tennant—they don't make them like they used to.



It is very fitting that Douglas L. Gourlay receive the Pain Educator of the Year Award as we celebrate a decade of PAINWeek. He has participated from the very beginning, which helped to make the conference grow into the largest and most diverse CME pain conference geared towards frontline practitioners in the US.

Doug has traveled worldwide, and participated in countless meetings and lectures relating to the interface of pain and addiction. He has also published over 20 articles in peer review journals, and has authored or coauthored over 10 chapters in books. However, his value to this complex field of medicine is not his writing, but rather the teaching he does in the halls before and after his lectures. Attendees gather around him for hours for his pearls of wisdom. In analyzing his lectures and publications, they are neither pro nor anti opioids: They are pro *patient*.

In line with the above, I would like to share some of what I call "Doug-isms" that he has shared with me over the years:

• Always separate the motive from the behavior when dealing with pain and addiction.

• Don't miss the Golden Moment when a patient may see things as they are, not the way they wished they were: Identify—Stabilize—Refer

• It takes 30 seconds to say "Yes" and 30 minutes to say "No" when writing a prescription. Choose your time wisely!

• You can't solve a chronic pain problem in the context of an active, untreated addiction.

• In the absence of knowing what to do, knowing what not to do is a close second!

• Abandon the molecule not the patient.

When I first got to know Doug at a closed meeting in 2000, I thought to myself "This guy is bright and has a lot to offer." Therefore, I invited him as cochair to speak at Common Threads: Program on Pain & Addiction for the American Society of Addiction Medicine in 2001. Since then, despite our radically different personalities and backgrounds, we have worked together for almost 2 decades as colleagues, and most importantly, as friends.





e extend a warm welcome to our new and returning participants to the 11th annual PaiNWeek conference on pain for frontline practitioners!

Since our launch in 2007, the national PaiNWeek conference has elevated the pain management expertise of thousands of healthcare providers, through continuous enhancement of the most comprehensive curriculum available anywhere. We've taken PaiNWeek "on the road" via a PaiNWeekEnd series bringing this program to busy practitioners in dozens of cities nationwide. This calendar of live events is complemented by a robust platform of digital and print resources addressing all aspects of multimodal pain treatment. And PaiNWeek, the nation's largest conference on pain, is our "main event." We are excited to have you with us.

The challenges facing frontline practitioners—and their patients with pain—have become no less daunting in the year since we last convened. The crisis of prescription opioid abuse is reflected in statistics that are familiar to us all, and the regulatory, legislative, and popular news reaction to prescribing practices becomes more pervasive and increasingly putative. The payer and reimbursement landscape for medical care in general, and chronic pain treatment in particular, has become no clearer or accommodating despite election campaign and governmental promises to make it so. And the needs of an aging patient population presenting with chronic pain syndromes of all types calls for tailored, rational treatment approaches that restore functionality and preserve quality of life.

As practitioners, payers, professional societies, regulatory agencies, and other stakeholders rethink the delivery and goals of pain care, the curriculum at PaiNWeek has evolved to keep pace. As you review this program book, you'll find over 120 CE/CME hours of instruction to choose from, delivered by more than 100 thought leaders in pain management. Of particular note are new course tracks in Functional Medicine and Physical Therapy discussing a range of diagnostic strategies and nonmedication treatment modalities that can enhance patient outcomes and help avoid unintended consequences. We'll bring you up to the minute with a new track on Medical Marijuana and Cannabinoids covering the clinical, legal, and sociopolitical landscape. Wound Care will consider the causes of pain related to various wound conditions, and provide critical information on care and treatment of the body's largest organ, the skin. Our acclaimed Advanced Practice Provider track returns with a full day of instruction for nurse practitioners, physician assistants, clinical nurse specialists, and other frontline clinicians. New special interest sessions will delve deeply into the current environment for opioid prescribing, the business of pain medicine, and the rapidly maturing world of remote assessment programs, pain apps, and other eHealth technologies.

We welcome our participating organizations, and their respective programs, including the American Pain Society, the American Headache Society, the International Pelvic Pain Society, and the National Association of Drug Diversion Investigators.

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, which this year is certified for credit, will be followed by refreshments and the opportunity to converse with faculty and colleagues at the Welcome Reception in the Exhibit Hall.

Finally, as we like to remind each year, the essence of PaiNWeek is interaction and collaboration. If you've been here before, you know how this works. If this is your first conference, we invite your questions, perspectives, and experiences. All of us, and our patients with pain, will be the better for it!



CONFERENCE FLOOR PLANS



Level 4

Levels 3&2 >>

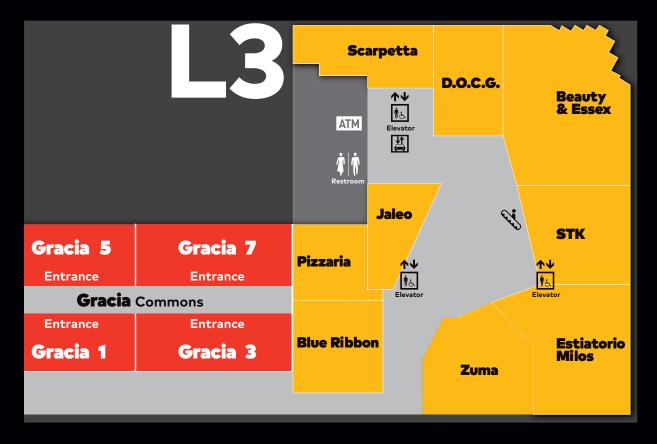
The Cosmopolitan of Las Vegas





Level 3

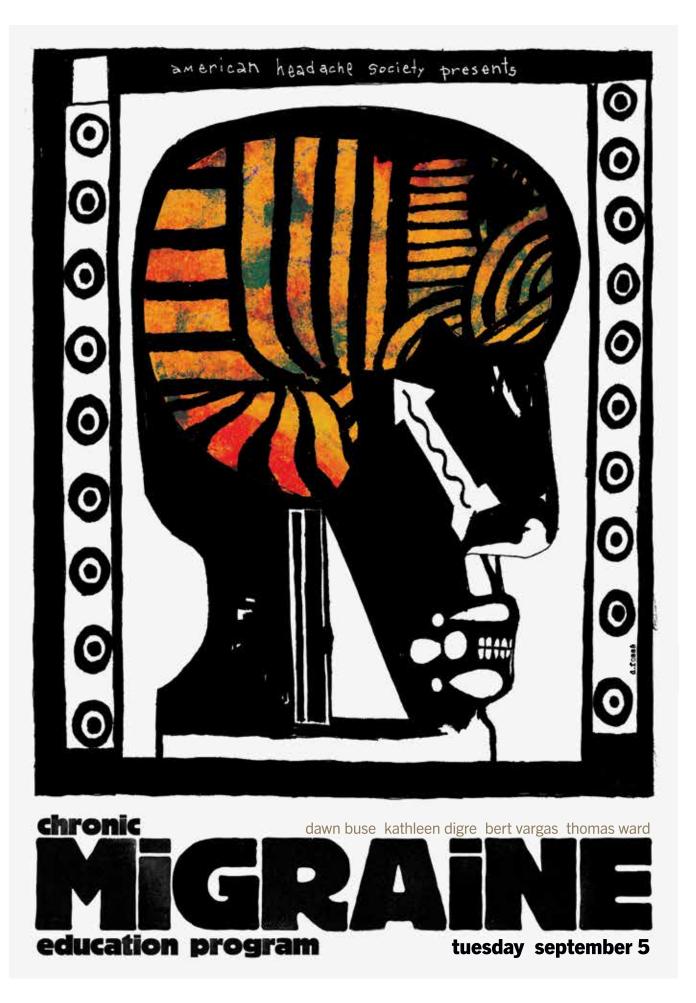


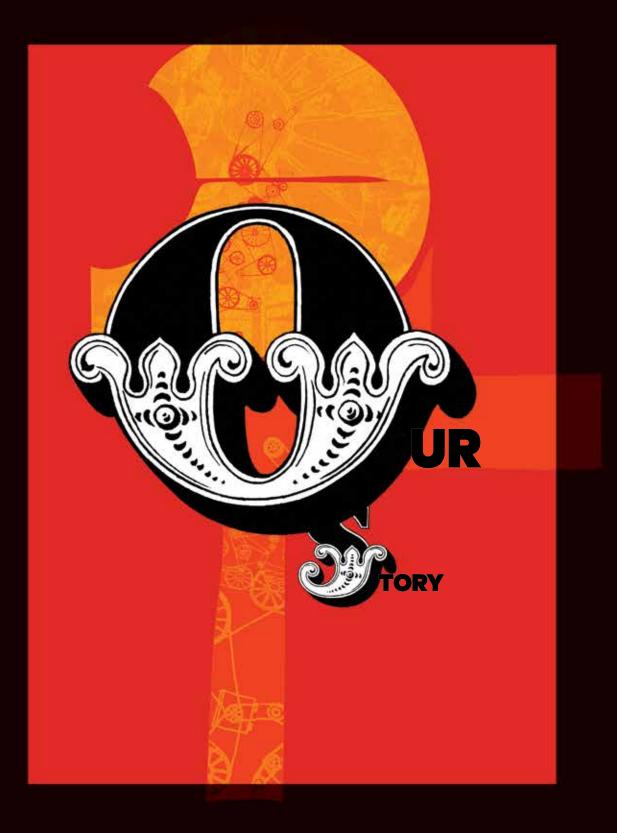


The Cosmopolitan of Las Vegas



Please Note: The Henry (restaurant) is located on Level 1







It was twenty years ago today Sgt. Pepper taught the band to play They've been going in and out of style But they're guaranteed to raise a smile So may I introduce to you The act you've known for all these years Sgt. Pepper's Lonely Hearts Club Band

It hasn't been 20 years, but it has been 11 years: a full decade since PaiNWeek was launched in 2007. For me, the lyrics to this iconic Beatles' song reflect the DNA of PaiNWeek, and the entity that created this enterprise, Aventine Co.

How and when did PaiNWeek begin? It was 2006, and we were going somewhere... but needed to go somewhere else. One of my two business partners, Steve Porada, had been captivated by the model of Digestive Disease Week. Steve kept returning to this idea, again and again, and finally asked "Why not have a PaiNWeek?"

Being the cowboys that we were, we decided to go forward and make it happen. We didn't wait for industry to express their interest. We collectively believed that we needed to build it...and they will come. It took us a year to put together the bones of what would eventually become the largest US pain conference. But we didn't know that then.

When P@iNWeek launched, there was a donut hole to be filled, as there was not yet a national conference for "frontline practitioners." Then, we had approximately 400 attendees, 12 exhibitors, and 5 posters. In 2017, we have over 2000 attendees, a full Exhibit Hall, and 115 posters.

When people ask me to explain our success, I say that it may be related to the fact that we've operated more like a band that's been together for a long, long time. A group where everyone plays a different instrument in their own quirky manner but, in the end, manages to make it all sound harmonic.

In 2015, PaiNWeek was acquired by Tarsus and, to their credit, they have allowed us to continue working autonomously, without any dilution of our irrevernt and creative spirit. Yes, we have worked hard, and we have also been extraordinarily lucky.

There are many layers to the PaiNWeek lasagna: faculty, content, accreditation, attendees, exhibitors, sponsors, logistics, operations, and marketing and promotion of the conference. I think it's important to identify the cast and crew and what they do to make sure it all happens.



The Cast

(in alpha order)

Holly Caster—PaiNWeek has evolved to be more than a national conference—it has become a robust communication platform inclusive of a journal, website, and calendar of 30+ regional meetings. Holly is responsible for the editorial side of things, making sure everything we say is consistent with everything we do. I am forever appreciative of her proofreading and copyediting genes, which make things better than they would be otherwise. In her other life, Holly is a writer, and author of the novel Cape May. Being a Virgo, she's wedded to precision, correct punctuation, and doing things as properly as possible. Holly is a tea and scones kind of person who does not embrace cilantro and highly spiced food. Ever.

Naiya Craig—It was approximately 4 years ago that Naiya found herself in our office, a new college grad figuring out what she wanted to do with her life. It was immediately apparent that she had an enviable skill set. Intelligent and personable with a keen interest in technology, she threw herself into every aspect of daily work life. She was great on the phone, quickly learned our conference management system, became involved in the sales process, and single handedly trained everyone on our PaiNWeekEnd onsite registration protocol. Naiya has been an indispensable team member who brought a lot of energy and gusto to an environment that benefits from that kind of vitality. It's been a fruitful tenure, and we wish her the best as she pursues new professional opportunities.

Keith Dempster—If Keith had not had a career in marketing and communications, with the right nudge, I think he would have been a newscaster. Along with his day-to-day writing responsibilities he conducts the majority of our faculty interviews every year in the PaiNWeek "Green Room." Keith's vibe is a cross between Cole Porter and the venerable Edward R. Murrow (millennials: think Lester Holt). His combination of gravitas and humor brings out the best in our stellar faculty.

Red Dempster—One of the most challenging aspects of the conference is that we not only deal with clients directly, but also with their various agencies. This can be very arduous because they often don't communicate with each other! Red is the person tasked with managing the sponsor "switchboard" and coordinating the multiplicity of components

associated with the sponsored events and Exhibit Hall. If he were a West Wing character, he'd be Sam Seaborn, the Deputy White House Communications Director.

Nicole Erazo—For a very long time the digital side of our business chugged along, wheezing through each season, without a dedicated person to direct content, strategy, traffic, and all of the other complicated things that IT people do. Nicole has been a great asset, and has whipped painweek.org into shape, organized our social media presence, debugged things that were clogging the system, and made it possible for us to launch our new podcast series. Nicole likes David Bowie, dark chocolate, tarot cards, and thinks Detroit is an amazing city.

Sean Fetcho—Every organization needs someone who is comfortable dousing for new business in any terrain. Sean is that person. He deals with our clients, putting together proposals that result in a sizeable amount of sponsored events for both PaiNWeek and PaiNWeekEnd. Sean likes to bungee jump and thinks nothing of flying to Greece for a 48-hour bachelor party. He also plays a mean set of electric drums. Sean reminds me a bit of David Spade, Eric in Entourage, and a dash of Evel Knievel thrown in for good measure.

Darryl Fossa—The most visible aspect of PAiNWeek are the visuals themselves, ie, the dynamic graphics that are the branding signature of everything we do. Each year, roughly 40 to 50 pieces of original art are produced which create an atmosphere that resembles a film festival rather than a medical conference. When not preparing for PAiNWeek, Darryl produces the graphics, illustrations, and layouts for our quarterly journal and various other activities. His Spotify playlist is eclectic, but you will mostly hear John Coltrane, Miles Davis, the Beatles, and maybe PJ Harvey as his office soundtrack. When he's not there, you can find him in a Berlin café with his sketchbook—a cappuccino to the left and a Nebbiolo to the right.

Patrick Kelly—Patrick has been with us for a long time, a keeper of the flame so to speak. We rely on him for so many things that it's difficult to know where to start. He manages our conference database and audience generation activities for the national and regional meetings. Additionally, he edits the faculty videos for digital distribution via our website and email newsletters, while managing the banner advertising associated with those activities. When he's not doing all of that, he's travelling to our PaiNWeekEnd conferences throughout the year. Patrick loves baseball, beer, and extreme meat based sandwiches, usually with lots of gravy and macaroni 'n' cheese in-between. He is also a printer whisperer and can often resolve vexing issues when we're all ready to have a meltdown.

Alyssa Pack—A year after Naiya joined us, her equally talented best friend jumped aboard the mothership. If Naiya is an extrovert, Alyssa is more of an introvert, who prefers to quietly go about her responsibilities without a lot of fanfare. Alyssa travels to the weekend conferences and handles a lot of attendee questions via our Help Scout online ticketing system. She is a well-travelled gifted photographer, an avid reader, and now the poster child for healthy eating. You will find raw veggies, protein shakes, and bowls of brown rice on her desk.

Steve Porada—It was 2004 when Steve became a vital part of our solar system. We soon discovered that along with his sales/new business acumen, he also possessed a sense of humor second to none. Much like me, he is neither reward dependent or punishment averse—an unusual and fortunate combination of traits that have enabled us to stay afloat during times of duress. Steve is also a talented musician and a great cook. He makes his own kimchee and has perfected roasted leg of lamb. Once asked to describe our respective partnership roles, I replied, "Steve keeps it real, Jeffrey keeps it legal, and I keep it going." Steve's still keeping it real.

Jeffrey Tarnoff — Once upon a time, two people, with too many brain cells for their own good, found themselves working together in a medical education company in northern New Jersey. While it wasn't attraction at first sight, we soon realized that we were kindred spirits and became close friends. We ate lunch together every day, and shared the existential angst of being surrounded by people who we believed were far less intelligent than we were, ie, people who just didn't "get it." Following a series of colorful events, we decided to start our own company, and the rest is history. Little did we know when we were on our Boston Market stops that we would discover something very cosmic: we were both born in Milwaukee, Wisconsin, in the very same hospital, only a decade and a half apart. We have sat across from each other since February 2002 and it has never gotten old for me. Jeffrey is many things: a pilot, a great cook, a generous friend, a vault of IT and travel knowledge, and someone who delights in pointing out "user errors." One of his favorite quotes is from Thomas Carlyle: "Let me have my own way in exactly everything and a sunnier and pleasanter creature does not exist."

Heather Woolf—How many people do you know who can sip two bottles of champagne until 2:00a and get up the next morning for a 6:00a gym session followed by a full day of work? Not many. She's quite a powerhouse, and is one of the most proactive, organized people I know. She's had a varied and interesting career and has lived in many other parts of the world (New Zealand, Australia, and Hong Kong). All of this has made her someone who you can leave in charge of the space station without losing a night's sleep. She's also an awesome cook who makes things that her children don't eat, so we get the yummy leftovers for lunch!

So, who am I, **Debra Weiner?** What exactly do I do here? I conceptualize the conference agenda topics/tracks, select our speakers, and work with Darryl on the creative. I am so very grateful for our brilliant and generous faculty—their sense of mirth, and willingness to push the envelope. Like Scheherazade, I get to create new stories every year that extend our professional lives, allowing us to return to the stage and keep doing it again and again.

It is very important that I acknowledge our **Sgt. Pepper**, the person who taught me and the band to play: **Barry Cole** MD. His many years of being a pain management practitioner and educator brought much to the table, accelerating the launch and subsequent growth of P**a**iNWeek. Barry was a force a nature, and he made sure that we were well rehearsed and ready to hit the ground running at show time.

The Crew

The success and evolution of P**a**iNWeek has so much to do with the fact that we have worked with the same people for so many years. It's like making a movie every year with the same lighting person, key grip, film editor, etc. We have developed a silent language, with a plethora of logistical activities communicated without words.

Etak Events

Scott Weston and his Etak squad are foundational to so much of what we do. Scott is amazing. Nothing seems to rattle him, not even having to take down an air wall in the middle of a panel discussion in order to accommodate the hordes of people clamoring to get into the session. Jackie Opel and Savanna Lueken are the best conference managers, and Jackie is the most fun when she's not happy with something. There are few things in life more entertaining than watching her express displeasure. Brianna Hall is our Exhibit Hall manager, and makes sure that it looks dazzling and is well trafficked. Julie Frigo and Erin Cassidy-Long are at the registration desk keeping everything moving. On the A/V side there are Chris and Cameron Bunch. Tim Condon, Enrique Bones, Jihan Donawa, John Hopkins, Brad Lever, and Terry McKyton. Then there are The Dudes—twins Justin and Jared Moschau. One works the sound, one works the camera in our Green Room. These guys spend 5 long days with Darryl, Keith, Alan Eisenbraun and our faculty, capturing content that keeps us communicating with our constituents for the next 365 days.

Global Education Group

It's not often that external work colleagues end up being friends, but it would have been impossible to have it otherwise with **Brandy** and **Stephen Lewis**. We have been with them since the launch of Global and have logged a lot of time with the original team of **Amanda Glazar**, **Annika Gill**, **Amanda Jamrogiewicz**, and **Andrea Funk**. While the two Amandas have moved on, Andrea is there, seamlessly shepherding the intense slide review process (of 120+ courses). Today, there are some new faces that we look forward to working with in the years ahead: **Joe Bush**, **Laura Gilsdorf**, **Ainsley McDaniel**, **David Mullins**, and **John McCormick**.

There are many other people that need to be acknowledged who have contributed a lot over the years: Jonathan Boone, Cathy Favolaro, Joe Finkstein, Robert Finkstein, Wanda Tarnoff, and Ginger Wilmot. Lastly, there is another superstar in the midst, Ronald K. Murray, our "atmosphere manager." No one can get a crowd moving like Ron. I love this guy: he's simply lit from within.

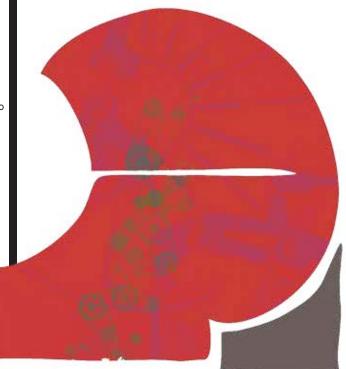
Las Vegas Convention and Visitors Bureau

Every year we are lucky enough to have **Eleanor "Ellie" Crowley** and **Sue Sharp** extending hospitality and conference coordination assistance over the five days. They are two of my favorite people, and the conference would not be the same without them!

What's Next?

As you might expect, we're ruminating on a few new ideas that we think you will find timely and captivating.

Stay tuned—we're glad you've enjoyed the show!



accreditation

PaiNWeek 2017

September 5–9 Las Vegas, NV

This activity is provided by Global Education Group.



TARGET AUDIENCE

The educational design of this activity addresses the needs of physicians, physician assistants, nurse practitioners, nurses, pharmacists, psychologists, and social workers involved in the treatment of patients with pain.

PURPOSE STATEMENT

PAINWeek® provides practical knowledge and tools for busy pain management practitioners to utilize in their daily practice.

educational Need

"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 140 hours of content will be presented!

Learning objectives

After attending PAINWeek® 2017, 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 39.75 *AMA PRA Category* 1 *Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Pharmacist Continuing Education

Accreditation Statement



Global Education Group is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

Credit Designation

Global Education Group designates this continuing education activity for 39.75 contact hours (3.975 CEUS) of the Accreditation Council for Pharmacy Education.

Please see **www.painweek.org** for full ACPE information and UAN numbers.

Please note: Pharmacy learners will not be eligible to receive partial credit. Individual courses must be attended in their entirety in order to be eligible to receive credit for those 1.0 or 2.0 credit hour sessions.

PHARMACY LEARNERS: **Instructions for Credit**—In order to receive credit, pharmacist participants must attend an entire course and complete the online credit application and evaluation form. An NABP number and date of birth (DOB) will be required to complete these forms and earn credit. Please bring this information with you to the conference for use while completing your evaluations.

Nursing Continuing Education

Global Education Group is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's coa.

This educational activity for 39.75 contact hours is provided by Global Education Group. Nurses should claim only the credit commensurate with the extent of their participation in the activity.

Psychologist Continuing Education

Global Education Group (Global) is approved by the American Psychological Association (APA) to sponsor continuing education for psychologists. Global maintains responsibility for this program and its content.

This activity has been approved for a maximum of 39.75 CE credits for psychologists. The instructional level of this activity is introductory. Psychologists should only claim credit commensurate with the extent of their participation in the activity.

Please note: Attendance of psychology learners will be monitored. As with all conference participants, psychology learners will be required to scan in using their coded badge. Psychology learners must then formally sign out for each session in which they are applying for continuing education credit.

Nurse Practitioner Continuing Education

Global Education Group is accredited by the American Association of Nurse Practitioners as an approved

provider of nurse practitioner continuing education. Provider number: 1561024. This activity is approved for 39.75 contact hour(s) which includes pharmacology hours (for full Rx hours visit m.painweek.org).

Activity ID #2139L.

This activity was planned in accordance with AANP CE Standards and Policies.

Physician Assistants

The AAPA accepts AMA PRA Category 1 Credit[™] from organizations accredited by the ACCME.

American Academy of Family Physicians Continuing Education

Application for CME credit has been filed with the American Academy of Family Physicians. Determination of credit is pending.

National Association of Social Workers Continuing Education

PAINWeek 2017 is pending approval from NASW.

ALL OTHER LEARNERS: **Instructions for Credit**—In order to receive credit, participants must attend the course and complete the online credit application and evaluation form. Participants can only claim the hours they were actually in attendance for CME credit. Statements of credit are available to print upon completion of online forms.

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. This activity is supported in part by an educational grant from Lilly. For further information concerning Lilly grant funding visit www.lillygrantoffice.com.

Disclosure of Unlabeled Use

This educational activity may contain discussion of published and/ or investigational uses of agents that are not indicated by the FDA. Global Education Group (Global) does not recommend the use of any agent outside of the labeled indications.

The opinions expressed in the educational activity are those of the faculty and do not necessarily represent the views of any organization associated with this activity. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications, and warnings.

Disclaimer

Participants have an implied responsibility to use the newly acquired information to enhance patient outcomes and their own professional development. The information presented in this activity is not meant to serve as a guideline for patient management. Any procedures, medications, or other courses of diagnosis or treatment discussed in this activity should not be used by clinicians without evaluation of patient conditions and possible contraindications on dangers in use, review of any applicable manufacturer's product information, and comparison with recommendations of other authorities.

Disclosure of Conflicts of Interest

Global Education Group (Global) requires instructors, planners, managers and other individuals and their spouse/life partner who are in a position to control the content of this activity to disclose any real or apparent conflict of interest they may have as related to the content of this activity. All identified conflicts of interest are thoroughly vetted by Global for fair balance, scientific objectivity of studies mentioned in the materials or used as the basis for content, and appropriateness of patient care recommendations.

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:

Name of Planner or Manager	Reported Financial Relationship						
Lindsay Borvansky	Nothing to disclose						
Kelvin Burton	Nothing to disclose						
Kristen Delisi NP	Nothing to disclose						
Andrea Funk	Nothing to disclose						
Ashley Marostica RN, MSN	Nothing to disclose						

Americans with Disabilities Act

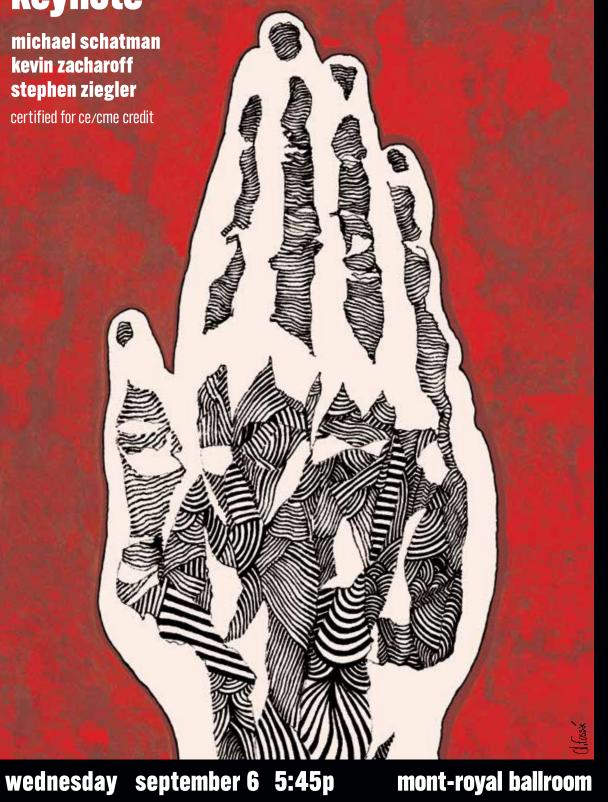


Event staff will be glad to assist you with any special needs (ie, physical, dietary). Please contact Patrick Kelly at (973) 415–5109 prior to the live event.

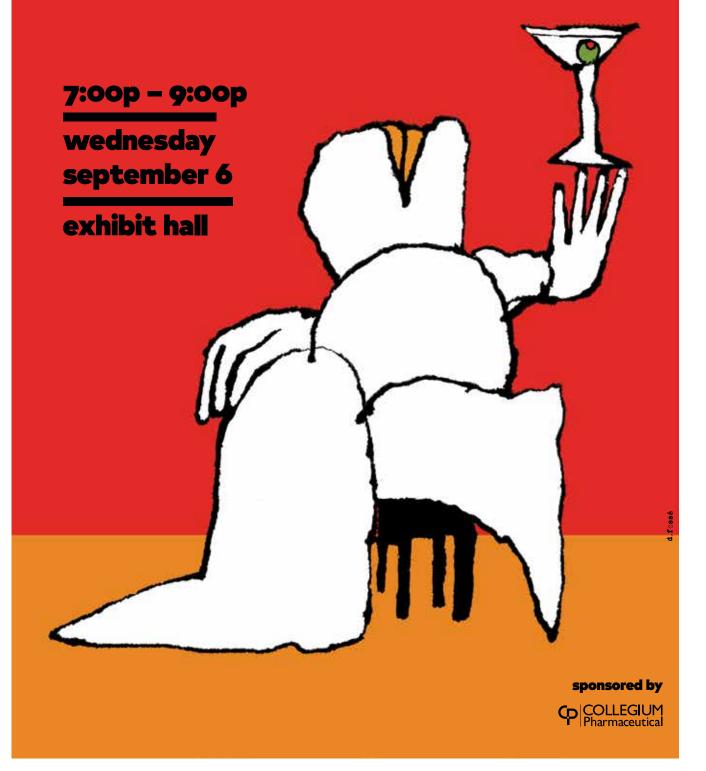


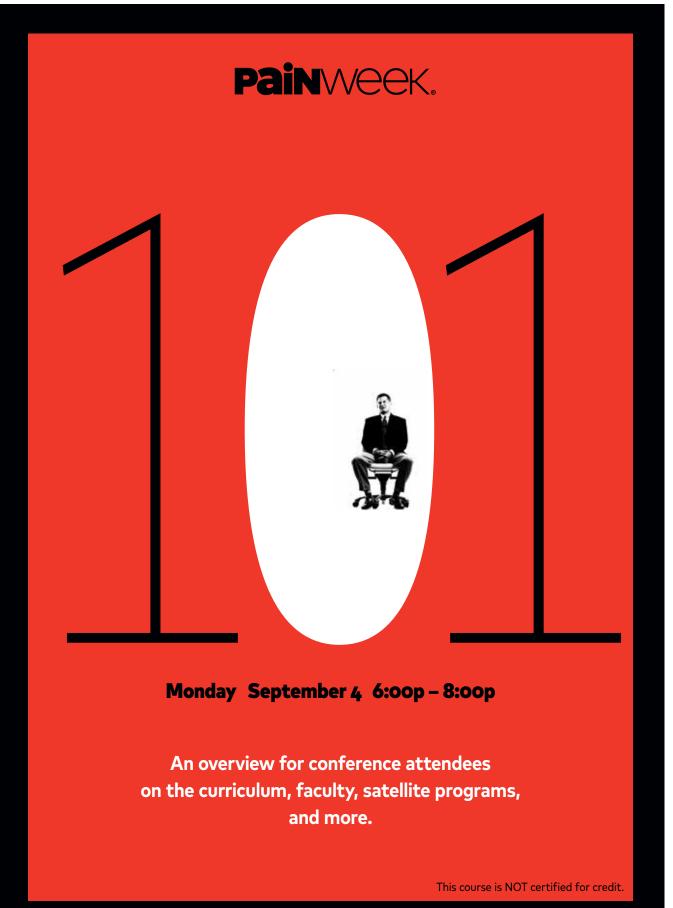
are you now or have you ever been? saving pain medicine from zealotry

keynote

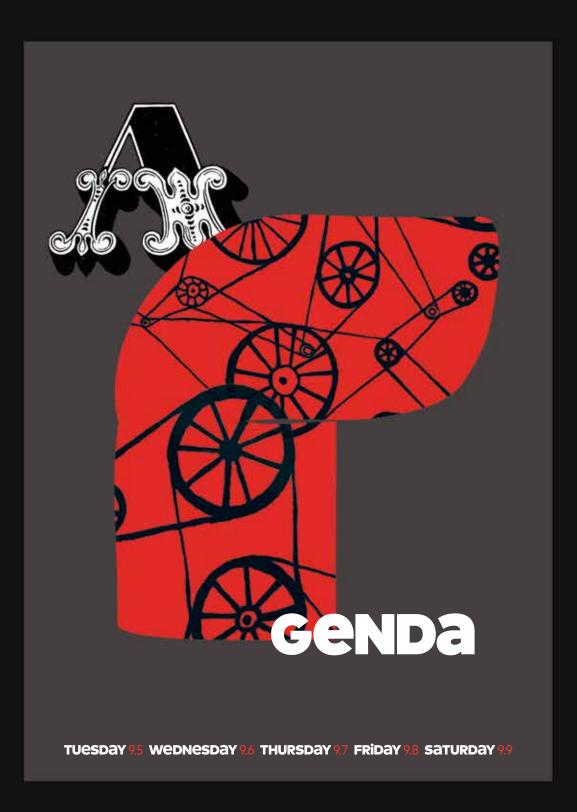


WELCOME Reception





Level 4. Nolita 1



TUESDAY

TUesd	ay	,		9.5
7:00a - 7:50a	BHV-01	Crisis=Opportunity: Reducing Medication Burden While Managing Chronic Pain	Level 3 Gracia 3	Jennifer M. Hah мD, мs Ravi Prasad PHD
7:00a - 7:50a	BRS-01	Does Understanding=Analgesia? Explaining Pain Neuroscience & Physiology	Level 4 Nolita 3	Kathryn A. Schopmeyer PT, DPT, CPE
7:00a – 7:50a	INTG-01	Snoring, Clicking, and Myofascial Pain	Level 3 Gracia 1	Hal S. Blatman MD, DAAPM, ABIHM
8:00a – 9:00a	PDM-01	Insights on Novel Technology in Pain Management with Abuse — Deterrent Extended-Release Opioids*	Level 3 Brera Ballroom	Jeffrey A. Gudin MD
		Sponsored by Collegium Pharmaceutical, Inc.		
9:00a – 12:00p	WRK-01	A Comedy of Errors: Methadone, Marijuana, and Buprenorphine	Level 3 Gracia 5	Douglas L. Gourlay MD, MSC, FRCPC, FASAM Mary Lynn McPherson PHARMD, MA, BCPS, CPE
		(Requires separate registration fee)		
9:10a - 10:00a	INTG-02	Microbiome: The Link Between Nutrition and Pain	Level 4 Nolita 1	Heather Tick MD
9:10a – 10:00a	SIS-01	The Regulatory Agency Will See You Now	Level 4 Mont-Royal Ballroom	Kevin L. Zacharoff MD, FACIP, FACPE, FAAP
9:10a - 10:30a	SIS- 02	Itsa Schmerz! Treatment of Preemptive and Perioperative Pain after Spine Surgery	Level 3 Gracia 1	Robert L. Barkin MBA, PHARMD, FCP, DAPM Gary W. Jay MD, FAAPM, FACFEI
9:10a - 11:00a	AHS-01	American Headache Society:	Level 3	Dawn C. Buse PHD
		Chronic Migraine Education Program	Gracia 7	Kathleen B. Digre MD
		(Part 1)		Bert B. Vargas MD, FAHS, FAAN Thomas N. Ward MD
10:00a - 10:30a		Break		
10:30a - 11:20a	BHV-02	Trauma: The Lesion Not Visible on the Scan	Level 4 Nolita 3	Melissa Fledderjohann PSYD
10.20- 11.20-			Level 4	Christian Washburn PSYD
10:30a - 11:20a	IN1G-03	Stress, Fatigue, and Pain	Level 4 Nolita 1	Hal S. Blatman MD, DAAPM, ABIHM
10:30a - 11:20a	SIS-03	Measure for Measure: Prescribing Guidelines, Rules, and Regulations	Level 3 Gracia 1	Stephen J. Ziegler PHD, JD
10:30a - 12:00p	MDL-01	Knowledge Gaps=Legal Traps:	Level 4	Jennifer Bolen JD
		Pearls and Pitfalls for the Business		Sue Kincer CPC, CHA
44.00 40.00		Aspects of Drug Testing	Ballroom	
11:30a – 12:00p	P0P-01	Pain Mechanism Theories: From Gates to Predictive Coding	Level 3 Gracia 1	Kathryn A. Schopmeyer PT, DPT, CPE
11:30a - 12:00p	POP-02	14 Miles From Wisdom: Things I Learned By Accident	Level 3 Gracia 3	Becky L. Curtis PCC
12:15p – 1:30p	PDM-03		Level 3	Joseph V. Pergolizzi, Jr MD
		Opioids Reconsidered*	Brera	Richard Rauck MD
		Sponsored by BioDelivery Sciences	Ballroom	
1:40p – 2:30p	HCH-01	Pain Management Coaching: Integrative and	Level 4	Lesa R. Abney BSN, MINT
		Complimentary Strategies for Complicated Pain	Nolita 3	Becky L. Curtis PCC
1:40p – 3:30p	AHS-02	American Headache Society:	Level 3	Dawn C. Buse PHD
		Chronic Migraine Education Program	Gracia 7	Kathleen B. Digre MD
		(Part 2)		Bert B. Vargas MD, FAHS, FAAN Thomas N. Ward MD
1:40p - 3:30p	INTG-04	Biofeedback Therapy:	Level 4	Anthony A. Whitney MS, LHMC, BCB
1.10p 3.30p	-1110-04	Surviving and Living With Chronic Pain	Nolita 1	

TUESDAY

1:40p - 4:40p	WRK-02	Managing Pain Between a Rock and a Hard Place: Getting the Tough Jobs Done in Serious Illness (Requires separate registration fee)	Level 3 Gracia 5	Frank D. Ferris MD Jessica Geiger-Hayes PHARMD, BCPS, CPE Alexandra McPherson PHARMD, MPH Mary Lynn McPherson PHARMD, MA, BCPS, CPE
2:40p – 3:30p	BHV-03	Nonpharmacologic Management of Pain: Essential Tools for Frontline Clinicians	Level 3 Gracia 1	Ravi Prasad PHD
2:40p – 3:30p	HCH-02	How Pain Management Coaching Impacts Pain Outcomes	Level 4 Nolita 3	Lesa R. Abney BSN, MINT Becky L. Curtis PCC
2:40p – 3:30p	SIS-04	The Outer Limits: Analgesics of the Future	Level 4 Mont-Royal Ballroom	Jeffrey A. Gudin MD
3:40p – 4:30p		Break		
3:40p – 4:30p	PDM-06	Salix Pharmaceuticals Invites You to a Product Theater on Opioid-Induced Constipation* Sponsored by Salix Pharmaceuticals	Level 3 Castellana Ballroom	Jeffrey A. Gudin MD
4:40p – 5:30p	BHV-04	Kissing the Wrong Frog: Exploring Common Factors in Pain Management	Level 4 Nolita 1	David Cosio PHD
4:40p – 5:30p	INTG-05	Connecting the Dots in Chronic Pain	Level 3 Gracia 7	Heather Tick MD
4:40p – 5:30p	sis-o6	Within You, Without You: Virtual Reality for Pain Management	Level 4 Nolita 3	Ted W. Jones PHD, CPE
4:40p – 6:00p	INTG-06	Lessons From a County Hospital Setting: A Novel Approach to Integrative Pain Management	Level 3 Gracia 3	Elaine S. Date мD Melissa Fledderjohann PSYD Abhishek Gowda MD
4:40p – 6:00p	MDL-02	Overdose! Legal Risk Mitigation and Response	Level 4 Mont-Roya Ballroom	Jennifer Bolen JD



9.5

Wednesday

Wedn	es	Day		9.6
7:00a – 7:50a	CPS-01	Osteoarthritis Pain: Past, Present, and Future	Level 3 Gracia 1	Ramon L. Cuevas-Trisan MD
7:00a – 7:50a	INT-01	Injections, Nerve Blocks, Pumps, and Spinal Cord Stimulation	Level 3 Gracia 5	Paul J. Christo MD, MBA
7:00a – 7:50a	PEF-01	Pain Terminology: Knowing the Difference Makes a Difference!	Level 3 Gracia 3	David M. Glick DC, DAAPM, CPE, FASPE Mary Lynn McPherson PHARMD, MA, BCPS, CPE Kathryn A. Schopmeyer PT, DPT, CPE
8:00a – 9:00a	PDM- 07	A Presentation by Daiichi Sankyo, Inc. & Inspirion Delivery Sciences* Sponsored by Daiichi Sankyo, Inc.	Level 3 Brera Ballroom	Faculty to be announced
8:00a – 9:00a	PDM-08		Level 3 Castellana Ballroom	Charles E. Argoff MD, CPE Michael C. Barnes JD MIEP
9:00a – 12:00p	WRK-03		Level 4 Yaletown 1	Jennifer Bolen JD Douglas L. Gourlay MD, MSC, FRCPC, FASAM Ted W. Jones PHD, CPE Darren McCoy FNP-BC, CPE
9:10a - 10:00a	BRS-02	An Alternative to Benzodiazepines for the Older Adult Chronic Pain Population	Level 3 Gracia 1	Errol M. Gould PHD Joseph V. Pergolizzi, Jr MD Robert B. Raffa PHD
9:10a - 10:00a	PEF-02	Pain Pathophysiology Unraveled	Level 4 Nolita 1	David M. Glick DC, DAAPM, CPE, FASPE
10:00a - 10:30a		Break		
10:30a – 11:20a	INT-02	Failed Back Surgery Syndrome	Level 4 Nolita 3	Jay Joshi MD
10:30a – 11:20a	PEF-03	Chronic Pain Assessment	Level 4 Nolita 1	Michael R. Clark MD, MPH, MBA
10:30a - 12:00p	CPS- 02	Translational Complex Regional Pain Syndrome: Research vs Empiricism	Level 3 Gracia 5	Philip Getson DO R. Norman Harden MD
11:30a - 12:00p	POP- 03	Pharmacogenetics: To Test or Not to Test?	Level 3 Gracia 3	Timothy J. Atkinson PHARMD, BCPS Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP
11:30a - 12:00p	POP- 04	The Path of Most Resistance: Patient Centered Approaches to Discussing Opioid Reduction	Level 3 Gracia 1	Eleni M. Romano PHD Allison E. Schroeder PHARMD, BCPS
12:15p – 1:30p	PDM-09	Navigating the Opioid Landscape: The Right Molecule at the Right Time* Sponsored by Depomed, Inc.	Level 3 Brera Ballroom	Michelle Brown MD
12:15p – 1:30p	PDM-10	Analgesic of the Future: A New Opioid Molecule With Slow Entry Into the CNS* Sponsored by Nektar Therapeutics	Level 3 Castellana Ballroom	Jeffrey A. Gudin мD Richard Rauck мD
1:40p - 2:30p	CPS-03	Diabetic Peripheral Neuropathic Pain: Evaluating Treatment Options	Level 3 Gracia 1	Ramon L. Cuevas-Trisan MD
1:40p - 2:30p	sis-08	The Story of O: A Molecule in Chains?	Level 4 Nolita 3	Michael R. Clark мd, мрн, мва
1:40p - 3:30p	MAS-01	It Hurts to Be Alive: Fibromyalgia	Level 3 Gracia 3	Gary W. Jay MD, FAAPM, FACFEI
1:40p - 3:30p	PEF-04	Pain Therapeutics	Level 4 Nolita 1	Thomas B. Gregory PHARMD, BCPS, DASPE, CPE

Wednesday

2:40p – 3:30p	INT-03	Regenerative Medicine for Chronic Pain: Who, What, and When?	Level 4 Nolita 3	Jay Joshi мD
2:40p – 3:30p	SIS-09	Walking the Tightrope: Pain, Addiction, and Suicide	Level 3 Gracia 1	Martin D. Cheatle PHD
2:40p – 3:30p	SIS-10	Drinking From a Fire Hose: Educating Stakeholders at the Speed of Sound	Level 3 Gracia 5	Steven D. Passik PHD
2:40p – 3:30p	SIS-11	How to Develop a Multidisciplinary Pain Program in a Nonacademic Setting	Level 3 Gracia 7	R. Norman Harden MD
3:40p – 4:30p		Break		
3:40p – 4:30p	PDM-12	A Presentation by Daiichi Sankyo, Inc. & Inspirion Delivery Sciences*	Level 3 Castellana	Faculty to be announced
		Sponsored by Daiichi Sankyo, Inc.	Ballroom	
4:40p – 5:30p	CPS-04	Man on Fire Syndrome: Diagnosis and Treatment of Erythromelagia	Level 4 Nolita 3	Charles E. Argoff MD, CPE
4:40p – 5:30p	INT-04	From the Torpedo Fish to HF10: The Evolution of Neuromodulation	Level 3 Gracia 5	Sean Li, MD
4:40p – 5:30p	PEF-05	Pain Diagnostics: Clinical Pearls to Improve Common Tests for Pain	Level 4 Nolita 1	David M. Glick DC, DAAPM, CPE, FASPE
4:40p – 5:40p	SYM-01	Managing Opioid Risks & Adverse Effects in a Politically Charged Environment	Level 3 Gracia 1	Jeffrey A. Gudin мD Lynn R. Webster мD
5:45p – 7:00p	KEY-01	Keynote: Are You Now, or Have You Ever Been? Saving Pain Medicine From Zealotry [†]	Level 4 Mont-Royal Ballroom	Michael R. Clark MD, MPH, MBA Michael E. Schatman PHD, CPE, DASPE Kevin L. Zacharoff MD, FACIP, FACPE, FAAP Stephen J. Ziegler PHD, JD
7:00p – 9:00p		Welcome Reception	Level 4 Exhibit Hall	C



9.6

THURSDAY

	-			
7:00a – 7:50a	APP-01	Importance of Appropriate Chart Documentation: <i>Pitfalls to Help Avoid Litigation</i>	Level 3 Gracia 3	Darren McCoy FNP-BC, CPE
7:00a – 7:50a	NAD-01	Data Fiction: Do We Make Life and Death Decisions Based on Bad Data?	Level 3 Gracia 1	Lisa M. McElhaney BS
7:00a – 7:50a	PEF-06	Flipping the Script: Why We Need a Patient REMS Course	Level 4 Nolita 1	Ted W. Jones PHD, CPE
8:00a – 9:00a	PDM-13	Opioid-Induced Constipation: The Science, Patient Burden, and a Prescription Treatment Approach* Sponsored by Daiichi Sankyo and AstraZeneca	Level 3 Brera Ballroom	Rainer Vogel MD, DABA, DABIPP, FIPP
8:00a – 9:00a	PDM-14	Postherpetic Neuralgia Treatment: Understanding the Neuropathic Disease* Sponsored by Arbor Pharmaceuticals, LLC	Level 3 Castellana Ballroom	Charles E. Argoff MD, CPE
9:10a - 10:00a	PHM-01	Opioid Conversion Calculations	Level 3 Gracia 3	Mary Lynn McPherson Pharmd, MA, BCPS, CPE
9:10a – 11:00a	APP-02	Case Based Learning: A Multidisciplinary Review	Level 3 Gracia 7	Jeremy A. Adler MS, PA-C Jennifer M. Hah MD, MS Theresa Mallick-Searle MS, NP-BC, ANP-BC Ravi Prasad PHD Kathryn A. Schopmeyer PT, DPT, CPE
10:00a - 10:30a		Break & Exhibits		
10:30a – 11:20a	NAD-02	Algorithms and Opioid Dosing Watch Lists	Level 4 Mont-Royal Ballroom	Marc S. Gonzalez PHARMD
10:30a - 11:20a	PHM-02	PharmasKnowGenetics vs Pharmacogenetics Unveiled	Level 3 Gracia 1	Timothy J. Atkinson PHARMD, BCPS Abigail T. Brooks PHARMD, BCPS Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP Courtney M. Kominek PHARMD, BCPS, CPE Thien C. Pham PHARMD
10:30a – 12:00p	MAS-02	Lost in Translation: Making Sense of Clinical Treatment Guidelines	Level 3 Gracia 3	Charles E. Argoff MD, CPE Brett R. Stacey MD Mark S. Wallace MD
10:30a – 12:00p	PEF-07	You're Giving Me an MI: Incorporating Motivational Interviewing Into Challenging Conversations	Level 4 Nolita 1	Eleni M. Romano PHD Allison E. Schroeder PHARMD, BCPS
11:30a – 12:00p	POP-05	Pharmacogenetic Case Studies: Test the Patient or Simply Switch the Drug?	Level 3 Gracia 7	Abigail T. Brooks PHARMD, BCPS Courtney M. Kominek PHARMD, BCPS, CPE
11:30a – 12:00p	POP- 06	Ketamine: Not Just for Horses	Level 3 Gracia 1	Jessica Geiger-Hayes PHARMD, BCPS, CPE
12:15p – 1:30p	PDM-15	A Presentation by Daiichi Sankyo, Inc. & Inspirion Delivery Sciences* Sponsored by Daiichi Sankyo, Inc.	Level 3 Brera Ballroom	Faculty to be announced
1:40p – 2:30p	APP-03	Blending, Melting, or Throwing Off a Cliff: Abuse Deterrent Technologies to Minimize Opioid Abuse	Level 3 Gracia 3	Jeremy A. Adler MS, PA-C
1:40p - 2:30p	PHM-03	What's All the "GABA" About? Pregabalin and Gabapentin Abuse	Level 3 Gracia 1	Abigail T. Brooks PHARMD, BCPS Courtney M. Kominek PHARMD, BCPS, CPE
1:40p - 3:30p	PEF-08	¿Dond Le Duele? An Introduction to Basic Medical Spanish for Healthcare Professionals	Level 3 Gracia 5	Trina L. Boice Tracey B. Long PHD, RN, BSN, MS

THURSDAY

THURS	SD a	Y		9.7
1:40p – 3:30p	SIS-12	Pain Clinical Trials	Level 4 Nolita 3	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	APP-04	The Green-Eyed Martian: Do Healthcare Disparities Exist in Pain Management?	Level 3 Gracia 3	Theresa Mallick-Searle MS, NP-BC, ANP-BC
2:40p - 3:30p	NAD-03	Balanced Pain Management & Overdose Prevention Strategies: Where Are We At?	Level 4 Mont-Roya Ballroom	Lisa M. McElhaney BS I
2:40p – 3:30p	PHM-04	Rational Polypharmacy: An Update for Specific Conditions	Level 3 Gracia 1	Charles E. Argoff MD, CPE
2:40p – 3:30p	SIS-13	Solutions to Counterfeit Medicines	Level 4 Nolita 1	Jay Joshi MD
3:40p – 4:30p		Break & Exhibits		
4:40p – 5:30p	NAD-04	Opioid Counterfeits	Level 4 Mont-Roya Ballroom	Lisa M. McElhaney BS I
4:40p – 5:30p	PHM-05	HeSAID, SheSAID: The Real Facts on NSAIDs	Level 3 Gracia 1	Timothy J. Atkinson PHARMD, BCPS Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP
4:40p – 5:30p	SIS-14	ls That Naloxone in Your Pocket or Are You Just Happy to See Me?	Level 4 Nolita 3	Kevin L. Zacharoff MD, FACIP, FACPE, FAAP
4:40p – 6:00p	SIS-15	The Octopus From Hell: Exploring 8 Extremities of Chronic Pain	Level 4 Nolita 1	Robert L. Barkin MBA, PHARMD, FCP, DAPM Gary W. Jay MD, FAAPM, FACFEI
4:40p – 6:00p	SIS-16	As You Like It: The Business of Pain Medicine	Level 3 Gracia 3	Ignacio J. Badiola мD Martin D. Cheatle РНD Peter G. Pryzbylkowski мD Peter Yi мD
5:40p – 6:30p	NAD-05	Pain Practice Check-Up	Level 4 Mont-Roya Ballroom	Marc S. Gonzalez PHARMD
5:40p – 6:30p	SIS-17	Fudin vs Gudin: Can Overprescribing Be Defended in Court?	Level 4 Nolita 3	Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP Jeffrey A. Gudin MD
5:40p – 6:30p	sis-18	Low Pressure Headaches: What Are You Missing?	Level 3 Gracia 5	Ian Carroll MD, MS
6:30p – 8:30p	POS-01	Scientific Poster Session and Reception*	Level 2 Condesa Commons	Co-Chairs: Srinivas Nalamachu мд Joseph V. Pergolizzi, Jr мд



7:00a - 7:50a	APS-01	Resilience vs Vulnerability in Chronic Pain	Level 4 Nolita 1	Roger B. Fillingim PHD
7:00a – 7:50a	IPPS-01	The Painful Uterus and the Brain	Level 3 Gracia 3	Sawsan As-Sanie MD, MPH
7:00a – 7:50a	POS- 02	Poster/Podium Presentations*	Level 3 Gracia 5	Srinivas Nalamachu MD Joseph V. Pergolizzi, Jr MD
3:00a – 9:00a	PDM-19	Salix Pharmaceuticals Invites You to a Breakfast Product Theater on Opioid- Induced Constipation [*]	Level 3 Brera Ballroom	Gerald M. Sacks MD
		Sponsored by Salix Pharmaceuticals		
8:00a – 9:00a	PDM-20	Insights on Novel Technology in Pain Management With Abuse-Deterrent Extended-Release Opioids*	Level 3 Castellana Ballroom	Gerard DeGregoris, III MD
		Sponsored by Collegium Pharmaceutical, Inc.		
9:10a – 10:00a	IPPS-02	Pelvis Gone Wild: A Sordid Tale of Musculoskeletal Dysfunction	Level 3 Gracia 1	Meryl J. Alappattu PT, DPT, PHD
9:10a – 10:00a	NRO-01	Neuroinflammation: Treating the Underlying Cause of Chronic, Severe Pain	Level 4 Nolita 1	Forest Tennant MD, FACPM, MPH, DRPH
9:10a – 11:00a	SIS-19	The Medical Stasi: Is Urine Drug Testing Necessary?	Level 4 Mont-Royal Ballroom	Jennifer Bolen JD Paul J. Christo MD, MBA Douglas L. Gourlay MD, MSC, FRCPC, FASAM Howard A. Heit MD, FACP, FASAM Gary M. Reisfeld MD
10:00a – 10:30a		Break & Exhibits		
10:30a – 11:20a	APS- 02	The Biological Interface of Resilience	Level 4 Nolita 3	Emily J. Bartley PHD Kimberly T. Sibille MA, PHD
10:30a - 11:20a	IPPS-03	When Pain Is Not Sexy: Evaluation and Management of Sexual Pain in Females	Level 3 Gracai 1	Georgine M. Lamvu MD, MPH, FACOG
10:30a – 11:20a	NRO-02	Differential Diagnosis of Myelopathies	Level 3 Gracia 3	Charles E. Argoff MD, CPE
11:30a – 12:00p	POP- 07	Pharmacogenetics 101: Reviewing the Cytochrome System & Other Genetic Variations Important in Treating Pain and Depression	Level 3 Gracia 1	Thien C. Pham PHARMD
11:30a – 12:00p	POP-08	Interdisciplinary Integration of Next Generation Pharmacists	Level 3 Gracia 3	Timothy J. Atkinson PHARMD, BCPS
12:15p – 1:30p	PDM-21	Opioid-Induced Constipation: The Science, Patient Burden, and a Prescription Treatment Approach*	Level 3 Brera Ballroom	Rainer Vogel md, daba, dabipp, fipp
		Sponsored by Daiichi Sankyo and AstraZeneca		
12:15p – 1:30p	PDM-22	A New Path to Pain Relief: Time for a Change with a Peripherally Acting Kappa Opioid Receptor Agonist (KORA)*	Level 3 Castellana Ballroom	Michael J. Brennan MD Joseph W. Stauffer DO, MBA
		Sponsored by Cara Therapeutics		
1:40p – 2:30p	IPPS-04	Beyond Pharmacotherapy: An Integrated Approach to Managing Female	Level 3 Gracia 1	Kathryn A. Witzeman MD, FACOG
		Chronic Pelvic Pain		

FRiDay

FRiday

1:40p - 3:30p	MAS-03	Differential Diagnosis of Low Back Pain	Level 3 Gracia 3	David M. Glick DC, DAAPM, CPE, FASPE
1:40p - 4:40p	PCD-01	Common Threads in Pain and Chemical Dependency	Level 4 Mont-Royal Ballroom	Douglas L. Gourlay MD, MSC, FRCPC, FASAM Howard A. Heit MD, FACP, FASAM Mel Pohl MD
2:40p – 3:30p	APS-03	Ramping Up Resilience for Chronic Pain: Strategies for Reducing Pain and Improving Function	Level 4 Nolita 3	Emily J. Bartley PHD Kimberly T. Sibille MD, PHD
2:40p – 3:30p	MDL-03	How Many Lawyers Does It Take to Keep a Practitioner Out of Trouble?	Level 3 Gracia 7	Michael C. Barnes JD, MIEP Jennifer Bolen JD Stephen J. Ziegler PHD, JD
2:40p – 3:30p	NRO-03	Arachnoiditis: Taming the Painful Shrew	Level 4 Nolita 1	Forest Tennant MD, FACPM, MPH, DRPH
3:30p – 4:30p		Exhibit Hall Closing Reception	Level 4 Exhibit Hal l	l
4:40p – 5:30p	APS-04	Resilience Interventions for Pain	Level 4 Nolita 3	Afton L. Hassett PSYD
4:40p – 5:30p	MMJ-02	Medical Efficacy of Cannabis Therapeutics: Focus on Pain Management	Level 4 Nolita 1	Donald I. Abrams MD Theresa Mallick-Searle MS, NP-BC, ANP-BC
4:40p – 6:00p	MAS-04	Neurogenic Thoracic Outlet Syndrome	Level 3 Gracia 5	Paul J. Christo MD, MBA
4:40p – 6:00p	SIS-20	Opioid Sparing: Treating the Whole Patient	Level 3 Gracia 3	Ignacio J. Badiola мD Martin D. Cheatle РНD Peter G. Pryzbylkowski мD Peter Yi мD
5:40p – 6:30p	APS- 05	Building Brain Resilience Through Mindfulness Meditation	Level 4 Nolita 3	Fadel Zeidan PHD
5:40p – 6:30p	ммл-оз	Cannabis vs Cannabinoids: The Politics of Medical Marijuana	Level 4 Mont-Royal Ballroom	Douglas L. Gourlay MD, MSC, FRCPC, FASAM
5:40p – 6:30p	NRO-04	Clinical Conundrum My Head's Stuck in a Waffle Iron and Can't Get Out! The Mystery of Occipital Neuralgia	Level 4 Nolita 1	Gary W. Jay MD, FAAPM, FACFEI



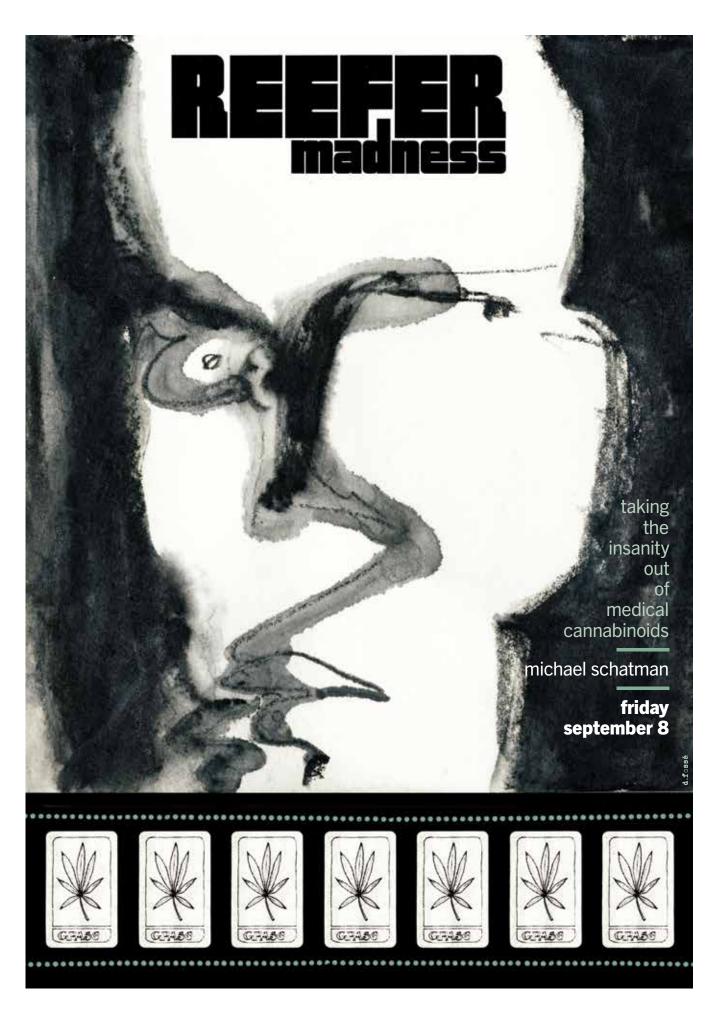
9.8

SATURDAY

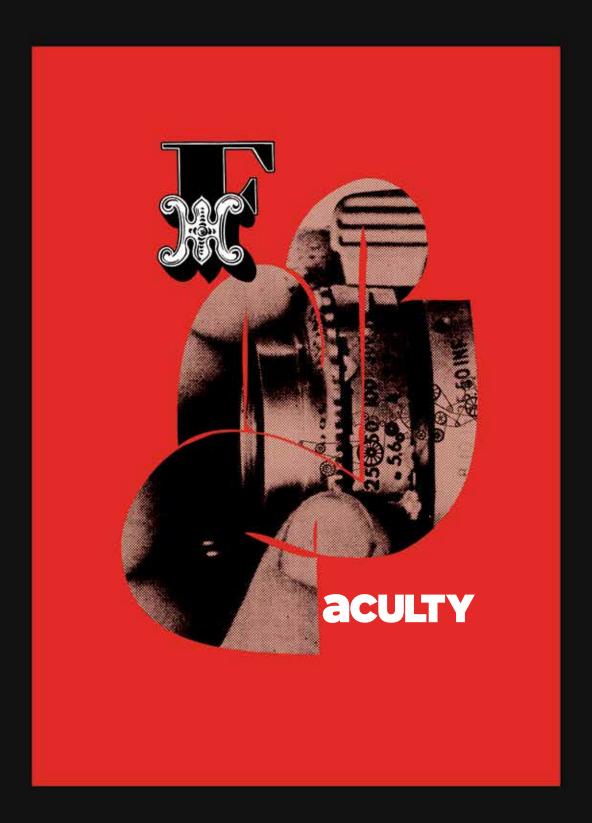
7:00a - 7:50a	PAL-01	A Wrinkle in the Plan: Metabolic Changes and Palliative Care in the Older Adult	Level 3 Gracia 5	Tanya J. Uritsky pharmd, bcps
7:00a - 7:50a	PTH-01	Words Wisely Chosen: Avoiding the Unintended Nocebo Effect	Level 3 Gracia 3	Kathryn A. Schopmeyer PT, DPT, CPE
7:00a – 8:00a	SYM-02	Finding Relief from Opioid-Induced Constipation: Emerging Therapies for Individualized Management	Level 3 Gracia 1	Jeffrey A. Gudin MD
8:00a – 9:00a	PAL-02	New Drugs in Pain Management and Palliative Care	Level 3 Gracia 3	Alexandra McPherson PHARMD, MPH Mary Lynn McPherson PHARMD, MA, BCPS, CPE
8:00a – 9:00a	рнм-о6	Topical Opioids: The Perfect Solution for Reducing Systemic Opioid Exposure	Level 3 Gracia 1	Annas Aljassem MD Levi M. Hall Pharmd, BCPS
8:00a – 9:00a	W0U-01	Insult to Injury: Wound and Other Pains in a Wound Care Patient	Level 4 Nolita 3	Michael S. Miller do, facos, fapwca, wcc
9:10a – 10:30a	SIS-21	Using Electronic Pain Assessment Programs and Innovative Technology in Pain Medicine: Where Are We Now and Where Are We Going?	Level 4 Mont-Royal Ballroom	Stephen F. Butler PHD Robert N. Jamison PHD M. Cary Reid, Jr MD, PHD
9:10a - 11:00a	FCN-01	All You Need Is Love: Incorporating Functional Medicine in Pain Care	Level 3 Gracia 1	David Cosio PHD David Schaefer DO, MPH
9:10a - 11:00a	PTH- 02	Fascial Distortion Model: Pattern Recognition of Patients' Subtle Hand Gestures When Describing Symptoms	Level 3 Gracia 5	Matthew R. Booth PT, DPT Todd A. Capistrant DO, MHA, CS
10:00a - 10:30a		Break		
10:30a – 11:20a	PAL-03	Speed Dating With the Pharmacy Ladies: Pain Management and Palliative Care	Level 3 Gracia 3	Alexandra McPherson PHARMD, MPH Mary Lynn McPherson PHARMD, MA, BCPS, CPE
10:30a - 11:20a	PTH-03	Exercise Prescription for Patients With Chronic Pain	Level 4 Nolita 1	Jason L. Silvernail DPT, DSC, OCS, CSCS, FAAOMPT
10:30a - 12:00p	W0U-02	Woundology: The Spectrum of Reasons Why the Epithelium Gets Lost	Level 4 Nolita 3	Michael S. Miller do, facos, fapwca, wcc
11:30a - 12:00p	POP- 09	Making America Treatment Friendly Again: Federal Policy and Pain	Level 3 Gracia 1	Michael C. Barnes JD, MIEP
11:30a – 12:00p	POP-10	Relaxation Through Music	Level 3 Gracia 3	John F. Mondanaro MA, MT-BC, LCAT Andrew R. Rossetti MMT, LCAT, MT-BC
1:40p – 2:30p	PHM-07	3's Company: COX-2 Inhibitors, Medicinal Marijuana, and Opioid Prescribing	Level 3 Gracia 3	Alexandra McPherson PHARMD, MPH Mary Lynn McPherson PHARMD, MA, BCPS, CPE Tanya J. Uritsky PHARMD, BCPS
1:40p - 3:30p	FCN-02	Food Is Medicine: A Review of the Anti-Inflammatory Diet	Level 3 Gracia 1	David Cosio PHD David Schaefer do, мрн
1:40 - 3:30p	SIS-22	Born to Be Wild? Music Therapy Applications for Neonatal Abstinence Syndrome	Level 4 Nolita 3	Joanne V. Loewy DA, LCAT, MT-BC John F. Mondanaro MA, MT-BC, LCAT Andrew R. Rossetti MMT, LCAT, MT-BC
2:40p – 3:30p	PHM-08	The 411 on Nonprescription Analgesics: When to Hold 'Em, When to Fold 'Em	Level 3 Gracia 3	Alexandra McPherson PHARMD, MPH Mary Lynn McPherson PHARMD, MA, BCPS, CPE
2:40p – 3:30p	PTH- 04	Restoring Hope: The Treatment of Pelvic Pain Across the Gender Spectrum	Level 4 Nolita 1	Sandra J. Hilton PT, DPT, MS
3:40p – 4:30p	FCN-03	Looking in the Rearview Mirror: Addressing Inflammation Through Lifestyle Imbalances	Level 4 Nolita 1	David Cosio РНD David Schaefer DO, МРН
3:40p – 4:30p	PAL-04	IV Methadone: When All Else Fails	Level 4 Nolita 3	Annas Aljassem MD Levi M. Hall PHARMD, BCPS
3:40p – 4:30p	PTH-05	At the Edge of Interaction: Applying Edge Work and Novel Movement to Painful Motion	Level 3 Gracia 3	Cory Blickenstaff PT, MS, OCS













Lesa R. Abney BSN, MINT Instructor, Coach Take Courage Coaching Bozeman, MT Disclosure not submitted

Donald I. Abrams MD

Professor of Clinical Medicine University of California, San Francisco Department of Hematology-Oncology Chief, Hematology-Oncology San Francisco General San Francisco, CA

Consultant/Independent Contractor: Abcann; Maui Wellness Group; Tikun Olam

Jeremy A. Adler MS, PA-C

Co-Owner, Chief Operating Officer Pacific Pain Medicine Consultants Encinitas, CA

Consultant/Independent Contractor:

Collegium Pharmaceuticals; Egalet; Quest Diagnostics **Speakers Bureau:** AstraZeneca; Daiichi Sankyo, Inc.; Depomed; kaléo, Inc; Millennium Labs; Pernix; St. Jude Medical Neuromodulation Systems

Meryl J. Alappattu PT, DPT, PHD

Research Assistant Professor University of Florida Department of Physical Therapy Gainesville, FL

Other/Royalty: Evidence-based Pelvic Education Consultants; StylifyU

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: Depomed; Grünenthal; Nevro; Novartis; Pfizer; Purdue; Theranica; Vertex Grant/Research Support: Grünenthal; Theranica Speakers Bureau: Allergan; BDSI; Collegium; Depomed; Pernix; Jazz Pharmaceutical Stock Shareholder: Depomed; Pfizer Sawsan As-Sanie MD, MPH Assistant Professor University of Michigan Department of Obstetrics and Gynecology Ann Arbor, MI

Consultant/Independent Contractor: Abbvie; Daiichi Sankyo

Timothy J. Atkinson PHARMD, BCPS Clinical Advisor, Pharmacy Pain Specialist Axial Healthcare Nashville, TN

Nothing to disclose

Ignacio J. Badiola MD

Assistant Professor Anesthesiology and Critical Care University of Pennsylvania Perelman School of Medicine Attending Physician/Anesthesiologist Penn Presbyterian Medical Center Hospital of the University of Pennsylvania Department of Anesthesiology Philadelphia, PA

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

Emily J. Bartley PHD

Research Assistant Professor University of Florida Pain Research and Intervention Center of Excellence Gainesville, FL

Nothing to disclose

Rami Ben-Joseph PHD

Senior Vice-President Health Outcomes Research Millennium Health San Diego, CA

Other/Royalty: Employee of Millennium Health

Hal S. Blatman MD, DAAPM, ABIHM *Medical Director* Blatman Health and Wellness Center Cincinnati, OH

Disclosure not submitted

Cory Blickenstaff PT, MS, OCS Owner Forward Motion Physical Therapy Vancouver, WA

Nothing to disclose

Trina L. Boice

Adjunct Faculty Brigham Young University—Idaho Rexburg, ID Disclosure not submitted

Jennifer Bolen JD

Founder Legal Side of Pain Knoxville, тм

Consultant/Independent Contractor: Alere; INSYS; MTL Solutions, LLC; ReCept Pharmacy

Matthew R. Booth PT, DPT

Clinical Faculty University of Washington Medical School Department of Family Medicine Seattle, WA *Clinical Director* Therapeutic Associates Physical Therapy Boise, ID

Consultant/Independent Contractor: FDM Academy

Abigail T. Brooks PHARMD, BCPS

Consultant Axial Healthcare Nashville, TN

Nothing to disclose

Dawn C. Buse PHD

Associate Professor Albert Einstein College of Medicine of Yeshiva University Director of Behavioral Medicine Montefiore Headache Center Department of Neurology Bronx, NY

Consultant/Independent Contractor: Eli Lilly Grant/Research Support: Allegan; Amgen; Avanir; Dr. Reddy's Laboratories

Stephen F. Butler PHD Senior Vice-President & Chief Science Officer Inflexxion, Inc. Newton, MA

Todd A. Capistrant DO, MHA, CS Regional Clinical Dean Adjunct Clinical Assistant Professor Pacific Northwest University of Health Sciences Yakima, WA Physician Tanana Valley Clinic Fairbanks, АК

Stock Shareholder: Co-founder of an LLC focused on teaching and spreading the fascial distortion model Other/Royalty: Authored an introductory book about fascial distortion model

Ian Carroll MD, MS Assistant Professor Stanford University Medical Center Department of Anesthesiology, Perioperative, and Pain Medicine Palo Alto, CA

Nothing to disclose

Martin D. Cheatle PHD

Associate Professor Director Pain and Chemical Dependency Program Perelman School of Medicine University of Pennsylvania Center for Study of Addiction Philadelphia, PA

Disclosure not submitted

Paul J. Christo MD, MBA

Associate Professor Johns Hopkins University School of Medicine Department of Anesthesiology and Critical Care Medicine Division of Pain Medicine Baltimore, MD

Consultant/Independent Contractor: Collegium; Daiichi Sankyo; Egalet; INSYS Therapeutics

Michael R. Clark MD, MPH, MBA

Vice Chair Clinical Affairs Johns Hopkins University School of Medicine Director, Pain Treatment Programs Johns Hopkins Medical Institutions Department of Psychiatry, Behavioral Sciences Baltimore, MD

Disclosure not submitted

David Cosio PHD

Psychologist University of Illinois College of Medicine Division of Pain Medicine Jesse Brown Veterans Affairs Medical Center Anesthesiology/Pain Clinic Chicago, IL

Nothing to disclose

Ramon L. Cuevas-Trisan MD

Affiliate Assistant Professor University of Miami—Miller School of Medicine Chief Physical Medicine, Rehabilitation & Pain Management Service

West Palm Beach VA Medical Center West Palm Beach, FL

Speakers Bureau: Allergan

Becky L. Curtis PCC *Professional Certified Coach* International Coach Federation Lexington, KY

Nothing to disclose

Elaine S. Date MD

Partner ReMeDy Medical Group Redwood City, CA Disclosure not submitted

Kathleen B. Digre MD

Professor Department of Neurology and Ophthalmology Adjunct Professor Department of Obstetrics and Gynecology Director Division of Headache and Neuro-Ophthalmology University of Utah Salt Lake City, UT

Other/Royalty: Royalty from Elsevier book: *Imaging in Neurology*; part owner on a patent for thin-filmed technology

Frank D. Ferris MD

Executive Director Palliative Medicine, Research & Education OhioHealth Columbus, он

Speakers Bureau: Salix Pharmaceuticals

Roger B. Fillingim PHD

Distinguished Professor University of Florida College of Dentistry Director University of Florida Pain Research and Intervention Center of Excellence Gainesville, FL Nothing to disclose

Melissa Fledderjohann PSYD Director of Pain Management Clinic San Mateo Medical Center San Mateo, CA

Nothing to disclose

Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP Adjunct Associate Professor Western New England College of Pharmacy Western New England University Springfield, MA Clinical Pharmacy Specialist, Residency Director PGY-2 Pain & Palliative Care Pharmacy

Stratton VA Medical Center Albany, NY

Consultant/Independent Contractor: Clarity; Endo; KemPharm; Scilex Phamaceuticas Honoraria: Collegium Speakers Bureau: AstraZeneca; Depomed; Endo; Iroko Phamaceuticals; kaléo; Pernix Therapeutics Advisory Board: Daiichi Sankyo; Depomed; kaléo; Kashiv Pharma Other/Royalty: Remitigate, LLC [Owner]

Jessica Geiger-Hayes PHARMD, BCPS, CPE *Clinical Pharmacist, Palliative Care* OhioHealth Riverside Methodist Hospital

Columbus, он Nothing to disclose

Philip Getson DO

Clinical Assistant Professor of Medicine Drexel University College of Medicine (Hahnemann) Department of Neurology Philadelphia, PA Nothing to disclose

David M. Glick DC, DAAPM, CPE, FASPE CEO & Medical Director HealthQ2 Richmond, VA Nothing to disclose

Marc S. Gonzalez PHARMD Investigator National Association of Drug Diversion Investigators Los Angeles, CA Disclosure not submitted

Errol M. Gould PHD Senior Director Medical and Scientific Affairs Pernix Therapeutics Morristown, NJ

Other/Royalty: Employee of Pernix

Douglas L. Gourlay MD, MSC, FRCPC, FASAM Educational Consultant Former Director Wasser Pain Centre Pain and Chemical Dependency Division Toronto, ONTARIO

Abhishek Gowda MD

Medical Director San Mateo Medical Center Department of Chronic Pain Management San Mateo, CA

Nothing to disclose

Thomas B. Gregory PHARMD, BCPS, DASPE, CPE *Adjunct Clinical Instructor* University of Missouri-Kansas City School of Pharmacy Kansas City, MO *Pain Management Pharmacy Specialist* Cox Health Springfield, MO

Nothing to disclose

Jeffrey A. Gudin MD

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/Independent Contractor: Collegium; Daiichi Sankyo; Depomed; Egalet; Inspirion; INSYS; Kempharm; Quest Diagnostics; Salix; Shionogi; Teva

Jennifer M. Hah MD, MS Instructor Stanford University Department of Anesthesiology, Perioperative, and Pain Medicine Division of Pain Medicine Stanford, CA

Nothing to disclose

Levi M. Hall PHARMD, BCPS Assistant Professor Oakland University William Beaumont School of Medicine Rochester, MI *Clinical Pharmacy Specialist* Department of Pain & Palliative Medicine Beaumont Hospital, Royal Oak 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

Consultant/Independent Contractor: Abbott; Charleston Labs; Grünenthal; INSYS

Afton L. Hassett PSYD

Associate Research Scientist University of Michigan Medical School Anesthesiology, Chronic Pain & Fatigue Research Center Ann Arbor, MI Nothing to disclose

Howard A. Heit MD, FACP, FASAM Assistant Clinical Professor of Medicine Georgetown University School of Medicine Washington, DC

Nothing to disclose

Sandra J. Hilton PT, DPT, MS Physical Therapist Entropy Physiotherapy and Wellness Chicago, IL Disclosure not submitted

Robert N. Jamison PHD Professor Harvard Medical School Departments of Anesthesiology, Peroperative and Pain Medicine, and Psychiatry Boston, MA *Clinical Psychologist* Brigham and Women's Hospital Departments of Anesthesiology, Peroperative and Pain Medicine, and Psychiatry Provo, UT

Nothing to disclose

Gary W. Jay MD, FAAPM, FACFEI Clinical Professor University of North Carolina Department of Neurology Chapel Hill, NC

Nothing to disclose

Ted W. Jones PHD, CPE

Clinical Psychologist Pain Consultants of East Tennessee Knoxville, тм

Nothing to disclose

Jay Joshi MD, DABA, DABA-FM, FABA-FM CEO and Medical Director National Pain Centers Vernon Hills, IL

Disclosure not submitted

Sue Kincer CPC, CHA President/Owner Medical Practice Partner Riverview, FL

Nothing to disclose

Courtney M. Kominek PHARMD, BCPS, CPE *Clinical Pharmacy Specialist - Pain Management* Harry S. Truman Memorial Veterans' Hospital Columbia, мо

Consultant/Independent Contractor: Axial Healthcare Inc

Ernest A. Kopecky PHD, MBA Vice President, Clinical Development Head, Global Pain Medicine Teva Pharmaceutical Industries, Ltd. Malvern, PA

Nothing to disclose

Georgine M. Lamvu MD, MPH, FACOG *Gynecologic Surgeon and Pelvic Pain Specialist* Veterans Administration Medical Center Department of Surgery Orlando, FL

Nothing to disclose

Sean Li MD Attending Pain Physician Riverview Medical Center Red Bank, NJ

Consultant/Independent Contractor: Boston Scientific; Medtronic; Nevro; Suture Concepts Grant/Research Support: Grünenthal; Nevro; Saluda Medical Speakers Bureau: Depomed; SI-Bone Stock Shareholder: Suture Concepts

Joanne V. Loewy DA, LCAT, MT-BC Director and Associate Professor Mount Sinai Beth Israel- Icahn School of Medicine Louis Armstrong Center for Music & Medicine New York, NY

Nothing to disclose

Tracey B. Long PHD, RN, BSN, MS Nursing Professor Chamberlain College Brightwood College Las Vegas, NV

Nothing to disclose

Theresa Mallick-Searle MS, NP-BC, ANP-BC *Nurse Practitioner* Stanford Health Care Division of Pain Medicine Stanford, CA

Speakers Bureau: Allergan; Pernix

Darren McCoy FNP-BC, CPE Clinical Precepter/Adjunct Faculty College of Nursing University of Tennesee-Knoxville Nurse Practitioner Pain Consultants of East Tennessee Knoxville, TN

Lisa M. McElhaney BS

National President National Association of Drug Diversion Investigators Lutherville, MD

Nothing to disclose

Alexandra McPherson PHARMD, 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 PHARMD, MA, BCPS, CPE

Professor and Executive Director Advanced Post-Graduate Education in Palliative Care University of Maryland School of Pharmacy Pharmacy Practice and Science Baltimore, MD *Consultant Pharmacist* Hospice and Palliative Care Stevensville, MD

Nothing to disclose

Michael S. Miller DO, FACOS, FAPWCA, WCC

Clinical Assistant Professor Marian University College of Osteopathic Medicine Indianapolis, IN *CEO and Medical Director* Miller Care Group Indianapolis, IN

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

Srinivas Nalamachu MD

President and Medical Director International Clinical Research Institute Department of Physical Medicine and Rehabilitation Overland Park, KS

Nothing to disclose

Steven D. Passik PHD

Vice President Collegium Pharmaceuticals, Inc. Scientific Affairs, Education and Policy Cantor, MA

Consultant/Independent Contractor: Collegium Pharmaceutials, Inc.

Joseph V. Pergolizzi, Jr мо

Chief Operating Officer Nema Research Inc. Naples, FL

Consultant/Independent Contractor: BDSI; DepoMed; GE Healthcare; Grünenthal; Integra; Purdue Pharma; Salix Grant/Research Support: Pernix; Purdue Pharma Speaker's Bureau: AstraZeneca; BDSI; Depomed; DSI

Thien C. Pham PHARMD

Clinical Pharmacy Specialist - Pain Management VA Medical Center Long Beach, CA

Nothing to disclose

Mel Pohl MD

Clinical Assistant Professor University of Nevada School of Medicine Department of Psychiatry, Behavioral Sciences Chief Medical Officer Las Vegas Recovery Center Las Vegas, NV

Nothing to disclose

Ravi Prasad PHD

Clinical Associate Professor Stanford University Department of Anesthesiology, Perioperative, and Pain Medicine Stanford, CA Nothing to disclose

Peter G. Pryzbylkowski MD

Interventional Pain Specialist Relievus Cherry Hill, NJ

Nothing to disclose

Robert B. Raffa PHD

Professor Emeritus and Past Chair Temple University School of Pharmacy Department of Pharmaceutical Sciences Philadelphia, PA

Nothing to disclose

M. Cary Reid, Jr MD, PHD Associate Professor of Medicine Weill School of Graduate Medical Sciences Cornell University New York, NY

Nothing to disclose

Gary M. Reisfeld мD

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

Eleni M. Romano PHD

Clinical Psychologist, Health Behavior Coordinator Denver VA Medical Center Denver, co

Nothing to disclose

Andrew R. Rossetti MMT, LCAT, MT-BC Appointment Associate Professor University of Barcelona Masters Program in Music Therapy Barcelona, SPAIN Coordinator Music Therapy Program in Radiation Oncology Mount Sinai Beth Israel Medical Center Louis Armstrong Center for Music & Medicine New York, NY

Nothing to disclose

David Schaefer DO, MPH Physician Jesse Brown VA Medical Center Chicago, IL

Nothing to disclose

Michael E. Schatman PHD, CPE, DASPE Adjunct Clinical Assistant Professor Tufts School of Medicine Department of Public Health & Community Medicine Boston, MA

Nothing to disclose

Kathryn A. Schopmeyer PT, DPT, CPE Physical Therapy Program Coordinator Pain Management San Francisco VA Healthcare System San Francisco, CA

Nothing to disclose

Allison E. Schroeder PHARMD, BCPS *Clinical Pharmacy Specialist* Eastern Colorado Heath Care System Denver, co

Kimberly T. Sibille MA, PHD

Assistant Professor University of Florida College of Medicine Department of Aging & Geriatric Research Gainesville, FL

Nothing to disclose

Jason L. Silvernail

DPT, DSC, OCS, CSCS, FAAOMPT Associate Professor Musculoskeletal Medicine Uniformed Services University Chief of Physical Therapy Service National Capitol Region PT Consultant Walter Reed National Military Medical Center Bethesda, MD

Nothing to disclose

Brett R. Stacey MD

Professor University of Washington Department of Anesthesiology and Pain Medicine Seattle, WA *Medical Director* UW Center for Pain Relief Seattle, WA

Consultant/Independent Contractor: Kineta, Inc; Teva Grant/Research Support: Axsome; Teva

Robert Taylor, Jr PHD

Executive Director of Operations NEMA Research Inc. Naples, FL Nothing to disclose

Forest Tennant MD, FACPM, MPH, DRPH

Medical Director Veract Intractable Pain Clinic West Covina, cA

Editor: Practical Pain Management Speakers Bureau: Regenesis Biomedical

Heather Tick MD

Clinical Associate Professor UW Medicine Department of Family Medicine Seattle, WA

Nothing to disclose

Tanya J. Uritsky PHARMD, BCPS

Clinical Pharmacy Specialist Pain and Palliative Care Hospital of the University of Pennsylvania Philadelphia, PA

Nothing to disclose

Bert B. Vargas MD, FAHS, FAAN

Associate Professor of Neurology UT Southwestern Director Sports Neurology and Concussion Program UT Southwestern Dallas, TX

Advisory Board/Consultant/Independent Contractor: Alder; Avanir; Pernix Speakers Bureau: Avanir

Mark S. Wallace MD

Professor of Clinical Anesthesiology University of California, San Diego Department of Anesthesiology *Chair, Division of Pain Medicine* UCSD Health System Department of Anesthesiology La Jolla, CA

Consultant/Independent Contractor: Boston Scientific; Jazz Pharmaceutical

Thomas N. Ward MD

Emeritus Professor of Neurology Geisel School of Medicine at Dartmouth Hanover, NH

Consultant/Independent Contractor: Dartmouth Region Medical Legal Consulting (President and Treasurer) Other/Royalty: Stipend as Editor-in-Chief, *Headache* (paid by American Headache Society)

Christian Washburn PSYD

Director of Training San Mateo Medical Center Pain Management Clinic San Mateo, CA Nothing to disclose

to disclose

Anthony A. Whitney MS, LHMC, BCB

Masters in Clinical Psychology Eastern Washington University Department of Clinical Psychology Cheney, WA Behavioral Therapist and Biofeedback Specialist Northwest Neurobehavioral Institute Psychology and Chronic Pain Department Spokane, WA Nothing to disclose

Kathryn A. Witzeman MD, FACOG

Associate Professor Department of OB/GYN Associate Director Women's Health, Ambulatory Care Services Denver Health Hospital Authority Director Women's Integrated Pelvic Health Program Denver, co

Nothing to disclose

Peter Yi MD

Assistant Professor University of Pennsylvania Department of Clinical Anesthesiology and Critical Care Philadelphia, PA

Disclosure not submitted

Kevin L. Zacharoff MD, FACIP, FACPE, FAAP Faculty SUNY Stony Brook School of Medicine Department of Preventive Medicine Stony Brook, NY Anesthesiologist St Catherine of Siena Medical Center Department of Anesthesiology Smithtown, NY

Nothing to disclose

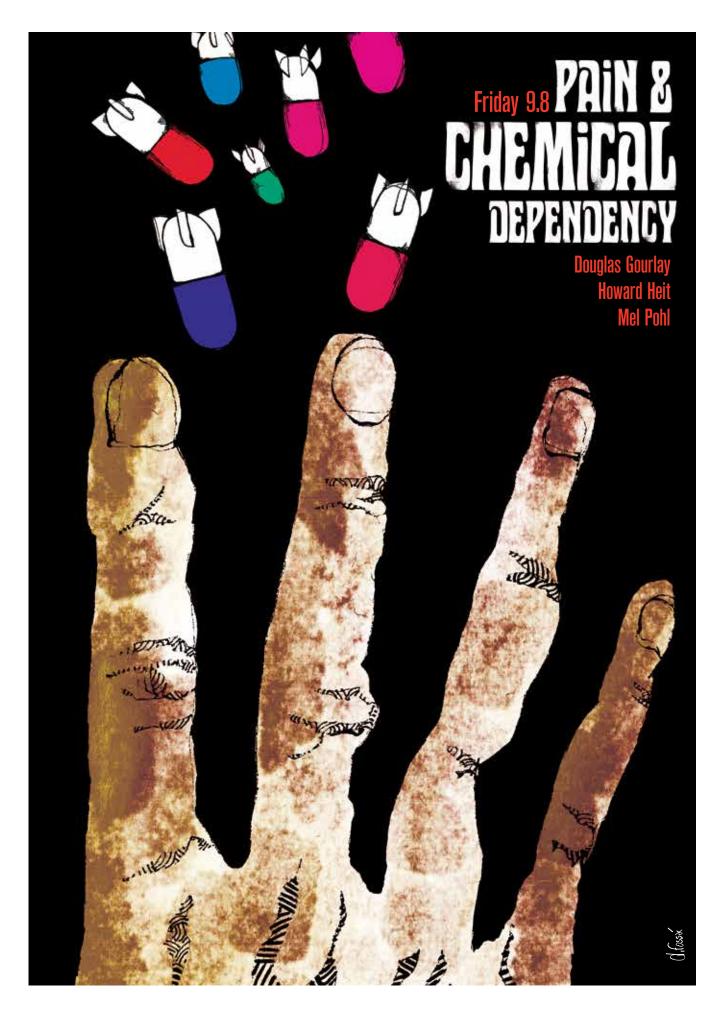
Fadel Zeidan PHD

Assistant Professor Departments of Anesthesiology, Neurobiology and Anatomy Wake Forest School of Medicine Associate Director Research Center for Integrative Medicine Winston-Salem, NC

Nothing to disclose

Stephen J. Ziegler PHD, JD

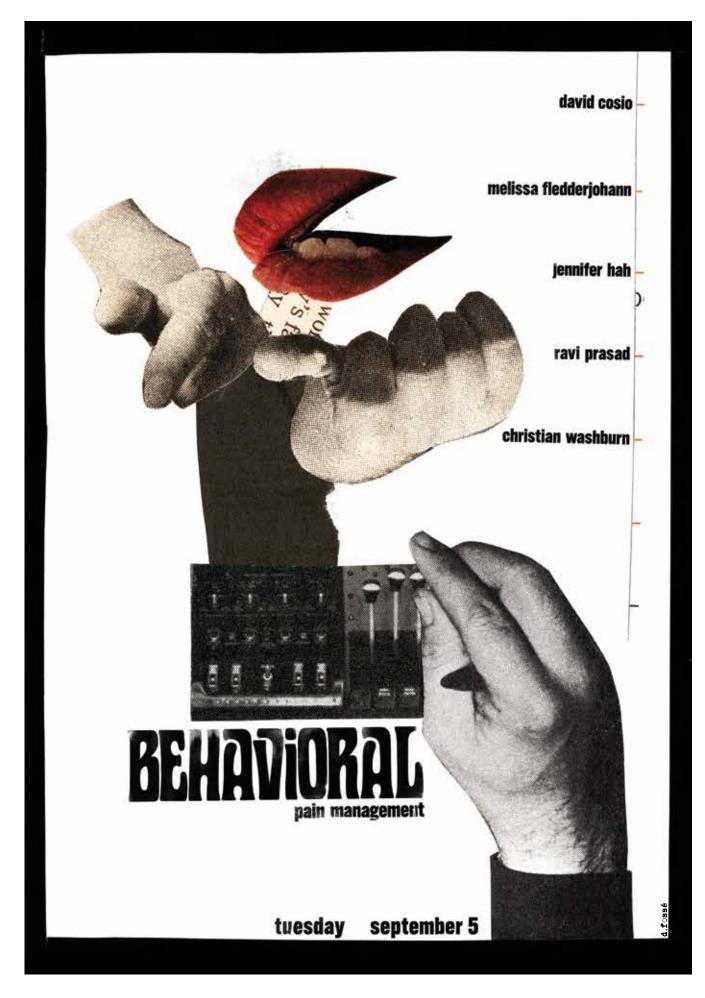
Associate Professor Emeritus of Public Policy Purdue University Department of Public Policy Fort Wayne, IN Mayday Pain & Scholar Fellow

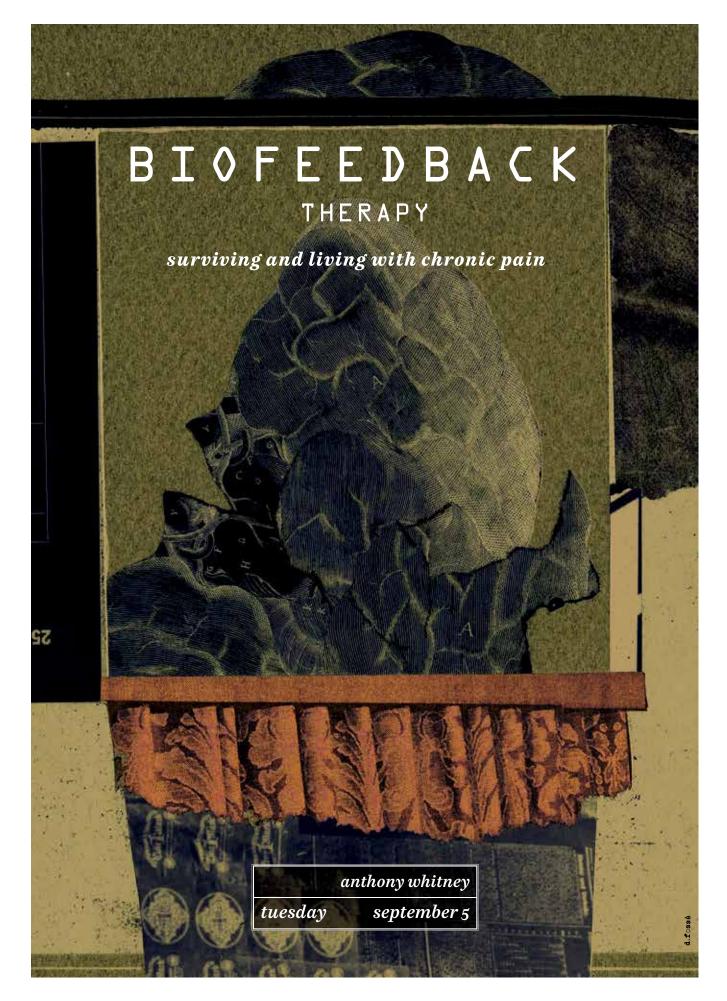


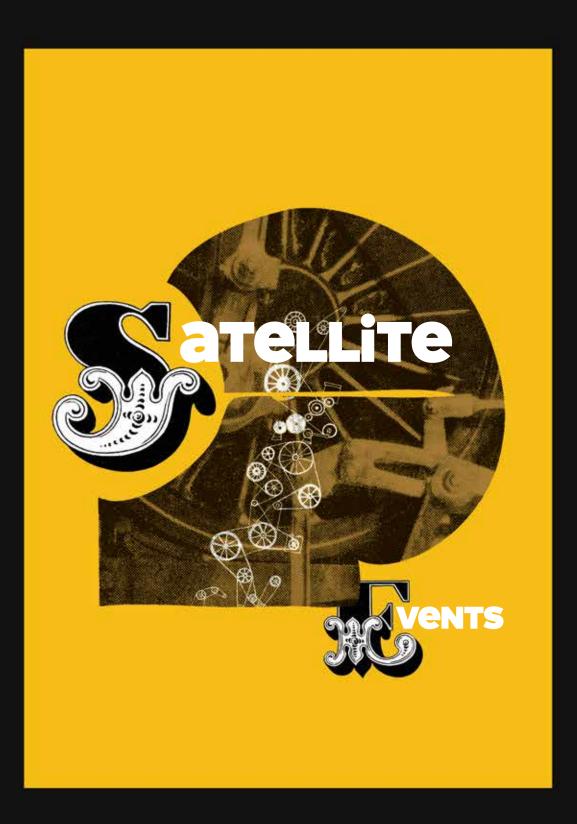


FROM TORPEDO FISH TO HF10

the evolution of neuromodulation







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 2017 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 was accurate as of press time. For the most up-to-date information please **visit m.painweek.org**.

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.

PDM Programs Product Theatre, Disease Awareness, and Medical Information

Events listed in chronological order. Check **m.painweek.org** for the most up to date PDM information.

NON-CME ACTIVITIES

(Not certified for credit)

Breakfast PDM

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

Sponsored by Collegium Pharmaceutical, Inc.

Jeffrey A. Gudin MD

Course code: PDM-01

Tuesday 9.5 8:00a – 9:00a

Level 3.Brera Ballroom

Breakfast will be served.

Contact: Sheri Selvey PHARMD; (317) 615–9891; sselvey@collegiumpharma.com

Lunch PDM

Chronic Pain Treatment: Opioids Reconsidered *Sponsored by* **BioDelivery Sciences**

Joseph V. Pergolizzi, Jr MD • Richard Rauck MD

Course code: PDM-03

Tuesday 9.5 12:15p – 1:30p

Level 3.Brera Ballroom

Lunch will be served.

Contact: Bridget Beck; (914) 703–3215; bbeck@curryrockefellergroup.com

PDM

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

Sponsored by Salix Pharmaceuticals

Jeffrey A. Gudin MD

Course code: PDM-06

Tuesday 9.5 3:40p – 4:30p

Level 3. Castellana Ballroom

Refreshments will be served.

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

Breakfast PDM

A Presentation by Daiichi Sankyo, Inc. & Inspirion Delivery Sciences

Sponsored by Daiichi Sankyo, Inc.

Faculty to be announced

Course code: PDM-07

Wednesday 9.6 8:00a - 9:00a

Breakfast will be served.

Contact: Scott Wearley; (908) 992–6981; swearley@dsi.com

Breakfast PDM

How Policy, Guidelines, and the Media Challenge Patient Access to Opioid Pain Management:

Level 3.Brera Ballroom

Shifting the Focus from Politics to Patients Sponsored by Pernix Therapeutics

Charles E. Argoff MD, CPE • Michael C. Barnes ESQ

Course code: PDM-08

Wednesday 9.6 8:00a – 9:00a Level 3.Castellana Ballroom

Breakfast will be served.

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

Lunch PDM

Navigating the Opioid Landscape:

The Right Molecule at the Right Time Sponsored by Depomed, Inc.

Michelle Brown MD

Course code: PDM-09

Wednesday 9.6 12:15p - 1:30p

Lunch will be served.

Contact: Alexandria Antonelle; (908) 766–2003; aantonelle@decileten.com

Lunch PDM

Analgesic of the Future:

A New Opioid Molecule With Slow Entry Into the CNS Sponsored by Nektar Therapeutics

Jeffrey A. Gudin MD • Richard Rauck MD

Course code: PDM-10

Wednesday 9.6 12:15p – 1:30p Level 3.Castellana Ballroom

• Lunch will be served.

Contact: Suresh Siddhanti; (415) 482-5772; ssiddhanti@nektar.com

Level 3.Brera Ballroom

PDM

A Presentation by Daiichi Sankyo, Inc. & **Inspirion Delivery Sciences** Sponsored by Daiichi Sankyo, Inc.

Faculty to be announced

Course code: PDM-12

Wednesday 9.6 3:40p - 4:30p Level 3.Castellana Ballroom

Refreshments will be served.

Contact: Scott Wearley; (908) 992-6981; swearley@dsi.com

Breakfast PDM

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

Rainer Vogel MD, DABA, DABIPP, FIPP

Course code: PDM-13

Thursday 9.7 8:00a – 9:00a

Level 3.Brera Ballroom

Level 3.Castellana Ballroom

Level 3.Brera Ballroom

Breakfast will be served.

Contact: Linda Corsini; (888) 595–7737 Ext. 51035; lcorsini@ahmdirect.com

Breakfast PDM

Postherpetic Neuralgia Treatment:

Understanding the Neuropathic Disease Sponsored by Arbor Pharmaceuticals, LLC

Charles E. Argoff MD, CPE

Course code: PDM-14

Thursday 9.7 8:00a – 9:00a

Breakfast will be served.

Contact: Rollin Knecht; (404) 418-5305; rollin.knecht@arborpharma.com

Lunch PDM

A Presentation by Daiichi Sankyo, Inc. & **Inspirion Delivery Sciences** Sponsored by Daiichi Sankyo, Inc.

Faculty to be announced

Course code: PDM-15

Thursday 9.7 **12:15**p – 1:30p

Lunch will be served.

Contact: Scott Wearley; (908) 992-6981; swearley@dsi.com

Breakfast PDM

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

Sponsored by Salix Pharmaceuticals

Gerald M. Sacks MD

Course code: PDM-19



Level 3.Brera Ballroom

Breakfast will be served.

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

Breakfast PDM

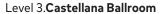
Insights on Novel Technology in Pain Management With **Abuse-Deterrent Extended-Release Opioids**

Sponsored by Collegium Pharmaceutical, Inc.

Gerard DeGregoris, III MD

Course code: PDM-20

Friday 9.8 8:00a – 9:00a



Breakfast will be served.

Contact: Sheri Selvey, PharmD; (317) 615-9891; sselvey@collegiumpharma.com

Lunch PDM

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

Rainer Vogel MD, DABA, DABIPP, FIPP

Course code: PDM-21

Friday 9.8 12:15p - 1:30p

Contact: Linda Corsini; (888) 595-7737 Ext. 51035, lcorsini@ahmdirect.com

Lunch PDM

A New Path to Pain Relief: Time for a Change with a Peripherally Acting Kappa Opioid Receptor Agonist (KORA) Sponsored by Cara Therapeutics

Michael J. Brennan MD • Joseph W. Stauffer DO, MBA

Course code: PDM-22

Friday 9.8 12:30p - 1:30p

Lunch will be served.

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

Level 3.Castellana Ballroom

Level 3.Brera Ballroom

Lunch will be served.

CME ACTIVITIES

(Certified for credit)

Symposium

Managing Opioid Risks & Adverse Effects in a Politically Charged Environment

This activity is supported by educational grants from Salix and Depomed.

Jeffrey A. Gudin MD • Lynn R. Webster MD

Course code: SYM-01

Wednesday 9.6 4:40p - 5:40p

Level 3.Gracia 1

Level 3.Gracia 1

Contact: Paula Larson; (443) 539–4070; plarson@rockpointe.com Go to p. 115 for course description.

Symposium

Finding Relief from Opioid-Induced Constipation:

Emerging Therapies for Individualized Management Supported by an educational grant from Salix Pharmaceuticals, Inc., a Division of Valeant Pharmaceuticals North America LLC and Consultant, a registered trademark of HMP Communications

Jeffrey A. Gudin MD

Course code: SYM-02

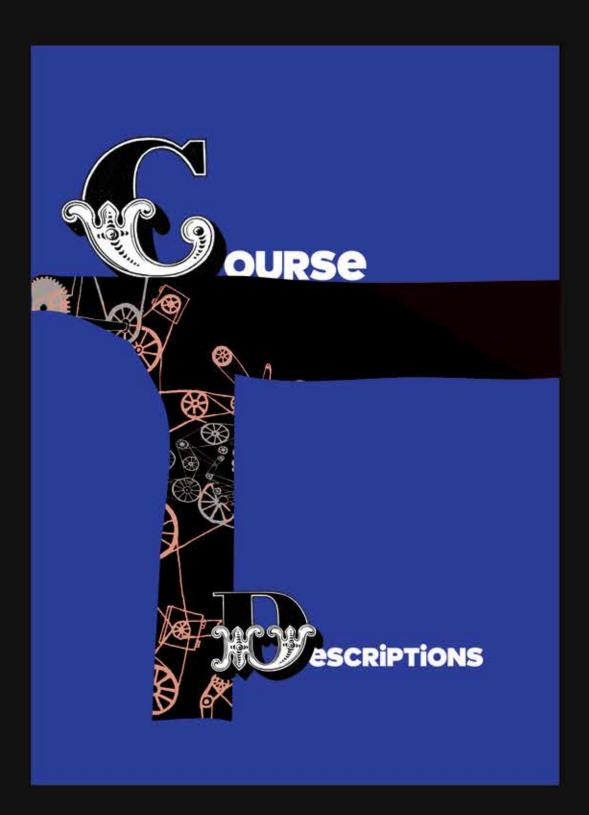
Saturday 9.9 7:00a - 8:00a

• Refreshments will be served.

Contact: MaryEllen Fama; (609) 630–6205; mfama@naccme.com Go to p. 116 for course description.

51







American Headache Society

APP Advanced Practice Provider

aps American Pain Society

BHV Behavioral Pain Management

> **BRS** Brain Science

CPS Chronic Pain Syndromes

FCN Functional Pain Management

> **HCH** Heatlh Coaching

iNT Interventional Pain Management

iNTG Integrative Pain Management

iPPS International Pelvic Pain Society

> **Key** Keynote

Mas Master Class

MDL Medical/Legal **MMJ** Medical Marijuana and Cannabinoids

NAD National Association of Drug Diversion Investigators

> **NRO** Neurology

PaL Palliative Care

PCD Pain and Chemical Dependency

> **PEF** Pain Educators Forum

PHM Pharmacotherapy

POP Pop-Up Course

POS Scientific Poster Session*

> **PTH** Physical Therapy

SiS Special Interest Session

> **SYM** Symposium

WOU Wound Care

WRK Workshop

*Not certified for credit

American Headache Society: Chronic Migraine Education Program (Part 1)

Dawn C. Buse PHD • Kathleen B. Digre MD • Bert B. Vargas MD, FAHS, FAAN •

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

AHS-02 American Headache Society: Chronic Migraine Education Program (Part 2) Dawn C. Buse PHD•Kathleen B. Digre MD•Bert B. Vargas MD, FAHS, FAAN• Thomas N. Ward MD

Tuesday 9.5 1:40p – 3:30p

studies and Q&A.

AHS-01

Level 3.Gracia 7

Level 3.Gracia 3

Part 2 will cover Pathophysiology of Chronic Migraine and Episodic Migraine; Acute Treatment Strategies; and Preventative Treatment Strategies.

APP-01 Importance of Appropriate Chart Documentation: Pitfalls to Help Avoid Litigation Darren McCoy FNP-BC, CPE

Thursday 9.7 **7:00a – 7:50a**

Chart documentation is important in any practice, but even more so when working with chronic pain patients. The treatment of chronic pain comes with increased potential for litigation. There are important steps that prescribers must take with their documentation to lessen that risk. As a case reviewer and expert witness, I will highlight important areas that should be documented and which safeguards to use with electronic medical records. What is being looked at? What is vital to every chronic pain chart? What must be included in your charts if they are ever called into question? All these questions and more will be addressed.

APP-02 Case Based Learning: A Multidisciplinary Review Jeremy A. Adler MS, PA-C • Jennifer M. Hah MD, MS • Theresa Mallick-Searle MS, NP-BC, ANP-BC • Ravi Prasad PHD • Kathryn A. Schopmeyer PT, DPT, CPE

Thursday 9.7 **9:10a – 11:00a**

Level 3.Gracia 7

There are many reasons why healthcare providers choose not to manage pain, or unknowingly undertreat pain. These include 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 these questions: 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 in the management of the patient with acute and chronic pain will help demystify and reduce the fear associated with managing such a subjective and otherwise challenging diagnosis. This timely lecture will focus on the importance of managing pain in the biopsychosocial model from a multidisciplinary perspective. In this 2-hour 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 multidisciplinary perspective.

APP-03 Blending, Melting, or Throwing Off a Cliff:

Abuse Deterrent Technologies to Minimize Opioid Abuse Jeremy A. Adler MS, PA-C

Thursday 9.7 **1:40**p – **2:30**p

Level 3.Gracia 3

Although opioids remain an important tool in aiding the management of pain in the United States, the balance between the potential benefits and harms must be considered. Some specific harms are manifested in the abuse of opioids for nonmedical purposes. The primary access to prescribable opioids for abuse is through illegal diversion. Those abusing opioids may do so through a variety of mechanisms, including taking excessive doses, altering formulations, and changing the route of delivery. For example, an oral formulation may be modified and abused through nasal snorting or intravenous injection. The FDA has developed guidelines for a clinical study design for "abuse deterrent opioids" and has labeled a number of opioids with language that they are "abuse deterrent." This session will review the FDA's publication "Abuse Deterrent Opioids–Evaluation and Labeling: Guidance for Industry" as well as discuss many of the novel technologies developed and labeled specifically to minimize the likelihood of abuse, while retaining the potential benefits of opioids in the management of pain.

APP-04 **The Green-Eyed Martian:** Do Healthcare Disparities Exist in Pain Management? Theresa Mallick-Searle MS, NP-BC, ANP-BC

Thursday 9.7 **2:40**p – **3:30**p

Level 3.Gracia 3

Despite education targeted at healthcare providers for improving the way in which they manage pain, discrepancies still exist in how they treat certain patients for this condition. Special populations of patients such as racial minorities, women, and patients with the disease of addiction remain victims of deficiencies in adequate pain management. This session will identify the epidemiological findings that define the scope of the problem related to disparities in pain management with regard to race, ethnicity, and socioeconomic status. Case scenarios will represent real life examples. Finally, we will examine strategies to minimize disparities in healthcare when it comes to providing pain management.

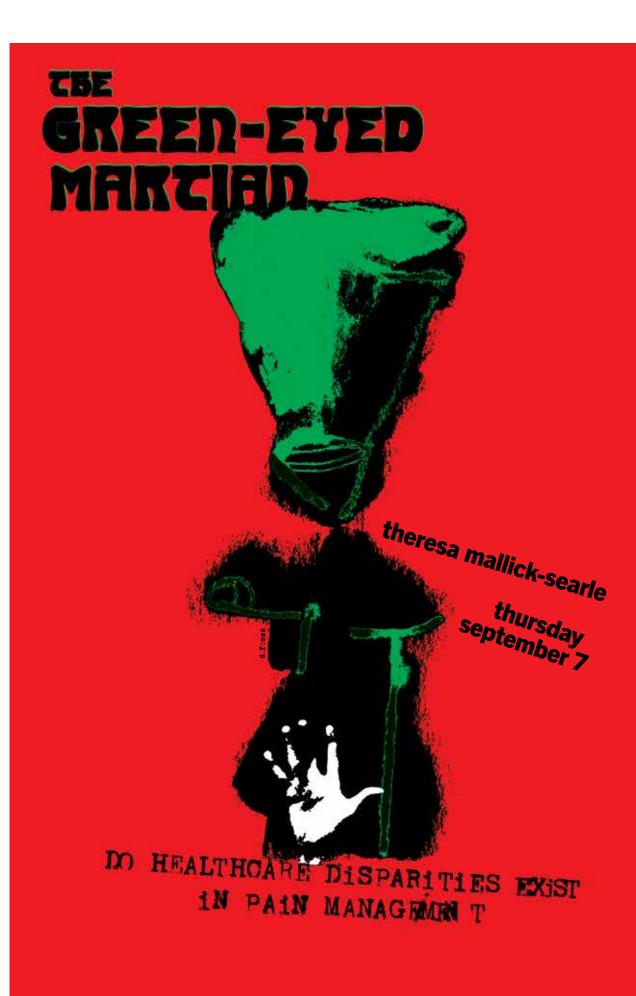
APS-01 Resilience vs Vulnerability in Chronic Pain

Roger B. Fillingim PHD

Friday 9.8 7:00a – 7:50a

Level 4. Nolita 1

This session will highlight the concept of resilience contrasted with typical pathological models of pain. An overview of potential resilience factors will be provided as well as a brief discussion of possible approaches to building resilience.





FADEL ZEIDAN

APS-02 The Biological Interface of Resilience

Emily J. Bartley PHD • Kimberly T. Sibille MD, PHD

Friday 9.8 10:30a – 11:20a

Level 4. Nolita 3

This session will present emerging research showing that chronic pain produces a substantial biological burden and can promote cellular aging and produce systemic biological wear and tear. However, there also exists biological resilience factors, and bolstering these may prevent or reverse the biological burden of pain. The speakers will discuss observed findings and possible treatment approaches to building biological resilience.

APS-03 Ramping Up Resilience for Chronic Pain:

Strategies for Reducing Pain and Improving Function Emily J. Bartley PHD • Kimberly T. Sibille MD, PHD

Friday 9.8 2:40p - 3:30p

Level 4.Nolita 3

Level 4. Nolita 3

Specific resilience factors appear to be important in chronic pain. This course will discuss emerging treatment approaches that may build resilience. Treatment examples include interventions designed to increase hope, to enhance positive affect, and to increase neuroplastic responsiveness.

APS-04 **Resilience Interventions for Pain**

Afton L. Hassett PSYD

Friday 9.8 4:40p – 5:30p

This course will present findings regarding different resilience interventions for musculoskeletal pain, including fibromyalgia. The speaker will discuss components of resilience based treatment and present data from her ongoing studies of resilience interventions.

APS-05 Building Brain Resilience Through Mindfulness Meditation Fadel Zeidan PHD

Friday 9.8 5:40p - 6:30p

This presentation will focus on mindfulness meditation as an approach to building resilience and will highlight the speaker's findings regarding the neural mechanisms whereby mindfulness might improve pain by building brain resilience.

BHV-01 **Crisis=Opportunity:** Reducing Medication Burden While Managing Chronic Pain Jennifer M. Hah MD, MS • Ravi Prasad PHD

Tuesday 9.5 **7:00a – 7:50a**

Level 3.Gracia 3

Level 4. Nolita 3

Per the department of Health and Human Services, opioid related overdose deaths have increased almost 400% over the last 18 years. This shift has yielded heightened scrutiny of prescribing practices, and opioids have subsequently fallen out of favor as a first-line treatment for chronic pain. In this changing landscape of pain care, it is more important than ever for clinicians to identify treatment pathways that will maximize patient outcomes while minimizing medication load. This presentation will review current literature related to use of opioids and medical challenges associated with weaning individuals off this class of drug. The role of evidence based behavioral treatment modalities known to result in improvement in physical and emotional functioning will be discussed in detail, including their use in the context of opioid weaning. The terms dependence, abuse, tolerance, and addiction are often used interchangeably when discussing opioid medication; however, use of nomenclature in this fashion is erroneous. The differences between these words will be explained and the implications for treatment discussed. Clinical pathways that often lead to medication escalation will be identified. The role of behavioral interventions for pain treatment and the literature supporting their use will be reviewed, including data from an interdisciplinary clinical program which provides patients such education while concurrently reducing opioid medication.

BHV-02 **Trauma:** The Lesion Not Visible on the Scan Melissa Fledderjohann PSYD • Christian Washburn PSYD

Tuesday 9.5 10:30a – 11:20a

Level 4. Nolita 3

The role psychological trauma plays in perpetuating chronic pain is well established. Despite this, many practitioners fail to properly identify or assess trauma and unknowingly become frustrated when patients fail to become better. This presentation will provide insight into the role of trauma in chronic pain and help practitioners to better treat their patients.

BHV-03 Nonpharmacologic Management of Pain: Essential Tools for Frontline Clinicians Ravi Prasad PHD

Tuesday 9.5 **2:40**p – 3:30p

Level 3.Gracia 1

Behavioral and psychological interventions for pain management have often been included in patient care as a last resort, a place to turn to when biomedical interventions fail to yield sustained amelioration in pain symptoms. Such an approach disregards research which has long suggested that patient outcomes are improved when incorporating psychosocial variables in the conceptualization and treatment of chronic pain from the onset of care. The opioid epidemic in the US may have an unintended consequence of changing the perception of behavioral and psychological interventions as a last line of defense as clinicians look for treatments to fill the space vacated by narcotic medications. Successful implementation of biopsychosocial treatment pathways will require clinicians to have a solid understanding of the fundamentals of this approach to care. This presentation will provide a broad perspective on the role of psychology in the etiology, maintenance, and exacerbation of pain. Psychological variables associated with the chronification of pain will be discussed, including their associations with disability. An overview of cognitive behavioral interventions for pain, stress, and mood management will be presented along with literature supporting their use. Strategies for including psychological approaches in regular medical appointments will be shared to facilitate incorporation of such tools in localities with limited access to mental health.

BHV-04 Kissing the Wrong Frog: Exploring Common Factors in Pain Management David Cosio PHD

Tuesday 9.5 **4:40**p – **5:30**p

Level 4. Nolita 1

Pain management providers in the field tend to be eclectic and flexible in their choice of modalities and attempt different treatments until they find something that suits the patient, a phenomenon known as the "Goldilocks effect," derived from the children's story about the 3 bears. As a result, research has shown that the overall treatment effectiveness for chronic pain remains inconsistent and fairly poor. Research studies in pain management have also concluded that the diverse treatment interventions currently available—pharmacological, interventional, physical medicine and rehabilitation, psychological, and complementary and alternative therapies—all appear to be equivocally effective. In the past, the practice of psychotherapy confronted a similar issue: research studies concluded that all psychotherapies were effective, which led to a verdict later termed the "Dodo bird effect," referencing a scene from *Alice's Adventures in Wonderland*. This conclusion led to the distinction of 2 possible mechanisms of psychotherapeutic change, specific vs nonspecific effects, also known as "common factors." Using models developed in other professions to inform inquiry in another field is appropriate and there is some precedence in the literature. The purpose of this presentation is to outline the applicability of the common factors model to pain management and provide supportive evidence from existing research. Only then will providers be able to increase the effectiveness and quality of health services during pain medicine consultations.

BRS-01 Does Understanding=Analgesia? Explaining Pain Neuroscience & Physiology Kathryn A. Schopmeyer PT, DPT, CPE

Tuesday 9.5 **7:00a – 7:50a**

Level 4. Nolita 3

A large body of research supports the use of pain science education—explaining pain from a neurophysiology framework—in conjunction with other treatment interventions for optimal outcomes in patients living with daily pain. What does pain science education mean and how is it delivered? This course is designed for people who wish to improve their knowledge about pain physiology, learn about updated research in this area, and develop skills in teaching people about this complex sensory experience that all humans share but very few understand. In this course, we'll review research supporting the use of neuroscience education in rehabilitation of patients living with pain. Attendees will learn how to demonstrate at least one didactic technique using a metaphor or story to explain pain to a patient. Finally, learners will be able to restate the benefits of framing pain from a nervous system perspective, rather than an anatomical one.

BRS-02 An Alternative to Benzodiazepines for the Older Adult Chronic Pain Population Errol M. Gould PHD • Joseph V. Pergolizzi, Jr MD • Robert B. Raffa PHD

Wednesday 9.6 9:10a - 10:00a

Level 3.Gracia 1

Chronic pain is common among the older adult population (≥ 65 years). As we age, age related decline in physiological functions give rise to comorbidities, which in turn may increase the severity of pain or increase the number of pain conditions experienced by the individual. One comorbidity often associated with aging is sleep disturbance. Sleep disturbance has been shown to exacerbate certain chronic pain conditions and chronic pain causes sleep disturbances, such as difficulty falling asleep or increased number of awakenings-thus, a vicious cycle between pain and sleep can develop. Physicians may be faced with treating both pain and sleep disturbances at the same time, perhaps not recognizing the link. Many of these patients are treated with opioids for their pain and, for some, opioids may be the only pain treatment option that is effective. But opioids can contribute to sleep disturbance. Previously, many of these patients were prescribed benzodiazepine sleep aids in combination with opioids. However, recently the FDA released a warning regarding the combined use of opioids and benzodiazepines due to serious risks, including death. Therefore, there is an imminent need for effective nonbenzodiazepine sleep aids. Doxepin, which is indicated for sleep maintenance, is a histamine H1-receptor antagonist. Increasing awareness of the efficacy and safety of doxepin for the older adult population may provide physicians and other healthcare providers with a potentially safer and more effective pain/sleep treatment option that would have the secondary effect of reducing chronic pain.

Ramon L. Cuevas-Trisan MD

Wednesday 9.6 7:00a – 7:50a

Level 3.Gracia 1

Pain related to osteoarthritis is extremely common, affecting a very large segment of the adult population. For years, many therapeutic approaches have been used with variable degrees of success. Over time, however, we have learned that some commonly used therapies may be ineffective or, worse yet, can lead to significant harm. In this course, available management methods, including oral agents, topical and physical agents, orthotics, and various injectable agents will be discussed, emphasizing existing and emerging medical evidence with proliferant/reparative agents and support of their use. Basic concepts regarding surgical options and their evidence will also be discussed in order for primary and specialty care providers in the audience to better use these treatment options, and know when to refer and how to educate their patients more effectively.

CPS-02 **Translational Complex Regional Pain Syndrome:** Research vs Empiricism **Philip Getson DO • R. Norman Harden MD**

Wednesday 9.6 10:30a – 12:00p

Level 3.Gracia 5

Complex regional pain syndrome (CRPS) is a severe, chronic, and disabling disease that requires a multimodal approach for successful management and, occasionally, resolution. Until recently there has been very little evidence on which to base treatment, thus an empirical approach has been required. This lively point/counterpoint presentation will address the clinical research available with a focus on very recent reports and how to fill in the gaps in our evidence based treatment approach with experience and anecdote.

CPS-03 Diabetic Peripheral Neuropathic Pain: Evaluating Treatment Options Ramon L. Cuevas-Trisan MD

Wednesday 9.6 1:40p – 2:30p

Level 3.Gracia 1

According to estimates from the Centers for Disease Control and Prevention, 29.1 million people (close to 10% of the US population) have diabetes and 30% to 50% of them eventually develop diabetic peripheral neuropathy, often with pain. Neuropathic pain due to diabetes is a commonly encountered chronic problem that has increased in frequency as the obese and diabetic population continues to increase. Many pharmacologic approaches including various algorithms are used to treat painful diabetic neuropathy; however, the effectiveness of many such medications is questionable. New evidence, including recent recommendations from the American Academy of Neurology, will be compared and contrasted with a prior systematic review and guideline, published in 2011. Agents and approaches with more recent evidence will be discussed in order to update knowledge of participants and assist them to better manage this disabling ailment.

CPS-04 Man on Fire Syndrome: Diagnosis and Treament of Erythromelagia Charles E. Argoff MD, CPE

Wednesday 9.6 4:40p – 5:30p

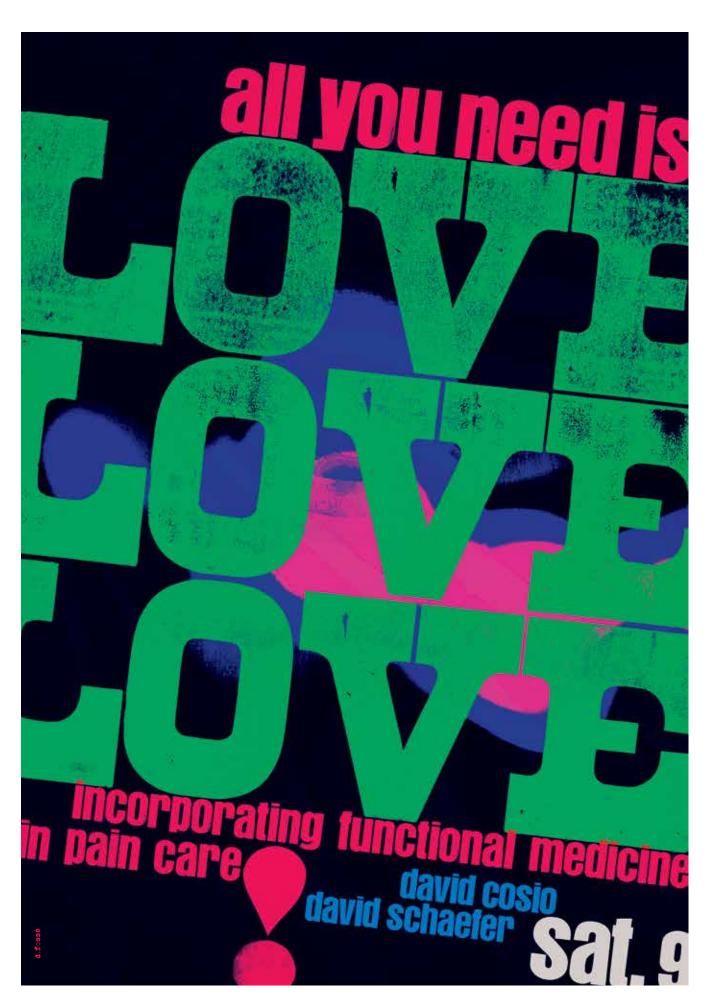
Level 4. Nolita 3

Erythromelagia is a rare and potentially devastating syndrome associated with severe heat and burning pain, and redness involving the skin of the hands or feet or both. The study of this disorder has led to the discovery of new insights into pain pathophysiology as well as new treatments. This course will describe not only the syndrome but how we may be able to apply the insights learned from studying this disorder to the treatment of pain.



diagnosis and treatment of erythromelagia





FCN-01 All You Need Is Love: Incorporating Functional Medicine in Pain Care

David Cosio PHD • David Schaefer DO, MPH

Saturday 9.9 9:10a – 11:00a

Level 3.Gracia 1

According to the CDC, chronic diseases and conditions are among the most common, costly, and preventable of all health problems. More concerning, the incidence of chronic pain is higher than heart disease, diabetes, and cancer combined. The American College of Preventive Medicine states that most chronic diseases are preventable and reversible if a comprehensive, individualized approach is implemented through integrated functional medicine teams and based on empirical research. Functional medicine addresses the underlying causes of disease—with a focus on why, not what—using a systems oriented approach and engaging both patient and practitioner in a therapeutic partnership. The intervention being shared in this presentation will be delivered in a group format with individual follow-up sessions, as needed. Group treatment protocol consists of 4 sessions of 60 to 75 minutes, with an interdisciplinary treatment team consisting of an osteopath physician, a health psychologist, and a dietician. Patients should be coached to change their environment and live an anti-inflammatory lifestyle by addressing 4 key pillars. Facilitators will provide preliminary data findings from a functional medicine clinic to use as a model, and show that what patients really need is love, which research has determined can decrease the experience of pain.

FCN-02 **Food Is Medicine:** A Review of the Anti-Inflammatory Diet David Cosio PHD • David Schaefer DO, MPH

Saturday 9.9 1:40p – 3:30p

Level 3.Gracia 1

It is important to remember that every time we eat, we are changing our body chemistry. The presenters will guide providers on how to implement a modified elimination, anti-inflammatory diet. Basically, patients are recommended to eat only REAL food. Use of an elimination diet necessitates the removal of the most common causes of food sensitivity while monitoring clinical symptoms to see if there is an improvement in how the patient feels. Some reactions, perhaps due to an allergy, can occur immediately after eating a food, but in other cases can be delayed by hours to days, because of an intolerance or sensitivity. During this presentation, the facilitators will outline what foods to eliminate. Patients would follow this dietary lifestyle for 3 weeks and log changes that occur with their body. Patients need to read and understand food labels, inquire on the Internet, or ask their providers about ingredients if necessary. At the end of the 3 weeks, a patient is asked if they would like to go back to their former dietary lifestyle or if they would like to continue this process. Presenters will outline how to reintegrate foods and will share common examples for nonadherence to the diet.

FCN-03

Looking in the Rearview Mirror:

Addressing Inflammation Through Lifestyle Imbalances David Cosio PHD • David Schaefer DO, MPH

Saturday 9.9 3:40p – 4:30p

Level 4.Nolita1

Inflammation is the "cornerstone" of the body's healing response. When your immune system is disrupted, it puts itself on constant defense, sending inflammation continually rippling throughout the body. Your immune system is then working *against* you, instead of *for* you, by switching focus from the antigen it's supposed to attack and instead launching a targeted strike on your own cells or tissues. Inflammation can be caused by many factors, including an underlying problem caused by an unhealthy lifestyle. Common pain conditions associated with inflammation include osteoarthritis, rheumatoid arthritis, injuries, bruises, surgery, MS, and cancers. Lifestyle changes

have evolved over time to negatively affect our health, and puts in question what the future may hold. The purpose of this presentation is to explain what is an inflammatory lifestyle. The presenters will guide providers on how to coach patients to change their environment and live an anti-inflammatory lifestyle by addressing the remaining 3 pillars: exercise, stress management, and sleep hygiene.

HCH-01 Pain Management Coaching:

Integrative and Complimentary Strategies for Complicated Pain Lesa R. Abney BSN, MINT • Becky L. Curtis PCC

Tuesday 9.5 **1:40p – 2:30p**

Level 4. Nolita 3

Level 4. Nolita 3

Pain management coaching is a systematized application of techniques, including motivational interviewing, that enable your patients to work through ambivalence and take action to change their lives. One of the primary components is education. Coaches teach skills to enable the patient to regain a sense of control and direction. Working with patients to implement providers' recommendations, coaches give support and tools to help the patient reframe their perspective hopelessness and safely navigate through the treacherous jungle of complicated pain.

HCH-02 How Pain Management Coaching Impacts Pain Outcomes

Lesa R. Abney BSN, MINT

Becky L. Curtis PCC

Tuesday 9.5 2:40p – 3:30p

Perhaps the single most failure producing aspect of chronic pain is its inherent isolation. Add the medical hopelessness faced by many patients and a perfect storm is created for chronic pain patients to fall permanently out of the workforce and fail to thrive. Pain management coaching provides the bridge between medical care and the patient's innate will to survive. Pain management coaching pioneer Becky Curtis will share how the latest research on the brain and pain relate to relearning and pain management. Attendees will gain an understanding of the role pain management coaching plays in reshaping the learned phenomenon of chronic pain and how clients acquire knowledge and implement effective pain management strategies with the guidance of a coach.

INT-01 Injections, Nerve Blocks, Pumps, and Spinal Cord Stimulation Paul J. Christo MD, MBA

Wednesday 9.6 7:00a – 7:50a

Level 3.Gracia 5

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.

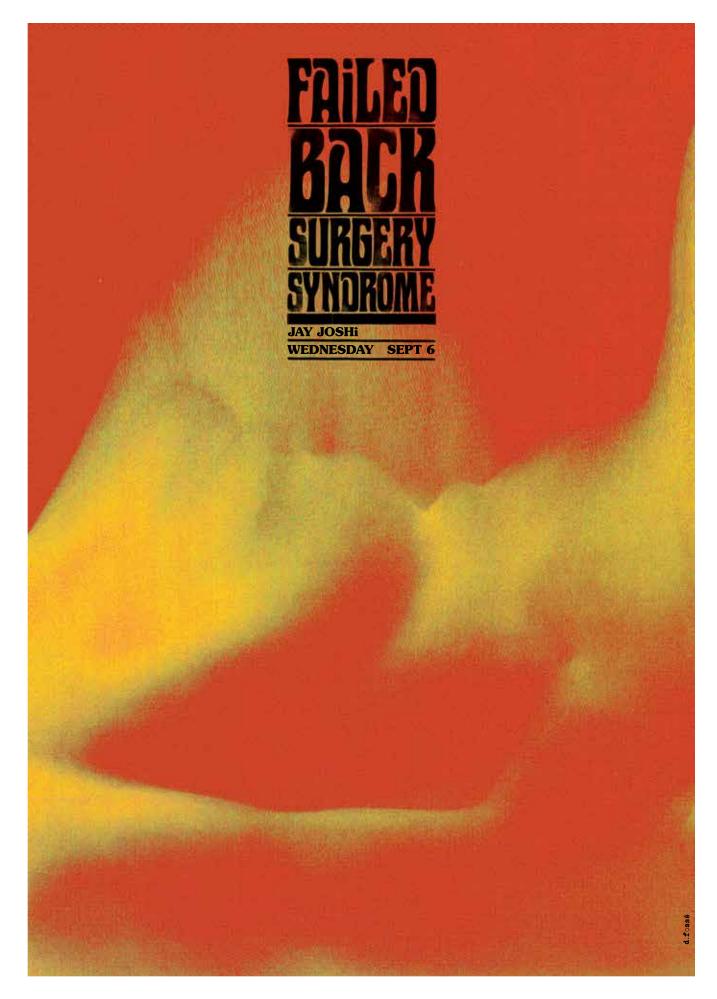
INT-02 Failed Back Surgery Syndrome

Jay Joshi MD

Wednesday 9.6 10:30a – 11:20a

Level 4. Nolita 3

Lower back pain is the most common reason to see a physician for pain and the number one cause of disability. Some patients with lower back pain eventually require spinal surgery. Unfortunately, 20% to 40% of these patients will develop failed back surgery syndrome (FBSS or FBS) after the first surgery. FBSS, also known as postlaminectomy syndrome, is defined as "lumbar spinal pain of unknown origin either persisting despite surgical intervention or appearing after surgical intervention for spinal pain originally in



snoring, clicking, and myofascial pain

HAL BLATMAN TUESDAY SEPTEMBER 5

the same topographical location." During this presentation, we will learn more about FBSS, its pathology, causes, diagnosis, management, and treatment options.

INT-03 Regenerative Medicine for Chronic Pain: Who, What, and When? Jay Joshi MD

Wednesday 9.6 2:40p - 3:30p

Level 4. Nolita 3

Humans have been searching for the Fountain of Youth for millennia. Some people feel that regenerative medicine is that magical fountain while others 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 already a wide variety of treatments and technologies available including, but not limited to, stem cells. We will discuss the various options of regenerative medicine and conditions that have been treated with them.

INT-04 From the Torpedo Fish to HF10: The Evolution of Neuromodulation Sean Li MD

Wednesday 9.6 4:40p - 5:30p

Level 3.Gracia 5

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 and burst. These innovations and the accompanying data have sparked several other inventions such as dorsal root ganglion stimulation and closed-loop technology. This ripple effect has provided chronic pain patients with additional treatment options and challenged our current understanding of neurostimulation. This presentation will review the history of neuromodulation, current theories on mechanism of action, technologies available, and showcase emerging innovations.

INTG-01 Snoring, Clicking, and Myofascial Pain

Hal S. Blatman MD, DAAPM, ABIHM

Tuesday 9.5 7:00a – 7:50a

Level 3.Gracia 1

Pain treatment protocols are changing to reflect greater awareness of a wide spectrum of comorbidities that affect the severity of symptoms. While sleep quality has long been a concern in pain management practice, there may be greater significance to sleep quality and apnea than what has generally been considered. TMJ syndrome and related jaw and face pain may further complicate treatment of head and neck pain. Gaining a larger appreciation of how these issues can be evaluated and considered will bring a greater awareness for a wider spectrum of nonpharmaceutical integrative treatment of pain.

INTG-02 Microbiome: The Link Between Nutrition and Pain Heather Tick MD

Tuesday 9.5 9:10a – 10:00a

Level 4. Nolita 1

In the age of modern medical miracles, it is easy to forget that we change our body chemistry every time we eat. The quality and composition of our food has the power to increase or decrease bodywide inflammation. Yet most medical schools have only a few hours of time devoted to a topic that has the potential to help every patient seen. The research evidence is robust for dietary interventions and improved health. The changes needed are simple, but not necessarily easy. Topics covered in this sessions will include the evidence, suggested interventions, and how to overcome barriers to change.

INTG-03 Stress, Fatigue, and Pain

Hal S. Blatman MD, DAAPM, ABIHM

Tuesday 9.5 10:30a – 11:20a

Homeostasis is one of the primary goals of biologic response to stress, and to this end our body devotes significant resources. Prolonged stress leads to fatigue and may also contribute to chronic pain. A greater variety of environmental stressors affect the body more now than ever before. Better understanding regarding the complexities of our struggle for homeostasis leads to more choices in therapies for an integrative pain practice. Some of the best treatment options may be found in herbal medicines. Nutritional and herbal therapies may provide tools for treatment of anxiety and stress. Providing integrative care allows for a wider range of choices in treatment of these patients with difficult problems.

INTG-04 **Biofeedback Therapy:** Surviving and Living With Chronic Pain Anthony A. Whitney MS, LHMC, BCB

Tuesday 9.5 1:40p – 3:30p

Level 4. Nolita 1

Biofeedback treatment will be defined and examined in relation to the nonpharmacologic treatment of chronic pain, mental health disorders, and other physiologic problems. Common biofeedback and relaxation myths will be discussed and differentiated to increase accuracy of what biofeedback is and is not. Biofeedback modalities that are often incorporated in the treatment process will be identified and differentiated according to their therapeutic application. The course will also examine how biofeedback enhances learning and confidence of making behavioral changes to improve physical, emotional, functional, and mental well being. Demonstrations of biofeedback modalities will be conducted to provide a deeper comprehension and awareness of the biofeedback experience. Recommendations and strategies will be assessed to improve the process of identifying both those appropriate for biofeedback treatment and those tools to simplify the referral process.

INTG-05 Connecting the Dots in Chronic Pain Heather Tick MD

Tuesday 9.5 **4:40p – 5:30p**

Level 3.Gracia 7

As physicians we often treat medicine like a game of Connect the Dots, as though if we do connect the dots, we'll understand what is going on with our patients. More often than not, even when we try our best and seem to have all of our dots in a row there is still something missing. In this talk we will explore ways of looking at parts of the pain picture that are difficult to measure with conventional medical strategies. Some of these areas include new scientific findings about the microbiome and fascia. Some go back to the ancient origins of medicine that looked to community connections to understand chronic illness. This will be an interactive session to explore strategies for more comprehensive approaches to pain.

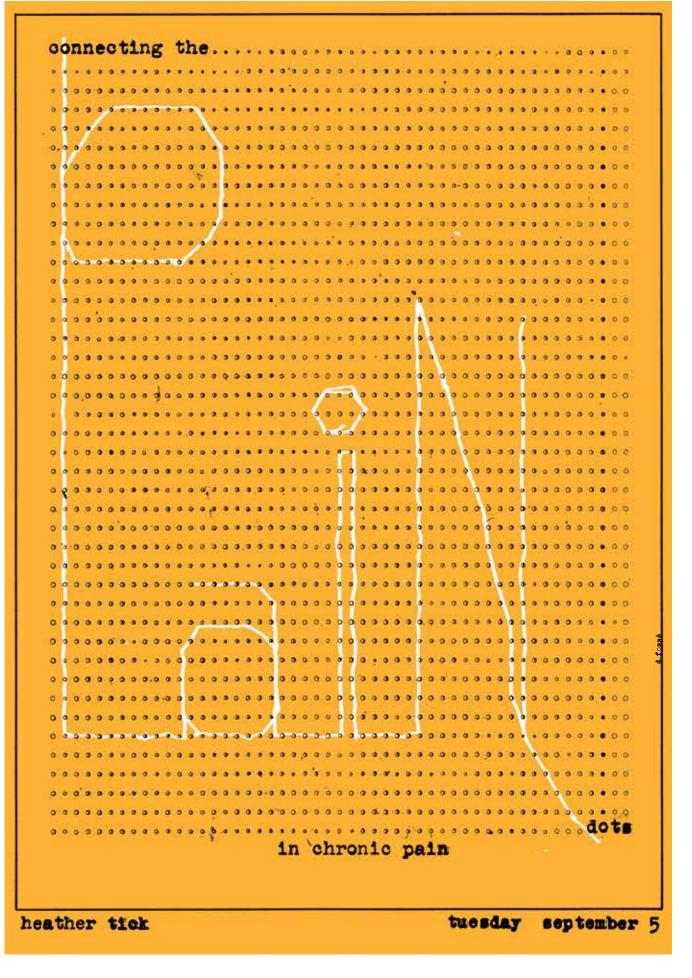
INTG-06 Lessons From a County Hospital Setting:

A Novel Approach to Integrative Pain Management Elaine S. Date MD • Melissa Fledderjohann PSYD • Abhishek Gowda MD

Tuesday 9.5 **4:40p – 6:00p**

Level 3.Gracia 3

This session presents a novel approach to a nonacademic based integrated pain management program with a focus on chronic pain and functional restoration. Our program, located at San Mateo Medical Center, serving San Mateo County in California, offers



a state of the art interdisciplinary pain management program for patients with an emphasis on nonopioid based treatment. Programs offered include physical therapy, yoga, mindfulness, psychological education, and an MD-led weekly educational series. Techniques maximizing treatment with limited funding, outcomes thus far, and future directions will discussed.

IPPS-01 The Painful Uterus and the Brain

Sawsan As-Sanie MD, MPH

Friday 9.8 7:00a – 7:50a

Level 3.Gracia 3

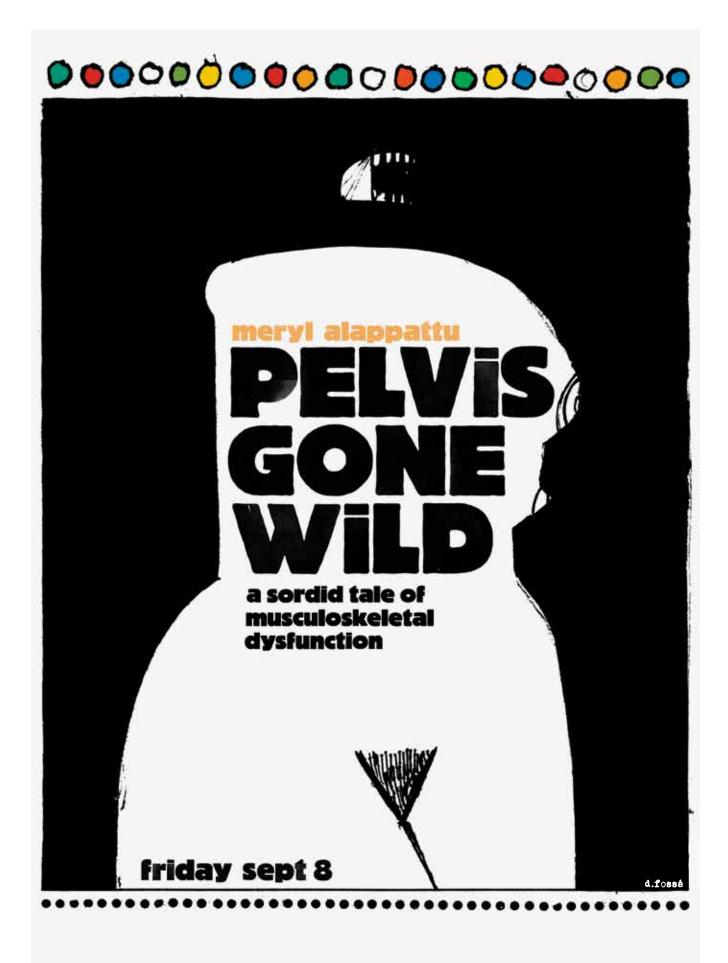
Dysmenorrhea is the most common pain disorder among women, estimated to affect 40% to 90% of women in their reproductive years. Up to 20% of women report menstrual pain severe enough to interfere with usual activities. As such, it is a leading cause of school and work absenteeism in young women. Despite its high prevalence and negative impact on guality of life, dysmenorrhea remains undertreated and often disregarded by clinicians, researchers, and even women themselves, who may consider it a normal manifestation of the menstrual cycle. However, emerging data suggests that while untreated dysmenorrhea is often a precursor to chronic pelvic pain and other centralized pain conditions, some women with dysmenorrhea already display evidence of centralized pain. Therefore, early and prompt treatment of dysmenorrhea may be an important target for prevention of central sensitization, as well as the progression to various chronic pain conditions. This lecture will provide an overview of the impact of dysmenorrhea on daily function, mood, and quality of life. We will present emerging evidence that dysmenorrhea is not just a localized pelvic disorder, but is associated with central nervous system changes in pain processing. This lecture will then review a systematic approach to the evaluation and management of dysmenorrhea, including the differential diagnosis and treatment strategies of both primary and secondary dysmenorrhea. Primary dysmenorrhea is defined as pain associated with menstruation in the absence of organic pathology, whereas secondary dysmenorrhea is associated with identifiable pathology, such as endometriosis. We will emphasize diagnostic and treatment strategies for the primary care clinician, and when to refer to a gynecologic surgeon or other specialist.

IPPS-02 Pelvis Gone Wild: A Sordid Tale of Musculoskeletal Dysfunction Meryl J. Alappattu PT, DPT, PHD

Friday 9.8 9:10a – 10:00a

Level 3.Gracia 1

When pelvic pain strikes, the impact is catastrophic. In this talk, we will uncover how the musculoskeletal system contributes to this debilitating condition. Pelvic floor muscle dysfunction is associated with pelvic pain, and prevalence estimates in various pelvic pain conditions, including endometriosis, vulvodynia, and painful bladder syndrome, range from 21% to a whopping 80%. Musculoskeletal pelvic pain negatively affects sexual and physical function, activities of daily living, and health related quality of life. To complicate the issue, pain coming from the pelvic floor muscles may refer to other body parts such as the lumbar spine, sacroiliac joints, hips, and abdomen. When pelvic pain becomes chronic, women may also show signs of maladaptive neuronal plasticity associated with widespread muscle pain beyond just the proximal pelvic region. Despite the high prevalence of musculoskeletal pelvic pain, medical and rehabilitative providers do not routinely screen for musculoskeletal dysfunction, leaving patients with limited access to providers skilled in managing musculoskeletal pelvic pain. This talk will provide an overview of key abdominopelvic musculature and its contributions to pelvic pain, screening for musculoskeletal dysfunction, and components of a musculoskeletal pelvic pain examination.



IPPS-03 When Pain Is Not Sexy: Evaluation and Management of Sexual Pain in Females Georgine M. Lamvu MD, MPH, FACOG

Friday 9.8 10:30a – 11:20a

Level 3.Gracia 1

It is estimated that up to 21% of women worldwide experience significant pain during intercourse at some point in their lifetime. Research shows that most women suffer in silence for years before they obtain proper care. Pain during intercourse, or dyspareunia, can be classified into superficial dyspareunia (pain with entry affecting the vulvar vestibule or vaginal introitus) or deep dyspareunia (internal pain with vaginal penetration). Superficial dyspareunia can be associated with vaginal dermatosis, atrophic vaginitis, vulvovaginitis, and vulvodynia, whereas deep dyspareunia is commonly caused by endometriosis, adhesions, fibroids, and cervicitis. Dyspareunia can occur before, during, or following intercourse and can be found along with interstitial cystitis, irritable bowel syndrome, and/or sexual abuse. In spite of the negative impact it has on women's lives, this condition often goes unrecognized, undiagnosed, and untreated. Many times patients have difficulty discussing this 'private' subject with their providers, and providers often do not know how to properly evaluate women for sexual pain. This lecture will discuss many of the myths associated with sexual pain and how sexual pain fits the biopsychosocial model of pain. Useful to all healthcare providers, a comprehensive guideline for the evaluation and management of this disorder will be formulated.

IPPS-04 Beyond Pharmacotherapy:

An Integrated Approach to Managing Female Chronic Pelvic Pain Kathryn A. Witzeman MD, FACOG

Friday 9.8 1:40p – 2:30p

Level 3.Gracia 1

The prevalence of chronic pelvic pain is reported as ranging from 15% to 24% of women during reproductive years. Various types of chronic pelvic pain frequently coexist and/or may be associated with other types of functional pain-interstitial cystitis, vestibulodynia, irritable bowel syndrome, fibromyalgia, etc. Pelvic pain is isolated in 52% of patients, but is associated with irritable bowel syndrome in 24% of cases, overactive bladder syndrome in 9% of cases, and all 3 symptoms are associated in 15% of cases. National surveys going back more than 25 years have consistently found that complementary approaches are used by 30% to 40% of the US public in a given year. Painful conditions are the most common health problem for which individuals turn to these complementary approaches. Integrative healthcare utilizes a coordinated team approach that includes a wide spectrum of health interventions and therapies emphasizing patient centered care inclusive of the physical, mental, emotional, and spiritual factors that impact health. Modalities can include conventional, traditional, alternative, or complementary approaches as the evidence supports. Integrative healthcare neither rejects conventional medicine nor accepts alternative therapies uncritically. This didactic lecture will discuss varied integrative modalities including conventional and plant based medicines, nutrition, mind-body modalities, movement therapies, and manual body work used in the treatment of chronic pain and the current evidence or lack of evidence to support their use specifically in female pelvic pain disorders.

KEY-01 **Keynote:** Are You Now, or Have You Ever Been? Saving Pain Medicine From Zealotry Michael R. Clark MD, MPH, MBA • Michael E. Schatman PHD, CPE, DASPE Kevin L. Zacharoff MD, FACIP, FACPE, FAAP • Stephen J. Ziegler PHD, JD

Wednesday 9.6 5:45p - 7:00p

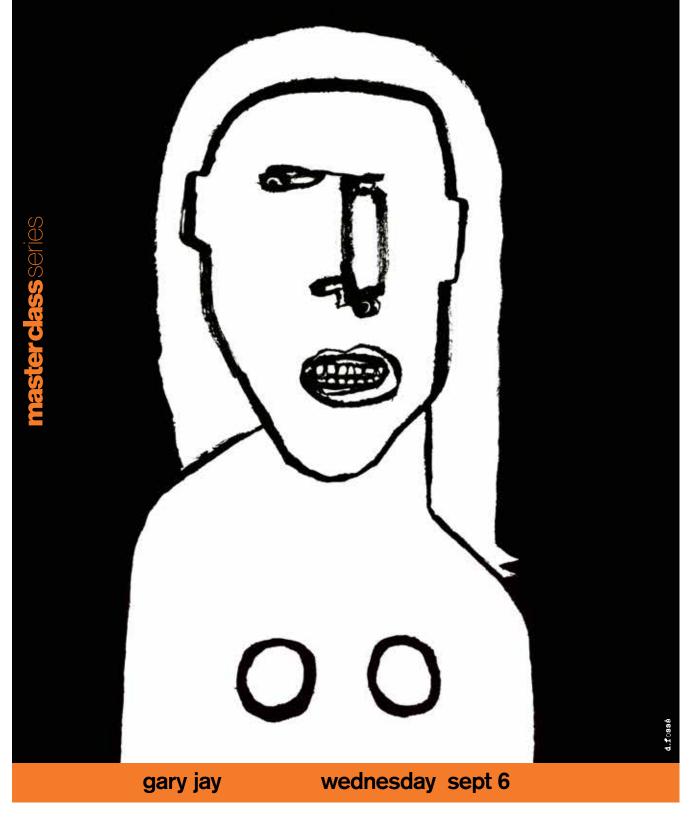
Level 4. Mont-Royal Ballroom

Healthcare providers continue to incur the ire of antiopioid zealots who have engaged in marginalization of prescribers and the millions of people who take opioids responsibly. This panel discussion will explore the many policy and ethical issues surrounding



it hurts to be alive

fibromyalgia



the prescribing of opioids and provide prescribers with some strategies that may help effect change and improve the lives of the people they treat.

New for this year: CE/CME credit.

MAS-01 It Hurts to Be Alive: Fibromyalgia Gary W. Jay MD, FAAPM, FACFEI

Wednesday 9.6 1:40p - 3:30p

Level 3.Gracia 3

In this master class, the diagnosis and clinical manifestations of fibromyalgia and its pathogenesis will be covered. We will examine fibromyalgia in children and adolescents, along with the initial treatment of the disorder in adults and those unresponsive to that treatment, highlighted through the use of patient vignettes.

MAS-02 Lost in Translation: Making Sense of Clinical Treatment Guidelines Charles E. Argoff MD, CPE • Brett R. Stacey MD • Mark S. Wallace MD

Thursday 9.7 10:30a – 12:00p

Level 3.Gracia 3

Multiple clinical treatment guidelines have been published regarding headache and pain management. However, many have questioned the benefit of such clinical guidelines for the treatment of individual patients. This course will review key published treatment guidelines for migraine, interventional pain management, chronic opioid use, neuropathic pain, and chronic low back pain. The faculty will review the relevant guidelines and discuss their strengths and critical weaknesses when using such guidelines to actually treat people.

MAS-03 Differential Diagnosis of Low Back Pain

David M. Glick DC, DAAPM, CPE, FASPE

Friday 9.8 1:40p – 3:40p

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.

MAS-04 Neurogenic Thoracic Outlet Syndromes

Paul J. Christo MD, MBA

Friday 9.8 4:40p – 6:00p

Level 3.**Gracia 5**

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. The 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.

MDL-01 Knowledge Gaps=Legal Traps:

Pearls and Pitfalls for the Business Aspects of Drug Testing Jennifer Bolen JD • Sue Kincer CPC, CHA

Tuesday 9.5 10:30a – 12:00p

Level 4. Mont-Royal Ballroom

Level 4. Mont-Royal Ballroom

2016 was not a good year to be on the wrong side of medical necessity when it came to drug testing and ongoing prescribing of controlled medication or substance abuse treatment programs. 2017 is likely to be an expensive year for those who do not proactively take steps to understand medical necessity for drug testing, prescribing controlled medication, and ongoing substance abuse treatment, as payers continue to carefully scrutinize these areas. Using a series of case hypotheticals, attendees will learn how to identify the elements of medical necessity, efficiently and effectively document medical necessity for drug testing and use of drug test results in the ongoing care of the patient, and locate and use payer medical policies and coverage determinations. Attendees will be given 3 tools to reinforce learning objectives: a checklist for medical necessity documentation, sample summaries of payer medical policies, and templates for documenting use of drug test results and tailoring ongoing treatment decisions to the individual patient.

MDL-02 **Overdose!** Legal Risk Mitigation and Response Jennifer Bolen JD

Tuesday 9.5 **4:40**p – 6:00p

• verdose—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 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.

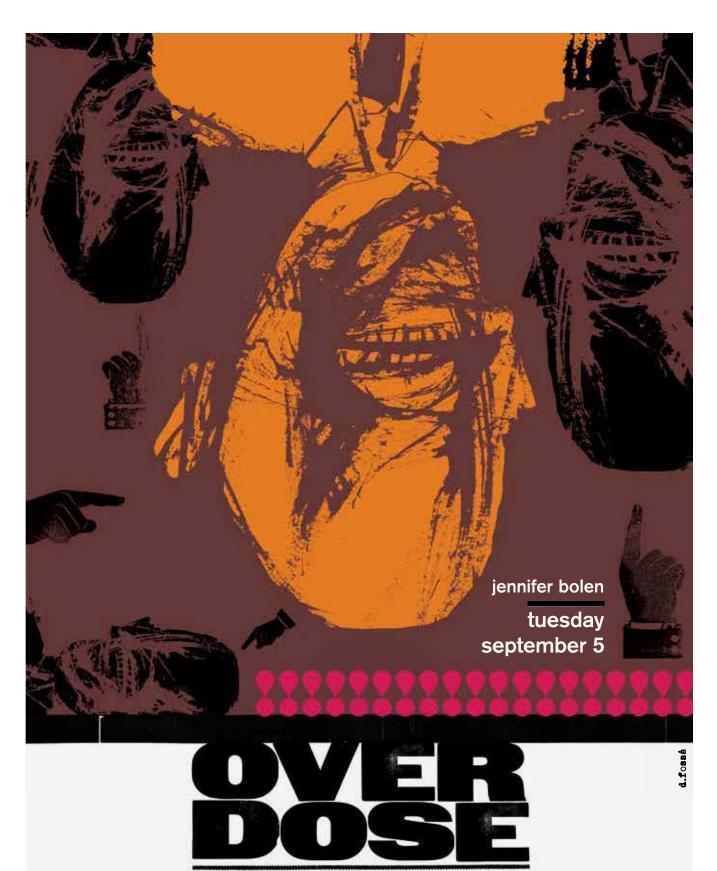
MDL-03 How Many Lawyers Does It Take to Keep a Practitioner Out of Trouble?

Michael C. Barnes JD, MIEP • Jennifer Bolen JD • Stephen J. Ziegler PHD, JD

Friday 9.8 2:40p – 3:30p

Level 3.Gracia 7

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. Similarly, to provide high quality legal counsel to pain care practitioners, an attorney should have current knowledge of the law, analyze each factual situation, and recommend a compliance plan specific to the circumstances. Healthcare and legal professionals alike practice more of an art than a science, making decisions based on their formal education and training, case studies, literature, and practical experience. In this presentation, 3 legal professionals will share their approaches to compliance in treating people with pain during an era of intense scrutiny and litigiousness. The presenters will discuss the principles they employ in advising practitioners on topics including prescribing opioids and other controlled medications,



legal risk mitigation and response

conducting urine drug testing, and discharging a patient for nonadherence to the treatment plan. The varying perspectives of the speakers will highlight the need for pain care professionals to ensure that their own attorney has experience in healthcare and, just as importantly, understands the unique challenges of pain care practice.

MMJ-01 **Reefer Madness:** Taking the Insanity Out of Medical Cannabinoids Michael E. Schatman PHD, CPE, DASPE

Friday 9.8 1:40p – 2:30p

Level 4. Nolita 1

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 alike 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.

MMJ-02 Medical Efficacy of Cannabis Therapeutics: Focus on Pain Management Donald I. Abrams MD • Theresa Mallick-Searle MS, NP-BC, ANP-BC

Friday 9.8 4:40p – 5:30p

Level 4. Nolita 1

The endocannabinoid system (ECS) is now recognized as an important modulator of many physiological processes. Even more 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.

MMJ-03 Cannabis vs Cannabinoids: The Politics of Medical Marijuana Douglas L. Gourlay MD, MSC, FRCPC, FASAM

Friday 9.8 5:40p – 6:30p

Level 4. Mont-Royal Ballroom

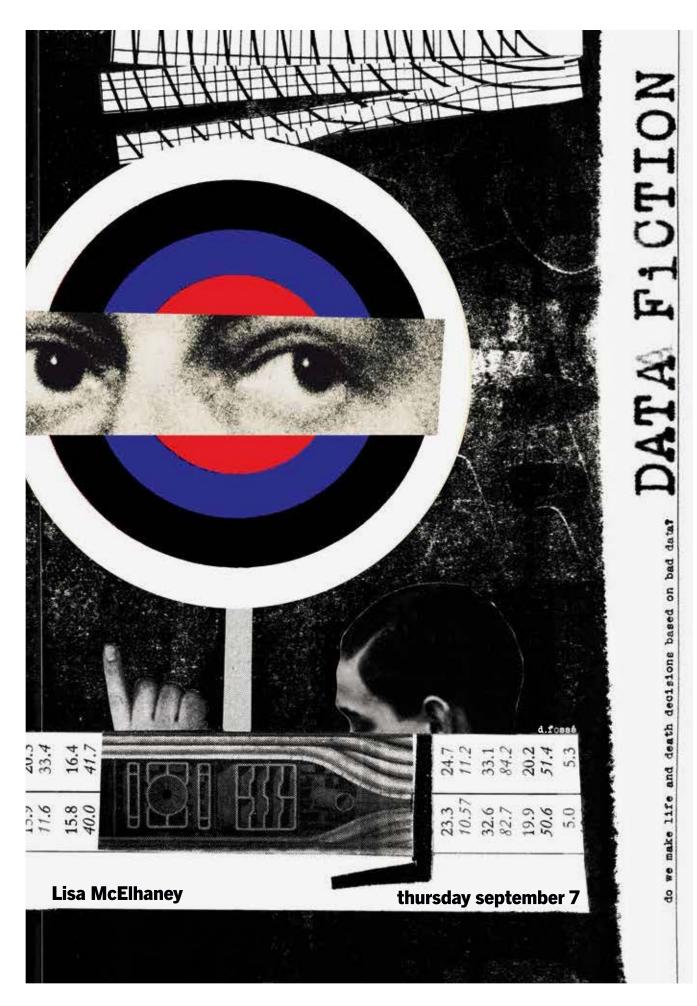
The subject of the medical use of cannabinoids has become an extremely hot topic. Unfortunately, there has been a tendency to equate medical cannabinoids with another very contentious topic: medical marijuana. In this presentation, the distinction between medical cannabinoids and medical cannabis will be explored. Specifically, the challenges facing prescribers who are being asked to prescribe medical marijuana will be examined.

NAD-01 **Data Fiction:** Do We Make Life and Death Decisions Based on Bad Data? Lisa M. McElhaney BS

Thursday 9.7 **7:00a – 7:50a**

Level 3.Gracia 1

Technology is the wave of the future. The electronic health record is supposed to make our healthcare system more efficient and ultimately safer. The negative impact of bad data in electronic health records is both immediate and long-lasting. This course examines the fundamental concepts and techniques for managing data in a healthcare setting. What if everything we believe isn't true, but is a facade, a mirage? What if what you see and hear is not the truth but a facsimile of the truth, twisted to benefit the patient, a provider, or the establishment? What if it's a front for fraud? Then you



have data fiction. An effective provider must always examine the facts on his/her own, instead of acting as if we should accept everything in a medical history or record on blind faith. Bad data can lead to criminal/administrative investigations, medical errors, adverse incidents, and death. This session examines the interaction between organizations, data sources, and the end user. Attendees will develop a self-critical perspective on the medical analysis process.

NAD-02 Algorithms and Opioid Dosing Watch Lists

Marc S. Gonzalez PHARMD

Thursday 9.7 **10:30a – 11:20a**

Level 4. Mont-Royal Ballroom

This is a review of certain computer coded algorithms which are used by private and government entities that score prescribers, pharmacies, pharmacists, and patients as a "potential" risk for prescribing, dispensing, or diverting controlled substances. See and learn some of the common rules used to score your prescribing patterns that may be referred to various law enforcement agencies for further investigation. The Centers for Medicare & Medicaid Services and point of sale "lockout" will also be discussed.

NAD-03 Balanced Pain Management & Overdose Prevention Strategies: Where Are We At? Lisa M. McElhaney BS

Thursday 9.7 **2:40**p – **3:30**p

Level 4. Mont-Royal Ballroom

The past decade has brought a strong focus on the substance abuse epidemic raging across the US and the number of overdose victims. The approaches that have ensued to battle this epidemic have produced a variety of very good actions to address misuse and abuse activities, but some approaches seem to have "thrown out the baby with the bath water." To be effective, every provider must address the overlapping issue of pain treatment and potential misuse that can lead to addiction. Through education, communication, and solid treatment approaches we can reduce the severity of this epidemic. This course examines the current states and national concerns regarding this severe epidemic and presents the varied approaches to address the problem. The instructor will demonstrate a way to traverse the numerous policies that address both pain management and substance abuse to generate a balanced approach to patient treatment. Attendees will receive a detailed breakdown of current policies and approaches to the current drug epidemic.

NAD-04 Opioid Counterfeits

Lisa M. McElhaney BS

Thursday 9.7 **4:40**p – **5:30**p

Level 4. Mont-Royal Ballroom

The United States is leading the world in opioid related overdoses and deaths. The opioid epidemic brewing for the past few decades has reached catastrophic proportions within our society, and there has been a significant shift in the drugs related to this crisis. A growing number of drugs currently being sold on the street that appear to be FDA approved pharmaceuticals are actually counterfeit drugs containing various synthetic opioid derivatives 50 to 1,000 times more potent than morphine. This rapidly growing trend presents a variety of serious public health issues, from accidental exposure to mass cluster(s) of overdoses, within our community. Attendees will receive an in-depth breakdown of the new drug analogs, the source of the derivatives, the trending marketing, and also the federal government's response to this public health crisis. Discussion will also include the current legislation to allow the importation of unregulated medications into the UNITED STATES, which will only worsen the ongoing opioid crisis.

NATIONAL ASSOCIATION OF DRUG DIVERSION INVESTIGATORS

MARC GONZALEZ LISA MCELHANEY ATTL

THURSDAY SEPTEMBER 7

83

d.fossé

U

NAD-05 Pain Practice Check-Up

Marc S. Gonzalez PHARMD

Thursday 9.7 **5:40**p – 6:30p

Level 4. Mont-Royal Ballroom

Level 4. Nolita 1

Level 3.Gracia 3

Level 4. Nolita 1

Level 3.Gracia 3

Come listen to what law enforcement is using as deviations from community standards of practice as it relates to prescribing controlled substances. See how these deviations are then used as the probable cause to search your office for evidence that may be used in a criminal filing.

NRO-01 Neuroinflammation: Treating the Underlying Cause of Chronic, Severe Pain Forest Tennant MD, FACPM, MPH, DRPH

Friday 9.8 9:10a – 10:00a

Chronic pain may centralize in the spinal cord and brain leaving the patient with constant, neuropathic pain. The mechanism of this development is microglial activation and neuroinflammation. Successful treatment of this condition usually requires a special pharmacologic regimen that includes analgesics, neuropathic agents, and agents which reduce neuroinflammation.

NRO-02 Differential Diagnosis of Myelopathies

Charles E. Argoff MD, CPE

Friday 9.8 10:30a – 11:20a

Multiple medical conditions are associated with myelopathies (spinal cord disorder). This course will provide an overview of the multiple causes of myelopathy, as well as approaches to their diagnosis and treatment.

NRO-03 Arachnoiditis: Taming the Painful Shrew Forest Tennant MD, FACPM, MPH, DRPH

Friday 9.8 2:40p – 3:30p

Arachnoiditis is officially listed as a rare disease, but its estimated incidence has increased about 400% in the past decade. Almost every pain practice has now encountered a case. Technically, the name implies an inflammatory disease of the arachnoid layer of the thecal sac or meninges. In most cases the underlying pathologic cause is neuroinflammation of the nerve roots of the cauda equina. Pain practitioners need to know the inciting causes, symptoms, physical signs, and MRI findings of arachnoiditis. A clinical protocol for treatment of this "most painful" of pain states has been developed and will be presented.

NRO-04 Clinical Conundrum:

My Head's Stuck in a Waffle Iron and Can't Get Out! The Mystery of Occipital Neuralgia Gary W. Jay MD, FAAPM, FACFEI

Friday 9.8 5:40p – 6:30p

This course will discuss the background and prevalence of occipital neuralgia, its etiology, clinical features, diagnosis, and treatment options. Additionally discussed will be treatment techniques and differential diagnosis of occipital neuralgia vs other headache/head pain disorders.



PAL-01 **A Wrinkle in the Plan:** Metabolic Changes and Palliative Care in the Older Adult Tanya J. Uritsky PHARMD, BCPS

Saturday 9.9 7:00a – 7:50a

Level 3.Gracia 5

There are many changes in the body composition of the older adult that can lead to altered effects of drug therapies. Symptom management in the older adult can be complicated as many of the drugs which we use are amongst those recommended to be avoided in this population. It is critical to understand the metabolic changes that occur as we age and apply pharmacokinetic and pharmacodynamic properties to agent selection for symptom control. This session addresses these metabolic changes as well as outlines optimal pharmacologic choices for symptom management in the older adult.

PAL-02 New Drugs in Pain Management and Palliative Care

Alexandra McPherson PHARMD, MPH • Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Saturday 9.9 8:00a – 9:00a

Level 3.Gracia 3

This is a MUST session for all practitioners who wish to remain cutting edge and prepared for questions from patients and other practitioners concerning new medications. Up to 100 new drugs and dosage formulations are approved every year by the Food and Drug Administration. Some of these are new molecular entities, while others are new formulations, new indications, generic drug approvals, or labeling revisions. Participants in this fast paced session will learn about new medications approved in 2015/2016 and their usefulness in treating pain and symptoms associated with advanced illness. Specifically, participants will learn the indication, any off-label uses, adverse effects, major drug interactions, dosing, clinical pearls, and financial implications if the medication is a controlled substance.

PAL-03 Speed Dating With the Pharmacy Ladies: Pain Management and Palliative Care Alexandra McPherson PHARMD, MPH • Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Saturday 9.9 10:30a – 11:20a

Level 3.Gracia 3

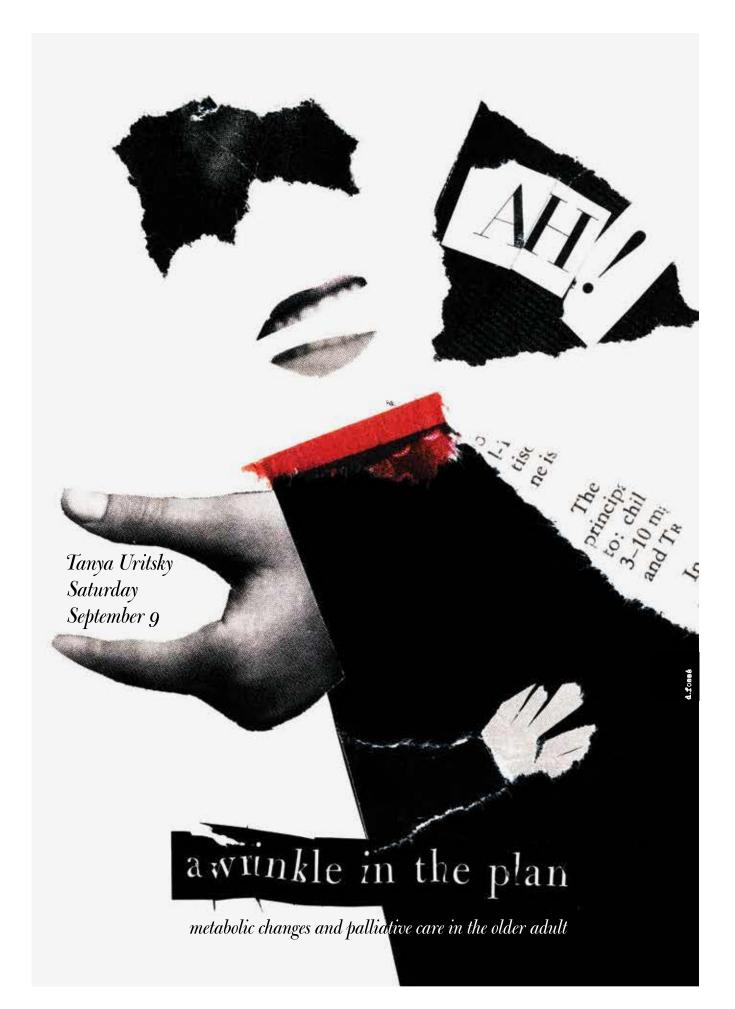
Complex medication decisions are an integral part of treating patients with pain and palliative care. Pharmacists have a unique perspective on using these medications creatively and effectively. This session will flirt with tips and tricks on using medications appropriately for patients with chronic pain and those facing advanced diseases. Whether debriding a medication profile, aggressively treating symptoms, or strategizing a dosage formulation, it can be hard to commit to medication decisions. Two pharmacists will "speed date" their way through medication tips designed to impart highly important and little known medication facts that are important in pain management and palliative care practice.

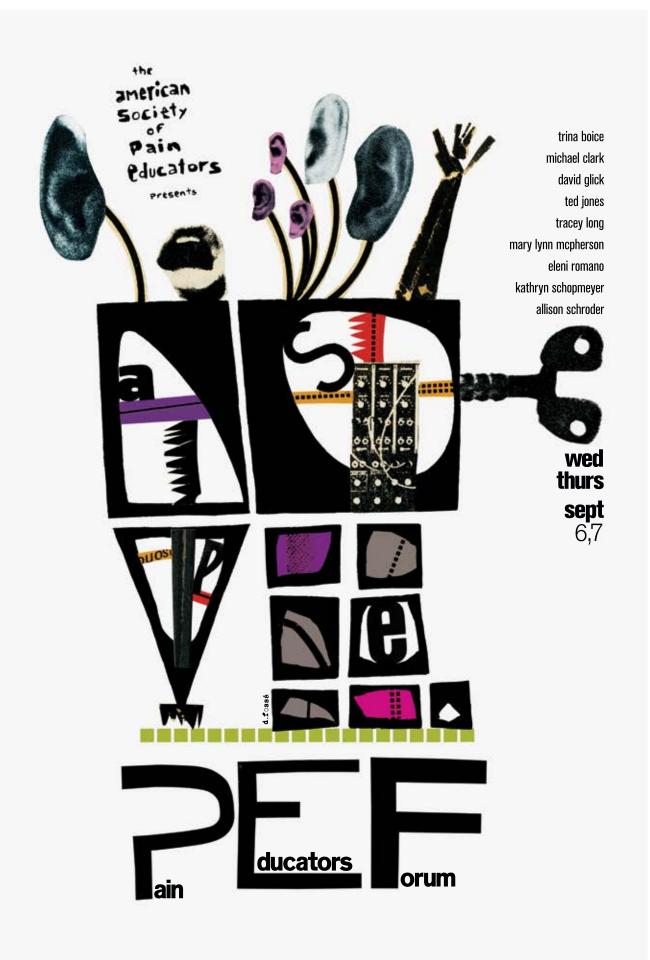
PAL-04 IV Methadone: When All Else Fails Annas Aljassem MD • Levi M. Hall PHARMD, BCPS

Saturday 9.9 3:40p – 4:30p

Level 4. Nolita 3

Due to incomplete cross-tolerance with other opiates, reduction in doses is required when rotating from another opiate. Several published conversions exist for opioid rotation to methadone, making the calculation more challenging. Numerous studies suggest that the equianalgesic depends on the previous opioid treatment, but there are few data on the use of intravenous (IV) methadone for the management of severe or refractory cancer pain. This requires introduction of more clinical experience and judgement. The pharmacokinetic profile, including variations between oral and parenteral





formulations, presents significant challenges to prescribers in providing this effective therapy. This session addresses the complex nature of the pharmacokinetic profile of methadone. It recommends that only those clinicians who are well versed in the interpatient variabilities of methadone, and who maintain awareness of the limitations of the data we have available, should prescribe this medication.

PCD-01 Common Threads in Pain and Chemical Dependency

Douglas L. Gourlay MD, MSC, FRCPC, FASAM • Howard A. Heit MD, FACP, FASAM • Mel Pohl MD

Friday 9.8 1:40p – 4:40p

Level 4. Mont-Royal Ballroom

This session will explore some of the challenges resulting from the recent "Decade of Pain." Clearly, the overuse of opioids and, to some extent, the solutions proposed to curtail the misuse of prescription drugs has led to a shift in how we diagnose and how we treat substance use disorders in this often challenging patient population.

PEF-01 Pain Terminology: Knowing the Difference Makes a Difference! David M. Glick DC, DAAPM, CPE, FASPE • Mary Lynn McPherson PHARMD, MA, BCPS, CPE • Kathryn A. Schopmeyer PT, DPT, CPE

Wednesday 9.6 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, you will be a fierce and worthy contestant on *Jeopardy*!

PEF-02 Pain Pathophysiology Unraveled

David M. Glick DC, DAAPM, CPE, FASPE

Wednesday 9.6 9:10a – 10:00a

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 management of pain. This discussion will include an overview of medication classes typically considered for pain and the pathways they affect.

PEF-03

Chronic Pain Assessment Michael R. Clark MD, MPH, MBA

Wednesday 9.6 10:30a - 11:20a

Level 4.**Nolita 1**

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

PEF-04 Pain Therapeutics

Thomas B. Gregory PHARMD, BCPS, DASPE, CPE

Wednesday 9.6 1:40p – 3:30p

Therapy of pain is a challenge and requires special approaches. This course, as part of the Pain Educators Forum, will build on information provided in other 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 pharmaco-therapy of pain will be provided. Pain Therapeutics examines current trends in pain relief, which can be implemented into practice.

PEF-05 Pain Diagnostics: Clinical Pearls to Improve Common Tests for Pain David M. Glick DC, DAAPM, CPE, FASPE

Wednesday 9.6 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 of time and patient 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 or, 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 Flipping the Script: Why We Need a Patient REMS Course Ted W. Jones PHD, CPE

Thursday 9.7 **7:00a – 7:50a**

Level 4. Nolita 1

Level 4. Nolita 1

Patient education is expected and often required for patients who are prescribed opioids. However, practitioners are often not well versed in what topics to cover in such education and what methods to use. This summary will review the content and process of patient education. Particularly troublesome issues such as safe storage, alcohol use, and marijuana use will be addressed, and suggestions made about some best practices to improve and streamline patient education at your practice.

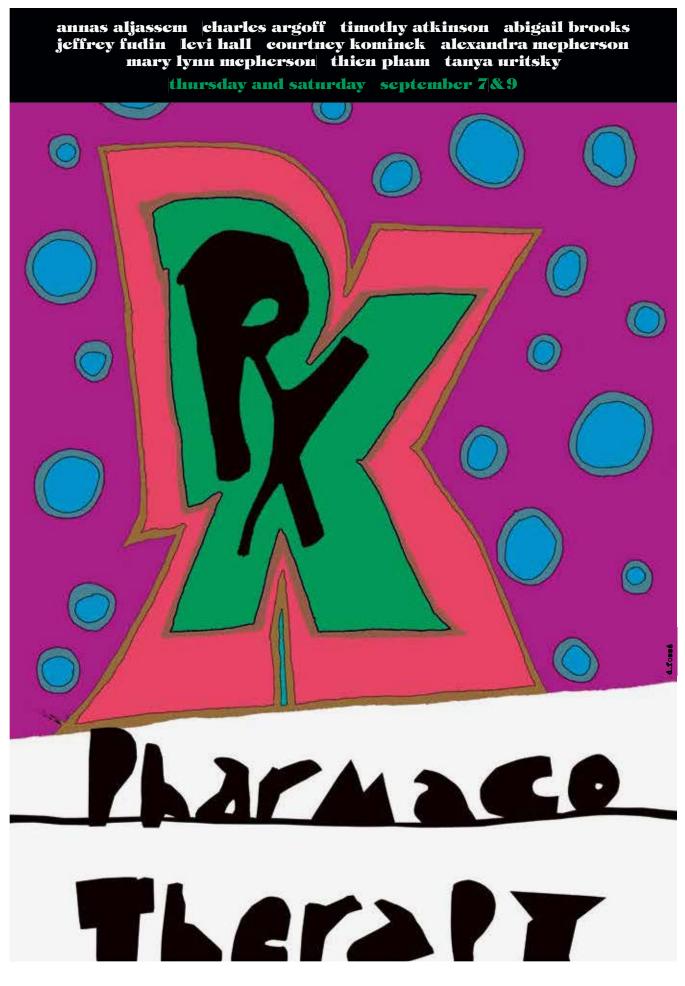
PEF-07 You're Giving Me an MI:

Incorporating Motivational Interviewing Into Challenging Conversations **Eleni M. Romano PHD • Allison E. Schroeder PHARMD**, BCPS

Thursday 9.7 **10:30a – 12:00p**

Motivational interviewing is a patient centered, collaborative style of communication that represents one tool to help clinicians overcome the challenges of conversations surrounding opioid tapers. MI can help strengthen motivation and interest in health behavior change. With regard to initiating an opioid taper, MI may elicit reasons for committing to an opioid taper, confirm beliefs in the ability to successfully complete a taper, and increase commitment to a treatment plan. Additionally, MI may increase provider comfort and skill in guiding conversations that have potential to cause conflict and undermine patient-provider rapport. Although training and education about the use of MI has proliferated in medical education, providers often report that

Level 4.Nolita 1



incorporating MI into their daily practices is challenging due to the abstract nature of its concepts and pressure to maintain brief appointment times. This course will: review the spirit of MI and barriers to using it in practice; define/list challenges specific to using MI in the long-term opioid therapy population; provide concrete examples of clinical situations in which an opioid taper is clinically indicated; and discuss MI-consistent phrases that can be incorporated into common scenarios regarding long-term opioid therapy.

PEF-08 **¿Dond Le Duele?** An Introduction to Basic Medical Spanish for Healthcare Professionals Trina L. Boice • Tracey B. Long PHD, RN, BSN, MS

Thursday 9.7 **1:40**p – 3:30p

Level 3.Gracia 5

Level 3.Gracia 3

This 2-hour session will prepare healthcare professionals to effectively communicate in basic Spanish phrases. Participants will gain a primary understanding of the language, an overview of Spanish speaking cultures, and an introduction to pronunciation, the alphabet, grammar, and vocabulary for conversational Spanish. Participants will be able to verbalize Spanish salutations, perform a basic health assessment, and function with conversational medical phrases.

PHM-01 Opioid Conversion Calculations

Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Thursday 9.7 **9:10a – 10:00a**

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

PHM-02 PharmasKnowGenetics vs Pharmacogenetics Unveiled Timothy J. Atkinson PHARMD, BCPS • Abigail T. Brooks PHARMD, BCPS • Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP • Courtney M. Kominek PHARMD, BCPS, CPE • Thien C. Pham PHARMD

sharpen their skills in opioid conversion calculation.

Thursday 9.7 **10:30a – 11:20a**

Level 3.Gracia 1

Pharmacogenetics is an emerging field and is defined as the variability in drug response due to genetics. Genetic differences can be divided into pharmacokinetic (what the body does to the drug) and pharmacodynamic (what the drug does to the body) biomarkers. Pharmacokinetic biomarkers include cytochrome P450 enzymes, drug transporters, and more. Examples of pharmacodynamic biomarkers important to pain therapeutics include opioid mu receptor 1 (OPRM 1), catechol-o-methyltransferase (COMT), and methylenetetrahydrofolate reductase (MTHFR). Ultimately, polymorphic variations in these biomarkers may lead to alterations in effectiveness, safety, and tolerability of medications. In this comprehensive interactive forum, led by Dr. Jeffrey Fudin, the next generation of clinical pharmacy specialists in pain management will focus on patient case based pharmacogenetic profiles used to discuss relevant biomarkers with genetic variations and the role these play to enlist actionable outcomes for optimizing medication including safety and effectiveness, potentially supporting supratherapeutic or presumed subtherapeutic opioid dosing.

PHM-03 What's All the "GABA" About? Pregabalin and Gabapentin Abuse

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

Thursday 9.7 **1:40p – 2:30p**

Level 3.Gracia 1

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 megadoses to enhance the effects of other psychotropic drugs, and other patients 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 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 potentially abusing them.

PHM-04 Rational Polypharmacy: An Update for Specific Conditions Charles E. Argoff MD, CPE

Thursday 9.7 **2:40**p – **3:30**p

Level 3.Gracia 1

Multidrug therapy, also known as rational polypharmacy, has been a part of treatment approaches for chronic pain for many years. This course will review the concept of rational polypharmacy as it applies to the treatment of migraine, neuropathic pain, and musculoskeletal pain conditions.

PHM-05 **HeSAID, SheSAID:** The Real Facts on NSAIDs **Timothy J. Atkinson** PHARMD, BCPS•**Jeffrey Fudin** BS, PHARMD, DAAPM, FCCP, FASHP

Thursday 9.7 **4:40**p – **5:30**p

Level 3.Gracia 1

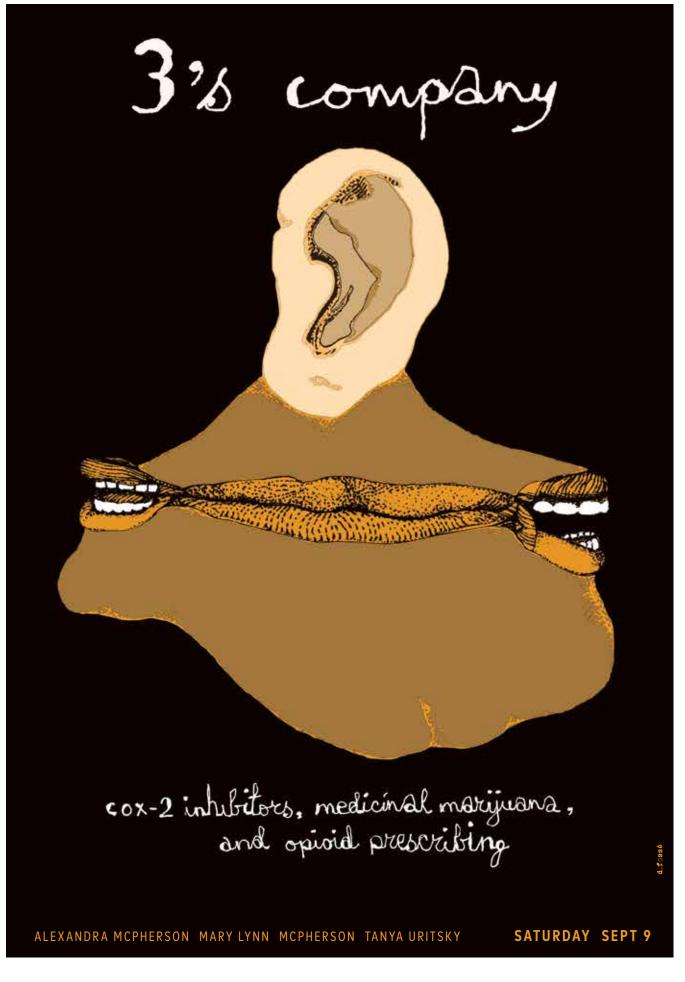
After nearly 20 years of safety concerns, warnings, and new formulations designed to minimize harm, many providers now struggle to determine appropriate NSAID use. NSAIDs have been a cornerstone of pain management of inflammatory, connective tissue, and autoimmune disorders for over a hundred years. A historical perspective is key to understanding the role of NSAIDs in pain management and a therapeutic update on current evidence will aid providers in practical utilization. The safety of NSAIDs will be reviewed and compared to risks of other medications including opioids. New FDA warnings on cardio-vascular risk of NSAIDs will be placed into context and examples of clinical decision-making provided. In addition, unique and underutilized NSAIDs formulations will be discussed including IV NSAIDs, topical NSAIDs, and new micronized NSAIDs. This clinical update, led by Dr. Jeffrey Fudin and his first resident and long-time collaborator Dr. Timothy Atkinson, will renew interest in this critical class of medications. Clinical pearls and NSAID trivia will keep audience members engaged throughout the session as creative ways to deliver NSAID therapy and overcome common treatment obstacles are discussed.

РНМ-06 **Topical Opioids:** The Perfect Solution for Reducing Systemic Opioid Exposure Annas Aljassem MD • Levi M. Hall PHARMD, BCPS

Saturday 9.9 8:00a – 9:00a

Level 3.Gracia 1

Topically applied opioids provide effective analgesia in adult patients with painful inflammatory conditions, due to opioid receptors found on peripheral nerves and inflamed tissue. Topicals may offer rapid reduction in pain scores in patients, without reported adverse effects or tolerance. Because topical opioid gels are not available commercially and need to be prepared by pharmacy, this course will identify medical staff and



implementation strategies, along with patient and family education needs. The insight that opioids exert a local analgesic effect is based on the observation that morphine and its metabolites are largely undetectable systemically when applied topically to skin ulcers (suggesting the analgesic effect is local), and because peripheral opioid injections for local analgesia, such as intra-articular morphine after knee surgery, have been found to be effective in several trials. 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, oral mucositis, and knee arthritis. Monitoring and drug interactions of topical opioids is the same as for systemic opioids—excess sedation, respiratory depression, pruritus. This course 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.

PHM-07 **3's Company:** COX-2 Inhibitors, Medicinal Marijuana, and Opioid Prescribing Alexandra McPherson PHARMD, MPH•Mary Lynn McPherson PHARMD, MA, BCPS, CPE• Tanya J. Uritsky PHARMD, BCPS

Saturday 9.9 1:40p - 2:30p

Level 3.Gracia 3

There is much controversy around many aspects of pain treatment, and compelling arguments have focused on both sides of the fence regarding appropriate opioid use and prescribing, legalization of marijuana, and the safety of cox-2 inhibitors. In all 3 cases, there are issues associated with strong positions, although the evidence, when put into practice, is less black and white. For each topic, we will evaluate current literature and debate the clinical, legal, and ethical controversies surrounding recent developments in pain management. Attendees will get a better understanding as presenters debate evidence based application of the CDC guidelines in various clinical settings, evaluate clinical and ethical concerns regarding marijuana for medicinal or recreational use, and take a critical look at the literature and its application when using cox-2 inhibitors for treating pain.

PHM-08 The 411 on Nonprescription Analgesics: When to Hold 'Em, When to Fold 'Em Alexandra McPherson PHARMD, MPH ● Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Saturday 9.9 2:40p - 3:30p

Level 3.Gracia 3

Pain is the number one reason why patients seek advice from their pharmacist or primary care provider. Patients very often seek to use a nonprescription analgesic to self-treat a painful complaint, yet often do not understand the exclusions to selftreatment or how to select the best analgesic. Participants in this presentation will learn what nonprescription analgesics are available, indications for use, appropriate dosing and duration of therapy, appropriateness of candidates, and how to monitor and educate patients about their nonprescription analgesic. At this presentation, participants will learn the mechanism of action, indications, adverse effects, and precautions of oral and topical nonprescription analgesics, along with patient counseling points when recommending a nonprescription analgesic.

POP-01 **Pain Mechanism Theories:** From Gates to Predictive Coding Kathryn A. Schopmeyer PT, DPT, CPE

Tuesday 9.5 11:30a – 12:00p

Level 3.Gracia 1

Understanding pain can be challenging, and using models or theories can simplify the complex. When treating people who have persistent pain, having a framework to reference is imperative, informative, and supports clinical reasoning. What is the gate control theory? Who introduced the neuromatrix? And what does Bayesian statistical modeling

have to do with pain? This Pop-Up course will take a historic view of pain mechanism theories from the 1960s forward and briefly discuss the underpinnings of chronic pain in terms of theoretical models.

POP-02 14 Miles From Wisdom: Things I Learned By Accident Becky L. Curtis PCC

Tuesday 9.5 11:30a – 12:00p

Level 3.Gracia 3

In an instant, a rollover car accident left me partially paralyzed from the neck down and in constant burning nerve pain. I began a fateful journey into the personal realities and facts of chronic pain. In my quest for a cure I discovered that the best solutions for chronic pain are not surgeries, pills, or other passive therapies. What I learned by accident is that pain is an experience of the brain. Chronic pain is an experience memorized and continually repeated, to such an extent that it has overtaken the lives of over 116 million people in the United States alone. Presenting evidence based modalities I used to retrain my brain and decrease my chronic pain, I will show how brain research provides wisdom for communicating with patients. Words spoken inspire thoughts, thoughts impact emotions, and emotions define the pain experience. Learn how words either emphasize the negative aspects of a condition or focus on positive options and attitudes. Hear through the ears of a pain patient as I describe the power words have had in my own experience and in the recovery of people I coach every day.

POP-03 Pharmacogenetics: To Test or Not to Test?

Timothy J. Atkinson PHARMD, BCPS • Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP

Wednesday 9.6 11:30a – 12:00p

Level 3.Gracia 3

Pharmacogenetics provides an opportunity for individualized drug selection and dosing. The question remains whether or not the cost of testing and phenotype identification provides optimal outcomes for the patient and opportunities for providers to more precisely target therapy. Lab companies have spent considerable time and money marketing genetic testing and the relevant clinical utility. This session will highlight the controversial nature of pharmacogenetic testing through a healthy debate of PROs and CONS. The audience will learn about updates on current evidence and practice contrasted with practical limitations. The debate is sure to be entertaining and informative, leaving the audience with a true perspective of both sides.

POP-04 The Path of Most Resistance:

Patient Centered Approaches to Discussing Opioid Reduction Eleni M. Romano PHD • Allison E. Schroeder PHARMD, BCPS

Wednesday 9.6 11:30a – 12:00p

Level 3.Gracia 1

• pioid reduction may be necessary in certain patients due to safety risk. Certain patients may be resistant to medication change for a number of physical and psychosocial factors. This presentation aims to provide clinicians with concrete examples of patient centered approaches to handling challenging conversations surrounding opioid reduction.

POP-05 Pharmacogenetic Case Studies: Test the Patient or Simply Switch the Drug? Abigail T. Brooks PHARMD, BCPS • Courtney M. Kominek PHARMD, BCPS, CPE

Thursday 9.7 11:30a – 12:00p

Level 3.Gracia 7

The emerging field of pharmacogenetics studies the variability in an individual's response to a drug due to genetics. Numerous biomarkers are at play when discussing the potential impact that pharmacogenetics can have on pain management

medications. At this time, there is no consensus on the role of pharmacogenetic testing in day-to-day practice. Two patient case examples will be used to explore polymorphic variations and whether pharmacogenetic testing is needed or if the case can be solved by changing the medication.

POP-06 Ketamine: Not Just for Horses Jessica Geiger-Hayes PHARMD, BCPS, CPE

Thursday 9.7 **11:30a – 12:00p**

Level 3.Gracia 1

Ketamine is an N-methyl-d-aspartate (NMDA) receptor antagonist and is both water and lipid soluble. These unique pharmacokinetic properties make ketamine a useful analgesic in that it can be given via multiple routes of administration and can add a different pathway for pain treatment in difficult or refractory pain cases. The goal of this presentation is to familiarize attendees with an additional adjuvant pain medication for use in refractory pain. After some background information is presented, a case based approach will be used to demonstrate patient identification, dosing strategies, routes of administration, and side-effect management. The presentation will conclude with methods for developing a ketamine protocol.

POP-07 **Pharmacogenetics 101:** Reviewing the Cytochrome System & Other Genetic Variations Important in Treating Pain and Depression **Thien C. Pham PHARMD**

Friday 9.8 11:30a – 12:00p

Level 3.Gracia 1

Pharmacogenetics is an emerging and novel approach to therapeutic drug selection for patients with many disorders including chronic pain and mental health comorbidities. Individual variability in pain perception and differences in the pharmacokinetics and pharmacodynamics of medications can be impacted by genetic phenotype and polymorphism. This session will explore the clinical implications of pharmacogenetics on the cytochrome (CYP) P450 enzymes, adenosine triphosphate (ATP) binding cassette transporter gene (ABCB1), opioid mu receptor 1 (OPRM 1), catechol-o-methyltransferase (COMT), and methylenetetrahydrofolate reductase (MTHFR), and their impact on commonly used analgesic and antidepressant medication selection. Attendees will learn to unveil the mystery of pharmacogenetics and reveal its potential to guide pharmacologic treatment decisions for individualized therapy in order to anticipate effective drug response while minimizing the risk for adverse effects of opioids and psychotherapeutic regimens.

POP-08 Interdisciplinary Integration of Next Generation Pharmacists Timothy J. Atkinson PHARMD, BCPS

Friday 9.8 11:30a – 12:00p

Level 3.Gracia 3

Pharmacists are trained to understand the administration, distribution, metabolism, and excretion of opioid medications, all while being considered one of the most accessible healthcare professionals in the country. So why are they not being utilized to a greater extent in the fight against opioid abuse and the undertreatment of pain? This presentation will identify barriers preventing this practice transformation from taking place. There is a lack of pain management education in pharmacy schools, only a small amount of pain focused residency training programs offered in the United States, and a culture of some pharmacists being afraid to intervene on the care of patients due to their lack of provider status. Ideally this will be a discussion based session to formulate a plan to help integrate pharmacists into the patient care process to better care for chronic pain patients. Together we can utilize the pharmacy profession to stop the swinging opioid pendulum and rest it in the middle.

Saturday 9.9 11:30a – 12:00p

Level 3.Gracia 1

At this point, it is no longer breaking news that opioid abuse is a public health epidemic in the United States. Over the past 2 decades the epidemic has spread throughout the entire country, leaving no demographic immune. At the same time, an estimated 25.3 million Americans experience persistent pain and have a legitimate need for treatment. Opioids have been demonstrated to help manage pain when other treatments have not provided enough pain relief. For some individuals, opioids are the best treatment for their pain. Yet at times, the desire to end the opioid abuse epidemic has resulted in policies, regulations, or guidance that sacrifice the medical needs of individuals with pain in favor of preventing opioid abuse. Governors, members of Congress, and regulators are calling for aggressive government action that poses grave consequences for people with pain and their healthcare providers. This presentation—led by an experienced professional in the fields of healthcare law and government affairs—will address the pressing policy issues affecting pain management. The discussion will include recent federal policies based on inappropriate interpretations of the CDC's opioid guidelines and will look ahead to noteworthy federal proposals. Current legislation and regulations and their likely impact, as well as the predicted benefits, drawbacks, and unintended consequences of such policy efforts on the clinical management of pain will be examined.

POP-10 Relaxation Through Music

Joanne V. Loewy DA, LCAT, MT-BC • John F. Mondanaro MA, MT-BC, LCAT • Andrew R. Rossetti MMT, LCAT, MT-BC

Saturday 9.9 11:30a – 12:00p

Level 3.Gracia 3

Music therapists from the Louis Armstrong Center for Music and Medicine of Mount Sinai Beth Israel in New York invite PAINWeek attendees to join us for a prelunch music facilitated relaxation experience. Extensive research from multiple disciplines has shown that music is a potent means of connecting the body, mind, and spirit. It can be used to foster resilience as well as modulate autonomic nervous system function and vagal response. The Louis Armstrong Center has researched and developed a myriad of clinical interventions that address pain perception and response. These include music directed release and focus/imagery driven relaxation techniques. We will provide these experiences, and you will come away not only more relaxed, but able to access music as a resource for self-care at your convenience.

Co-Chairs: Srinivas Nalamachu MD • Joseph V. Pergolizzi, Jr MD

Thursday 9.7 6:30p – 8:30p

Level 2.Condesa Commons

POS-02 Poster/Podium Presentations*

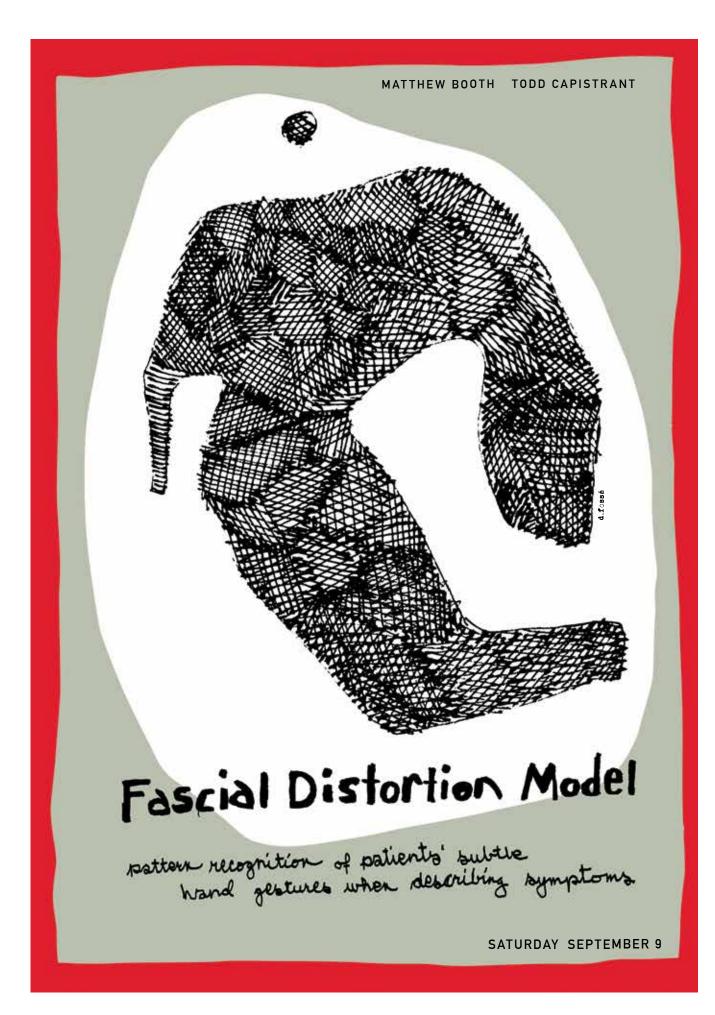
Srinivas Nalamachu MD • Joseph V. Pergolizzi, Jr MD

Friday 9.8 7:00a – 7:50a

Level 3.**Gracia 5**

This session presents posters selected for oral presentations.

POS-01 Scientific Poster Session and Reception*



PTH-01 Words Wisely Chosen: Avoiding the Unintended Nocebo Effect Kathryn A. Schopmeyer PT, DPT, CPE

Saturday 9.9 7:00a – 7:50a

Level 3.Gracia 3

Traditional medical and rehabilitation training programs teach clinicians to frame an explanation of body pain in terms of anatomy and biomechanics. As intuitive as this may be, what we say is often not what patients hear. Research has demonstrated that use of common terms such as "degeneration," "wear and tear," or even "chronic" is associated with worse prognosis in the long term. This course will provide a research review of the nocebo effect of language, and offer alternative, descriptive terms and phrases for clinicians to use during brief or extended interactions. When patients have a greater sense of hope and control over their pain conditions, outcomes improve. This course is designed for any professional who educates patients about pain, directly treats pain conditions, or collaborates with other disciplines in multimodal pain care.

PTH-02 Fascial Distortion Model:

Pattern Recognition of Patients' Subtle Hand Gestures When Describing Symptoms Matthew R. Booth PT, DPT • Todd A. Capistrant DO, MHA, CS

Saturday 9.9 9:10a – 11:00a

Level 3.Gracia 5

Level 4. Nolita 1

The fascial distortion model (FDM) is an anatomical perspective in which the underlying etiology of virtually every musculoskeletal injury is considered to be comprised of one or more of 6 specific pathological alterations of the fascial system. FDM allows practitioners the ability to interpret a patient's pain complaints and direct treatment to correct the fascial distortions. The treatments provide quick and effective reduction of pain. This hands-on manual treatment reduces the need for pain medications and helps patients regain independence. This session will introduce attendees to the gestures that are commonly found in patients experiencing pain.

PTH-03 Exercise Prescription for Patients With Chronic Pain

Jason L. Silvernail DPT, DSC, OCS, CSCS, FAAOMPT

Saturday 9.9 10:30a – 11:20a

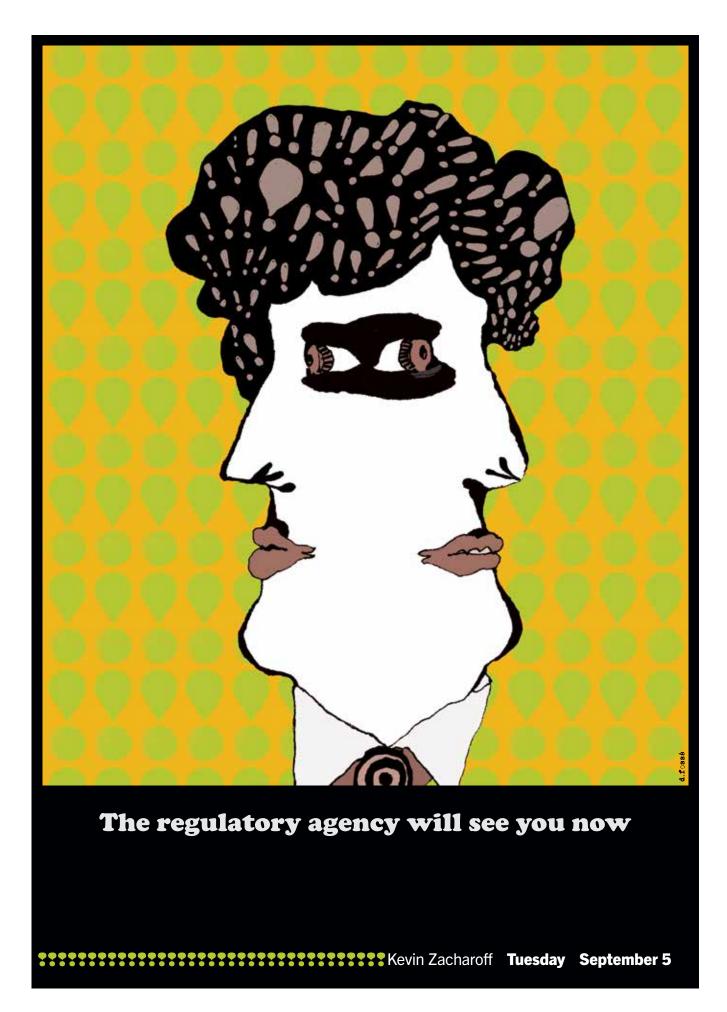
Patients with chronic pain are less active than average, exposing them to increasing risks of comorbid conditions, resulting in decreasing functional status for ADLs and low activity ability. This cycle results in low tolerance for physical activities; decreased participation in school, workforce, or in job retraining programs; increased care costs; and a poorer prognosis for recovery and return to a healthy and independent lifestyle. Clinicians of all backgrounds can profit from understanding the benefits of exercise as a treatment and prevention approach for their patients, as well as learning practical strategies for implementing exercise therapy in the clinic and improving patient compliance. This presentation will review the recommendations on physical activity for healthy adults, discuss the problem of low exercise compliance in the chronic pain patient, and provide practical strategies for clinicians to prescribe exercise in the clinic. We'll review consensus scientific guidelines and published clinical trials and discuss implementation of patient coaching techniques to bridge the gap between evidence and practice to help patients attain better function and a healthier lifestyle.

PTH-04 **Restoring Hope:** The Treatment of Pelvic Pain Across the Gender Spectrum Sandra J. Hilton PT, DPT, MS

Saturday 9.9 2:40p – 3:30p

Level 4.Nolita 1

Pelvic pain is a global problem affecting people across the gender spectrum through a limitation of quality of life, a loss of pleasure, and often a loss of hope for recovery. This



session will outline the interdisciplinary options for taking advantage of current pain science as a framework to identify persons with pelvic pain and design treatment programs to restore optimal function. Evidence for manual therapy, psychosocial interventions, and motivational interviewing will be used to describe a treatment model that promotes self-efficacy and can be used in a variety of settings.

PTH-05 At the Edge of Interaction: Applying Edge Work and Novel Movement to Painful Motion Cory Blickenstaff PT, MS, OCS

Saturday 9.9 3:40p – 4:30p

Level 3.Gracia 5

Edge work describes a process of attending to and experimenting with movement and positional sensations during movement interventions such that self-efficacy and recovery expectations are facilitated. An approach of moving within specific novel contexts, while guiding/facilitating various recovery narratives, will be discussed. An overview focusing on the interactive process of care will be provided with example applications of pain science and theory to movement related clinical presentations. This session is well-suited for clinicians working or interested in fields of movement therapy, manual therapy, physical medicine, and rehabilitation as it relates to pain.

SIS-01 The Regulatory Agency Will See You Now

Kevin L. Zacharoff MD, FACIP, FACPE, FAAP

Tuesday 9.5 **9:10a – 10:00a**

Level 4. Mont-Royal Ballroom

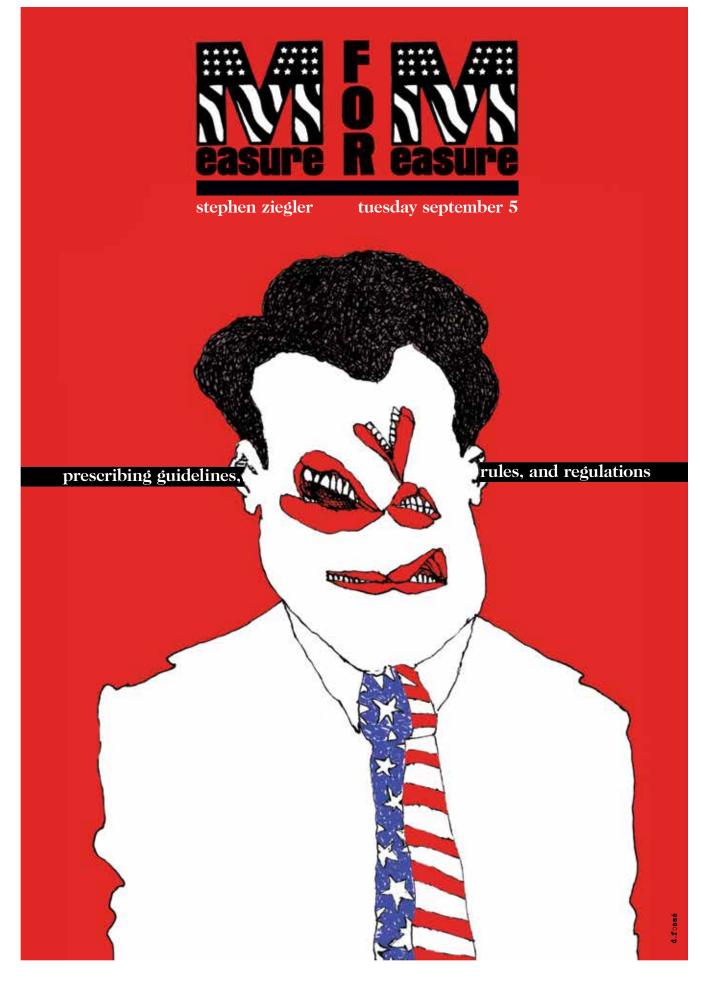
Despite high prevalence and seemingly continuous attention, the clinical challenges associated with assessing, treating, and managing patients with chronic pain continue to persist. Many different forces are at play and responsible for this frequently frustrating situation and, as is often the case, the person with the most at risk is the patient with chronic pain. There is no deficit of opinions for possible solutions to this problem. In fact, the number of potential solutions seems to increase each year, all with the intent of helping pain care be more safe and effective, and most trying to stem the negative consequences of abuse, misuse, and diversion of prescription pain medications. Clinicians have had to juggle these good intentions along with the fear of regulatory scrutiny. This course will present and detail the variety of current regulatory forces that need to be considered in clinical practice; how they can potentially impact clinical decisions regarding chronic pain; and how they can be negotiated. A number of regulatory agencies are now "sitting at the pain management table" for the foreseeable future and it is critical to navigate the waters without sacrificing that most important stakeholder: the patient.

SIS-02 **Itsa Schmerz!** Treatment of Preemptive and Perioperative Pain after Spine Surgery **Robert L. Barkin** MBA, PHARMD, FCP, DAPM • Gary W. Jay MD, FAAPM, FACFEI

Tuesday 9.5 **9:10a – 10:30a**

Level 3.Gracia 1

New paradigms of patient care postsurgery (such as spinal surgery) utilizing both pre- and postoperative multimodal approaches to analgesia, nonopioid medications specifically, will be discussed. Included in the course will be presurgical and immediate postoperative medications, and both acute and chronic/persistent postoperative pain. And yes, we will mention opiates! We will cover preventative analgesia, concepts for perioperative pain control, regional or local anesthetics, the analgesic selection process, monitoring special populations, and discharge pain treatment plans.



SIS-03 Measure for Measure: Prescribing Guidelines, Rules, and Regulations Stephen J. Ziegler PHD, JD

Tuesday 9.5 **10:30a – 11:20a**

Level 3.Gracia 1

Washington was one of the first states to legislate prescribing rules for the treatment of chronic pain, a unique model which relied on the use of a dosage trigger and the necessity to calculate morphine equivalency. Following Washington's lead, other states and the Centers for Disease Control and Prevention (CDC) have created their own guidelines and rules that not only vary widely but are often in conflict with each other. This presentation will discuss the recent history of prescribing guidelines, their diffusion across the United States, and their potential impact on medical practice and the treatment of pain.

SIS-04 The Outer Limits: Analgesics of the Future Jeffrey A. Gudin MD

Tuesday 9.5 **2:40p – 3:30p**

Level 4. Mont-Royal Ballroom

Medicine and science builds and grows on the foundations of those that 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-o6 Within You, Without You: Virtual Reality for Pain Management Ted W. Jones PHD, CPE

Tuesday 9.5 4:40p - 5:30p

Level 4. Nolita 3

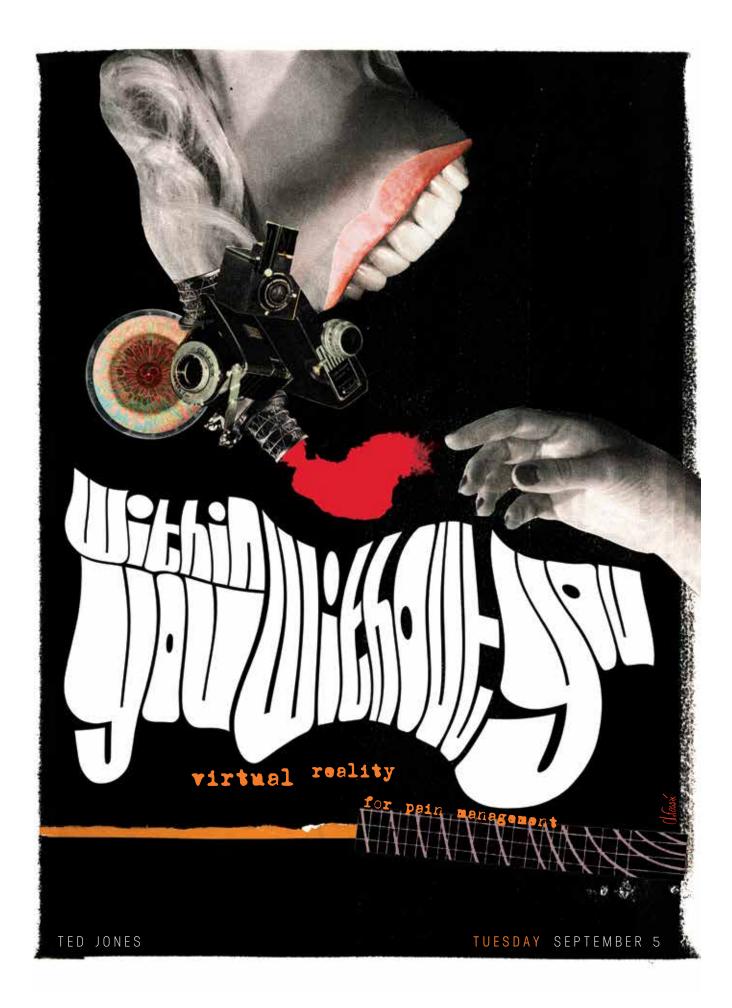
Virtual reality (VR) has been used as a pain treatment technique in some settings for decades. However, the cost of the technology has traditionally been out of reach for most practitioners. This has changed recently, as the hardware has become affordable, and using VR in the treatment of outpatient chronic pain is now possible. This session will review some of the existing literature on the use of VR for pain, and the hardware options available. Data from 2 clinical trials done at my practice of VR and chronic pain will be reviewed and implications discussed. Overall, we will discuss the emerging options with VR for frontline practitioners to help patients deal with pain without opioids.

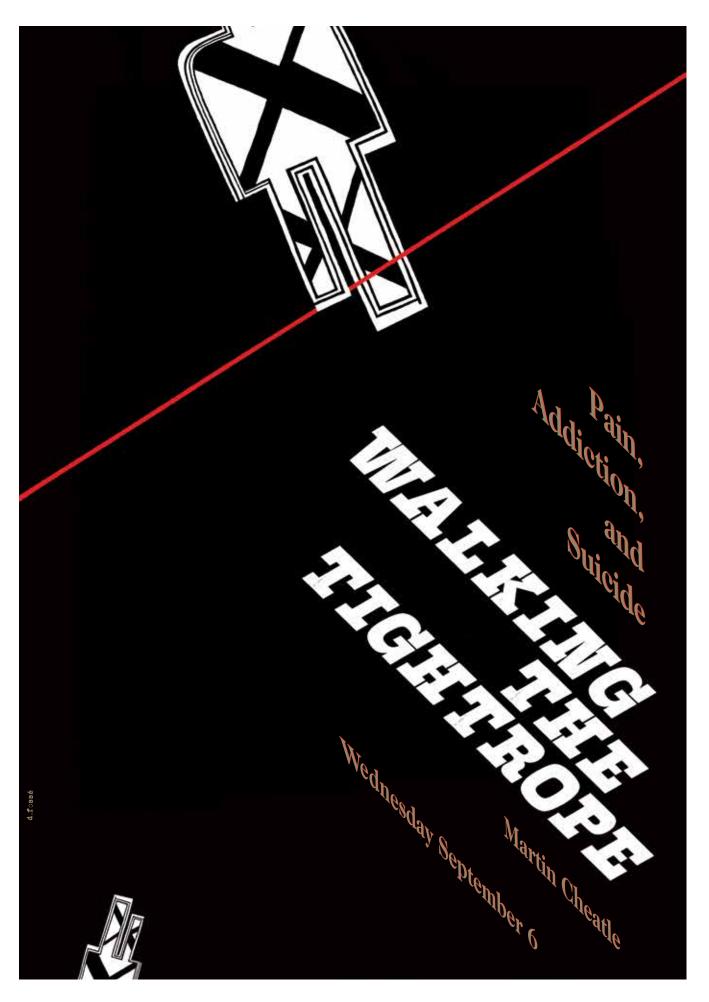
SIS-08 The Story of O: A Molecule in Chains? Michael R. Clark MD, MPH, MBA

Wednesday 9.6 1:40p – 2:30p

Level 4. Nolita 3

The management of chronic pain syndromes with long-term opioid therapy remains controversial. How are clinicians supposed to responsibly sift through the miasma of evidence based data, and the chorus of CNN, CDC, and DEA voices, while helping patients manage their chronic pain? This presentation separates fact from fiction, acknowledges the dilemma facing healthcare providers today, and provides practical insight to front-line practitioners grappling with this quandary.





SIS-09 Walking the Tightrope: Pain, Addiction, and Suicide Martin D. Cheatle PHD

Wednesday 9.6 2:40p - 3:30p

Death by suicide has become a global epidemic. Every 40 seconds someone dies of suicide, and in 2012 an estimated 804,000 suicide deaths occurred worldwide. Individuals with chronic pain commonly have significant concomitant psychiatric and medical disorders placing them at higher risk for suicide. This presentation will review current literature on the epidemiology of suicidal ideation in the pain and substance use disorder populations, and discuss assessing suicide risk and identifying modifiable mediators of suicide, pain, and substance use disorder.

SIS-10 Drinking From a Fire Hose: Educating Stakeholders at the Speed of Sound Steven D. Passik PHD

Wednesday 9.6 2:40p – 3:30p

This course will address the current predicament of the clinician treating pain and trying to do opioid therapy safely and effectively. How do you stay in step with the ever changing landscape, rules and rhetoric, do what's right for your patient, stay abreast of new developments, and one step ahead of burnout and bewilderment? All the tools are in place to make every opioid exposure as safe as possible if one has the time, knowledge, experience, and inclination even while there is immense pressure, some of it justified, to decrease the number of exposures overall. And how can you do all this while colleagues are backing out of caring for these patients? If you are still hanging in there, the likelihood is you're swamped, and time is a scarce (and poorly reimbursed) resource. You likely feel like you are drinking from a fire hose. Indeed, you are.

SIS-11 How to Develop a Multidisciplinary Pain Program in a Nonacademic Setting R. Norman Harden MD

Wednesday 9.6 2:40p – 3:30p

Level 3.Gracia 7

Level 3.Gracia 1

Level 3.Gracia 5

Interdisciplinary pain programs are usually found in academic centers and large urban hospitals. This session will discuss how to develop and deliver a quality multidisciplinary approach outside of these centers. Topics will include appropriate modalities, recruitment of the indicated professionals, training, organization, and operation.

SIS-12 Pain Clinical Trials

Co-Chairs: Srinivas Nalamachu MD • Joseph V. Pergolizzi, Jr MD Rami Ben-Joseph PHD • Errol M. Gould PHD • Ernest A. Kopecky PHD, MBA • Robert B. Raffa PHD • Robert Taylor PHD

Thursday 9.7 **1:40**p – 3:30p

Level 4.Nolita 3

The significance of investigational drugs can be identified by performing a variety of clinical studies. These studies can range from bench top to bedside and include various populations like pediatrics and geriatrics. This course will address elements related to the clinical study of analgesics. Discussed will be new analgesic drugs; their mechanism of action; how to design a study around these characteristics; why trial design for these types of analgesics (and others) do not always mimic clinical practice; and pitfalls of analgesic trials. Issues surrounding some of the new regulatory requirements of analgesics, especially controlled substances, and the impact of these requirements on trial design will be discussed. In addition, dissemination of data from analgesic clinical studies into the public domain will be covered.

SIS-13 Solutions to Counterfeit Medicines

Jay Joshi MD

Thursday 9.7 **2:40**p – **3:30**p

Level 4.Nolita 1

We will discuss solutions and technologies available TODAY that are aimed at fighting counterfeit medicine. Counterfeit medicine and counterfeit medical services pose a clear and present danger to our society. While we have all heard of the opioid epidemic, most people 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. Global sales of counterfeit products in the pharmaceutical industry accounted for \$431 billion in 2012 according to the World Health Organization. Counterfeit pharmaceuticals account for up to \$200 billion in losses per year alone.

SIS-14 Is That Naloxone in Your Pocket or Are You Just Happy to See Me?

Kevin L. Zacharoff MD, FACIP, FACPE, FAAP

Thursday 9.7 **4:40**p – **5:30**p

Level 4. Nolita 3

Naloxone was approved for the treatment of opioid overdose by the Food and Drug Administration in 1971. Listed in the World Health Organization's Model List of Essential Medications in the section Antidotes and Other Substances Used in Poisonings, there is no question that naloxone has a firmly established place in modern medical systems of healthcare delivery. A "pure" opioid antagonist, naloxone has long been used by anesthesiologists, emergency medical service personnel, and first responders in order to counteract opioid induced respiratory and neurologic depression caused by natural and synthetic opiates. Only relatively recently has community level use of naloxone become more commonplace, including use for patients being treated with opioid analgesic therapy at higher risk of respiratory depression, individuals being treated for substance use disorder, and people who abuse or misuse opioid medications. This presentation will discuss the pharmacologic and clinically relevant rationale for the use of naloxone in detail, along with the advocacy and controversy associated with mainstream use. Naloxone's role in helping to improve prescribed opioid analgesic safety and efficacy, along with its potential contribution towards stemming the rising rate of unintended opioid related deaths, is a timely subject.

SIS-15 **The Octopus From Hell:** Exploring 8 Extremities of Chronic Pain **Robert L. Barkin** MBA, PHARMD, FCP, DAPM • Gary W. Jay MD, FAAPM, FACFEI

Thursday 9.7 **4:40**p – 6:00p

Level 4. Nolita 1

The purpose of this session is to look at the various issues entangling pain medicine and creating significant obstacles for the clinicians who work in the field, many of whom are deciding to "get out of town" because of fear of retaliation secondary to the use of opioids. Also to be discussed: the opioid epidemic (or is it the heroin epidemic?); the CDC guidelines and where they are going; treating new vs old (or chronic) pain patients; the existing and lack of opiate medications; and the police officer role. We ask "Are tamper resistant formulations helpful?" and "Whose fault is all this really?" Featuring a surprise guest speaker, the class will be a place for interaction between presenters and attendees. Come and share your thoughts!

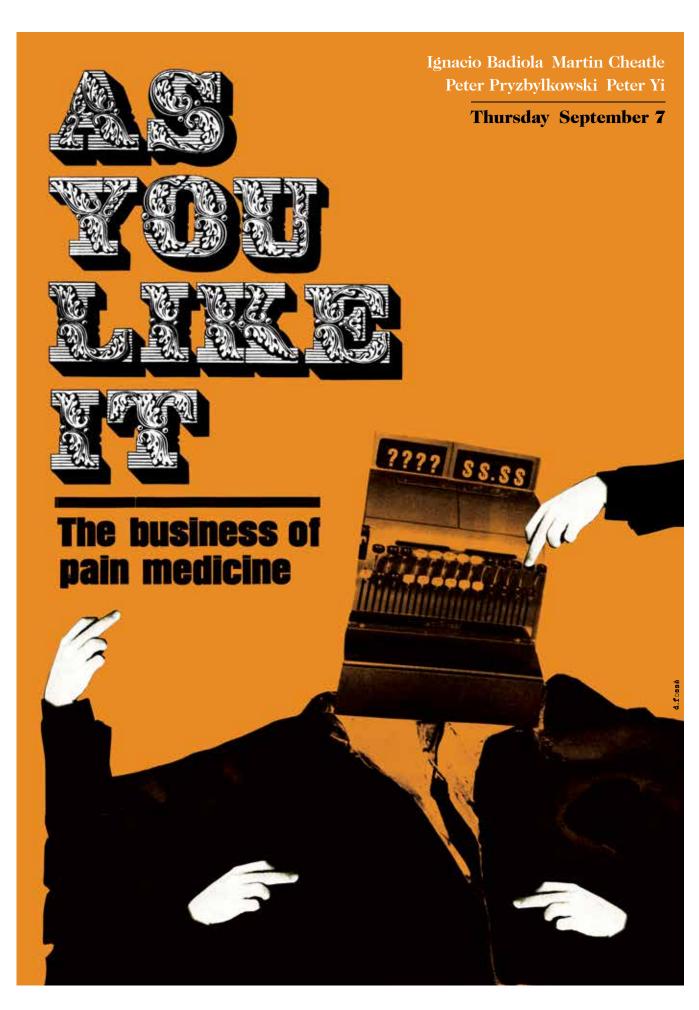
sis-16 As You Like It: The Business of Pain Medicine

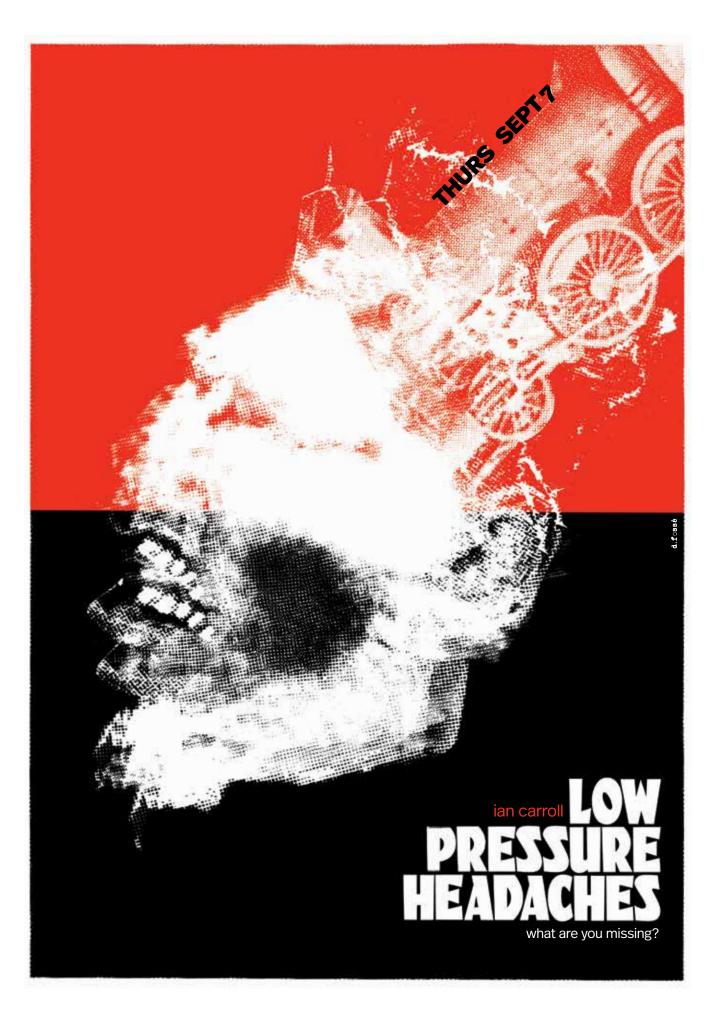
Ignacio J. Badiola MD • Martin D. Cheatle PHD • Peter G. Pryzbylkowski MD • Peter Yi MD

Thursday 9.7 **4:40p – 6:00p**

Level 3.Gracia 3

It has been estimated that approximately 30% of adults in the United States suffer from chronic or recurrent pain and this number grows annually. Pain care models have





evolved from unimodal/multimodal approaches to cost effective, efficacious interdisciplinary care. But over the past few years the field of pain medicine has regressed from providing a more holistic, interdisciplinary approach to emphasizing unimodal (spinal injections, spinal cord stimulation) and at best limited multimodal (medication management, procedures) interventions. The long-term efficacy and costs of these currently standard treatments varies greatly. This presentation will provide a critical review of good vs poor evidence based pain medicine interventions and the associated costs to patients and society.

SIS-17 **Fudin vs Gudin:** Can Overprescribing Be Defended in Court? Jeffrey Fudin BS, PHARMD, DAAPM, FCCP, FASHP•Jeffrey A. Gudin MD

Thursday 9.7 **5:40p – 6:30p**

Level 4. Nolita 3

Various new state regulations and guidelines, including those recommendations from the CDC, have recently emerged that assign maximum allowable morphine equivalent daily doses. Certain states have endorsed hard edits that disallow prescribing or dispensing above a predetermined maximum daily dose. These disparate and often arbitrary rules have left clinicians in a dilemma to forcibly reduce opioid dose and to defend themselves in court. In some cases it has forced a wedge between prescriber and dispensing pharmacist. Drs. Fudin and Gudin are both expert witnesses with extensive court experience in defending or supporting various positions to justify drugs or doses beyond those assigned or supported by regulatory and oversight authorities. Discussion of real cases with point and counterpoint arguments will include regular use of oxycodone immediate release 30 mg tablets; transmuscosal immediate release opioids off-label use; high dose methadone for chronic pain; and combined opioids with benzodiazepines and carisoprodol, aka The Holy Trinity. Audience participation will be encouraged. Bring your jury and judge hats!

SIS-18 Low Pressure Headaches: What Are You Missing? Ian Carroll MD, MS

Thursday 9.7 **5:40**p – 6:30p

Level 3.Gracia 5

Low pressure headaches (LPH) are caused by low cerebral spinal fluid pressure or volume and may be spontaneous or provoked. Although the suspected incidence of spontaneous intracranial hypotension is rare, improved imaging and greater awareness have led to increased identification. Undiagnosed LPH can lead to years of painful, expensive, and unyielding diagnostics. Patients endure years of suffering as a result of inappropriate treatment and the stigma of chronic, or even a suspicion of psychogenic, pain. Practitioners struggle with the inability to diagnose or manage the patient's symptoms because of inadequate education. This presentation will review the clinical features of a low intracranial pressure headache, explore unique patient history and imaging characteristics, and identify proper treatment options available.

SIS-19 The Medical Stasi: Is Urine Drug Testing Necessary? Jennifer Bolen JD • Paul J. Christo MD, MBA • Douglas L. Gourlay MD, MSC, FRCPC, FASAM • Howard A. Heit MD, FACP, FASAM • Gary M. Reisfeld MD

Friday 9.8 9:10a – 11:00a

Level 4. Mont-Royal Ballroom

The basic elements of drug testing in clinical care, including the core elements an ordering clinician should know, will be highlighted through a moderated panel discussion by key opinion leaders from the clinical as well as legal domains. Some of the more hotly debated topics such as medical necessity, presumptive vs definitive testing, and even the need for rational testing strategies will be examined from a patient centered point of view. Common traps associated with drug testing including "excess testing," overinterpretation, as well as "What do we do with unexpected results?" will be discussed. The role of state/government involvement in clinical drug testing will be explored. The session will end with audience Q&A.

sis-20 **Opioid Sparing:** Treating the Whole Patient

Ignacio J. Badiola MD • Martin D. Cheatle PHD • Peter G. Pryzbylkowski MD • Peter Yi MD

Friday 9.8 4:40p – 6:00p

Level 3.Gracia 3

There has been increasing concern regarding the efficacy and potential adverse effects of long-term opioid therapy in patients with chronic noncancer pain. As the rate of opioid prescribing increased, it was paralleled by an increase in opioid related fatalities and rates of admissions to residential programs for treatment of opioid use disorders. In a subgroup of patients, opioids can be very effective in improving pain and functionality, but current practice guidelines promote a more multimodal approach to managing pain in patients with chronic pain. This includes developing opioid sparing techniques to ensure effective pain management, while mitigating the risk of long-term adverse effects from opioids. Rather than approaching the opioid debate with frequently discussed topics (urine drug monitoring, risk assessment, etc) this presentation will focus on treating pain, common comorbidities (sleep, mood, anxiety), and behaviors/lifestyle (high BMI, deconditioning) with a multimodal approach (interventions, nonopioid pharmacologic, and nonpharmacologic strategies) promoting improved outcomes and lower opioid dosing or cessation of opioids altogether.

SIS-21 Using Electronic Pain Assessment Programs and Innovative Technology in Pain Medicine: Where Are We Now and Where Are We Going? Stephen F. Butler PHD • Robert N. Jamison PHD • M. Cary Reid, Jr MD, PHD

Saturday 9.9 9:10a – 10:30a

Level 4. Mont-Royal Ballroom

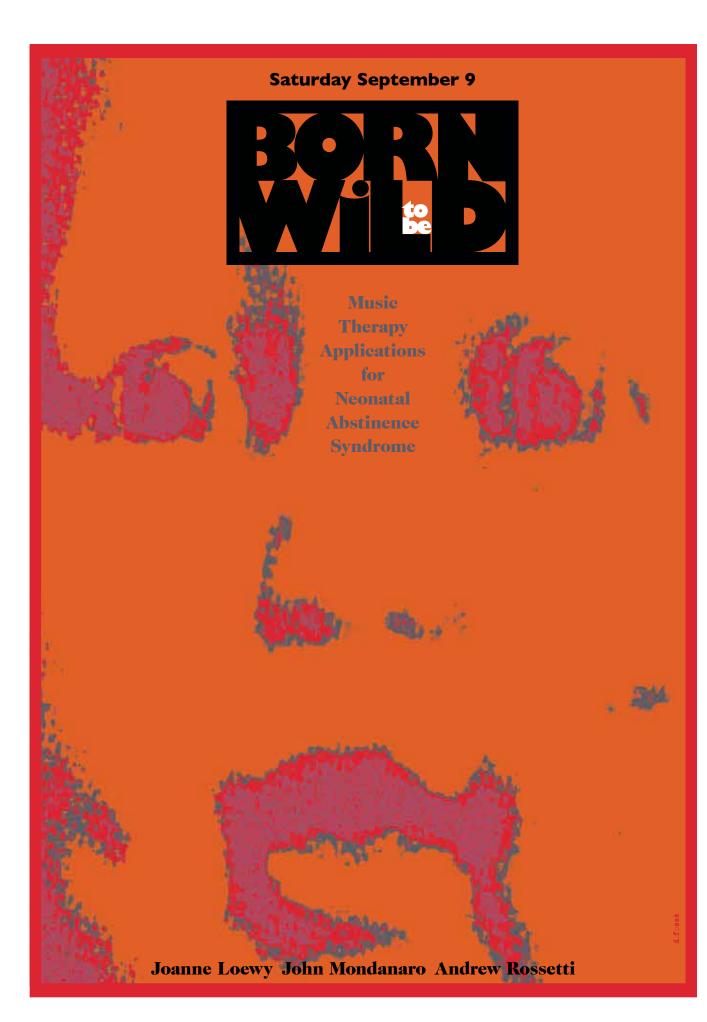
There has been a rise in interest in remotely assessing and monitoring pain and associated symptoms, such as fatigue, as well as in the use of electronic health (eHealth) technology designed to support individuals in making lifestyle changes needed to improve pain management. Consumer demand for remote assessment programs, health apps, and sensors has far outpaced the science needed to understand their benefits and impact. For persons with chronic pain and providers who treat them, assessment programs, mobile apps, and activity monitors can help encourage behavioral change including symptom monitoring, education, reinforcement of positive behaviors, and as tools to enhance patient-provider communication. This course will detail the content, face validity, reliability, usability, benefits, barriers, and technical issues associated with the use of eHealth technology for persons with chronic pain and discuss future areas for clinical use.

SIS-22 Born to Be Wild? Music Therapy Applications for Neonatal Abstinence Syndrome Joanne V. Loewy DA, LCAT, MT-BC • John F. Mondanaro MA, LCAT, MT-BC • Andrew R. Rossetti MMT, LCAT, MT-BC

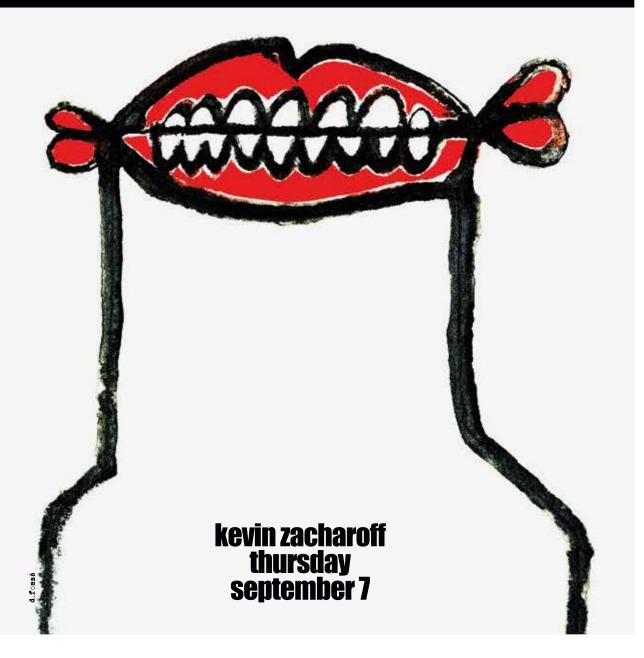
Saturday 9.9 1:40p – 3:30p

Level 4. Nolita 3

Neonatal abstinence syndrome affects both infants and the parenting dyad on physical and psychoemotional levels often resulting in multiple domains of pain that are not easily managed. The painful withdrawal of the neonate due to a substance usage (illegal opiate or neurotransmission via ionotropic) results in inconsolable crying, poor feeding, vomiting, and other severe physical symptomatology. The fragility of the neonate is further complicated for mothers hospitalized for antepartum care.



is that naloxone in your pocket or are you just happy to see me?



Unwanted and at times harmful stress levels during high risk pregnancy can be further exacerbated due to drug exposure. Heightened anxiety levels affecting the release of hormones can result in elevated pain for mothers and for the postnatal infant. Music therapy focusing simultaneously on the developmental needs of the neonate in with-drawal and the psychosocial needs of the mother, father, and/or other significant caregivers fosters a sense of meaning and relationship in an environment where identity compromised by uncertainty can result in detachment and ambivalence. Addressing the pain that is visibly and palpably felt by the neonate can result in the empowerment and amelioration of emotionally painful circumstances of mothers in recovery, and their respective partners.

SYM-01 Managing Opioid Risks & Adverse Effects in a Politically Charged Environment

This activity is supported by educational grants from Salix Pharmaceuticals, Inc. and Depomed

Jeffrey A. Gudin, MD • Lynn R. Webster, MD

Wednesday 9.6 4:40p – 5:30p

Level 3.Gracia 1

Learning Objectives

After completing this activity, participants should be able to:

- Recognize risks and benefits of analgesic therapies for chronic pain
- Identify MOAs and safety and efficacy profiles of agents, particularly new and emerging agents that minimize side effects, to guide personalized pain-management plans
- Discuss mitigation strategies and patient-centered approaches to overcome barriers associated with under-treatment of pain

Program Overview

Moderate-to-severe pain continues to be widely undertreated in outpatient settings, often due to fears of legal and regulatory sanctions, insurance barriers, and adverse outcomes from opioids. Despite the pain-relieving properties of opioid medications, the potential for abuse remains a concern among primary care providers, pain management specialists, and other clinicians who manage patients with pain. The risk of contributing to an opioid use disorder or overdose is omnipresent.

When an opioid is used, clinicians must find safe and effective ways to manage adverse effects, such as opioid-induced constipation (OIC). As many as 80% of patients taking an opioid medication experience at least one adverse event, which diminishes overall satisfaction and limits a patient's ability to achieve adequate analgesia.

Engaging patients through an interdisciplinary approach can help patients effectively manage their pain. This includes ensuring patient adherence and making sure each patient understands how to properly take medication(s). Clinicians must be prepared to discuss potential side effects and ways to manage these events, and must address patient concerns regarding the use of opioids. Clinicians should also be familiar with new and emerging analgesic therapies, some of which tout an improved safety profile.

This educational initiative will address factors that prevent appropriate and safe opioid management of pain, and will explore the reduction of adverse effects associated with opioids. Increasing clinicians' awareness of evidence-based pain management can improve patient quality of life and satisfaction.

For accreditation information, please refer to page 51.

SYM-02 Finding Relief from Opioid-Induced Constipation:

Emerging Therapies for Individualized Management Supported by an educational grant from Salix Pharmaceuticals, Inc., A Division of Valeant Pharmaceuticals North America IIc and Consultant, a registered trademark of HMP Communications Jeffrey A. Gudin, MD

Saturday 9.9 7:00a – 7:50a

Level 3.Gracia 1

Learning Objectives

After completing this activity, participants should be able to:

• Recognize the prevalence, burden, and barriers to care faced by chronic pain patients with oic

- Discuss the latest criteria for the screening and diagnosis of OIC in patients with chronic pain managed by opioids
- Evaluate the full OIC treatment armamentarium—including emerging targeted therapies—in terms of mechanism of action, safety, and efficacy
- Develop tailored treatment plans that apply the latest consensus recommendations and prescription therapies to effectively manage OIC

For accreditation information, please refer to page 51.

WOU-01 Insult to Injury: Wound and Other Pains in a Wound Care Patient Michael S. Miller DO, FACOS, FAPWCA, WCC

Saturday 9.9 8:00a – 9:00a

Level 4. Nolita 3

A break in the largest protective organ of the body (namely the skin) can cause a myriad of issues of which pain is all too frequently a major focal point. As with all pain management, identifying the basic cause(s) of the pain is integral to treating it. The goal is to do so without having an adverse impact on wound healing or creating other issues as a result of the intervention. Once a logical diagnosis of the etiology of a presenting wound or related condition has been made, the treatment of the pain associated with it needs to be logical, successful, and multifocal to address not just the pain, but the related and interrelated causes for each presentation. This session will look at the many causes of pain related to different wound conditions and discuss the options to treat pain, whether wound related or unrelated, to maximize wound healing.

WOU-02 **Woundology:** The Spectrum of Reasons Why the Epithelium Gets Lost Michael S. Miller DO, FACOS, FAPWCA, WCC

Saturday 9.9 10:30a – 12:00p

Level 4. Nolita 3

The presentation of a patient with a nonhealing wound and related conditions can be a puzzling and frustrating issue. The keys to healing a presenting wound or related condition are no different than any other branch of medicine: it helps to have a diagnosis which makes sense and then initiate treatment that is not only cost effective but successful. This session will review the major causes of wounds that present in the office and review common sense ways to make the diagnosis and decide if treatment can be performed in the office or sent to a specialist.

WRK-01 **A Comedy of Errors:** Methadone, Marijuana, and Buprenorphine **Douglas L. Gourlay** MD, MSC, FRCPC, FASAM • Mary Lynn McPherson PHARMD, MA, BCPS, CPE

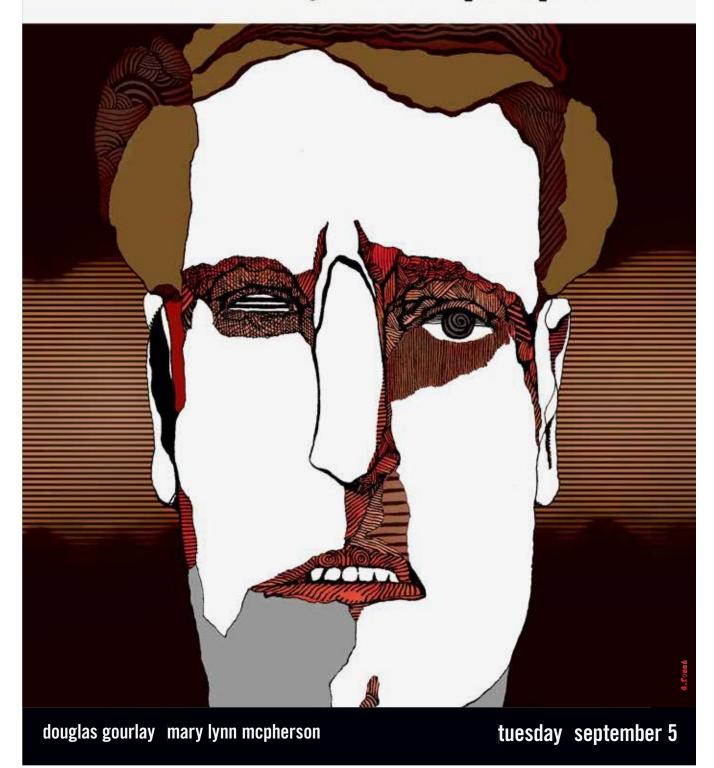
Tuesday 9.5 9:00a – 12:00p

Level 3.Gracia 5

The 3 most contentious, poorly understood analgesics today are methadone, cannabis, and buprenorphine. This fast paced workshop will equip practitioners with immediately



methadone, marijuana, and buprenorphine



implementable practical tips regarding when and how to use these analgesics, including dosage formulations, routes of delivery, appropriate use in therapy, drug interactions, dosage titration (both up and down), opioid conversion calculations, and more. All discussions will be aimed at enhancing clinical, economic, and humanistic outcomes on the individual patient and health system level.

This course requires a separate registration fee of \$165

WRK-02 Managing Pain Between a Rock and a Hard Place:

Getting the Tough Jobs Done in Serious Illness Frank D. Ferris MD•Jessica Geiger-Hayes PHARMD, BCPS, CPE• Alexandra McPherson PHARMD, MPH•Mary Lynn McPherson PHARMD, MA, BCPS, CPE

Tuesday 9.5 **1:40**p – **4:40**p

Level 3.Gracia 5

Patients with serious illnesses often experience painful clinical situations that are beyond the scope of usual and customary practice. Palliative care practitioners are skilled at "thinking outside the box" to get the job done, including recognizing and treating opioid induced hyperalgesia and pain in highly opioid tolerant patients, and utilizing analgesics such as ketamine (by a variety of routes of administration), methadone (oral and parenteral) and lidocaine (parenteral and topical). Participants in this interactive workshop will leave with practical strategies to treat difficult pain syndromes in advanced illness, including painful wound care.

This course requires a separate registration fee of \$165

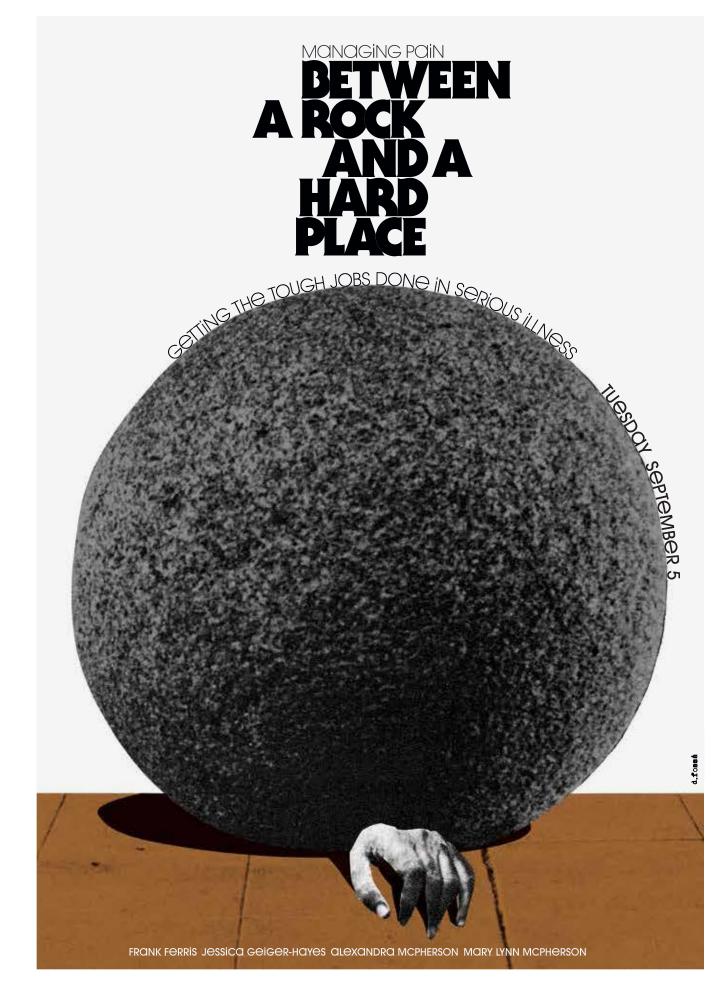
WRK-03 Winning the Game of Groans: Strategies and Tactics for Preserving the Pain Practitioner's Decision to Prescribe Controlled Medication Jennifer Bolen JD • Douglas L. Gourlay MD, MSC, FRCPC, FASAM • Ted W. Jones PHD, CPE • Darren McCoy FNP-BC, CPE

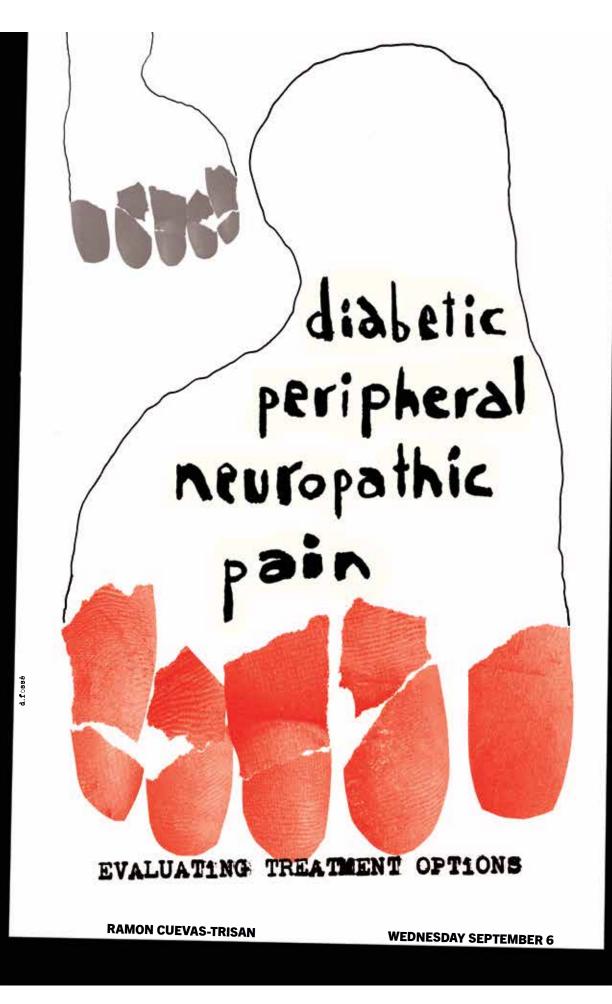
Wednesday 9.6 9:00a – 12:00p

Level 4.Yaletown 1

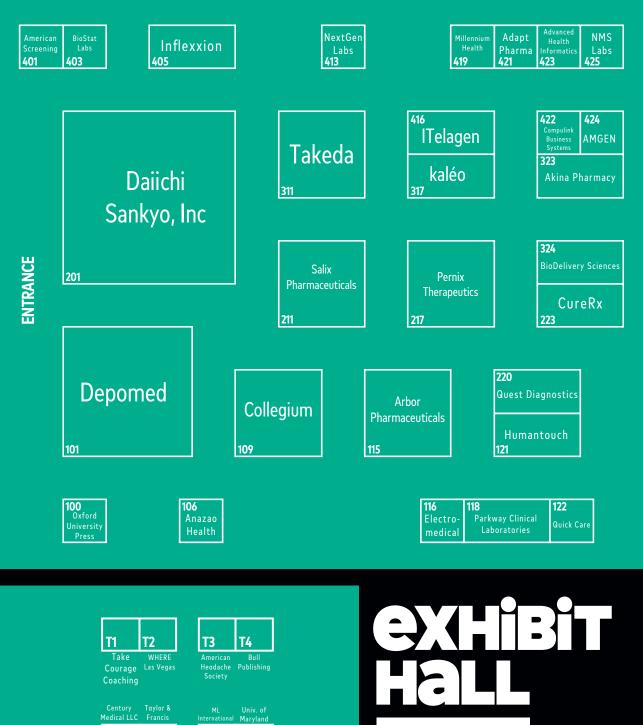
This hands-on workshop is conducted by a unique combination of faculty: a physician, a nurse practitioner, a clinical psychologist, and a veteran attorney/medical practice consultant. It will instruct pain practitioners on key self-audit strategies and tactics to demonstrate and document patient evaluation and monitoring when prescribing controlled medication to treat pain. Using a combination of teaching methods, faculty will present not only the "what" of quality patient evaluation and monitoring, but also the "how to" of compliance and documentation strategies. Faculty and attendees will work through extensive case examples and various treatment puzzles to accomplish course objectives. In today's environment of ever increasing regulatory scrutiny over controlled medication, pain practitioners need to accurately and completely capture patient history, physical examination, risk evaluation, treatment plan, informed consent, treatment agreement, condition, and medication monitoring, and perform other steps to demonstrate "prescribing for a legitimate medical purpose while acting in the usual course of professional practice."

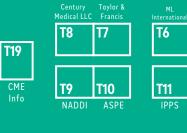
Note: This is an application-based activity; registration is limited to 40 learners, and there is a separate registration fee of \$185. Precourse materials will be made available prior to the program.













T5

T12

NEMA



Synergy	INC	ARUP	Alere
Health	Research	Labs	Toxicology
427	429	431	433

Hamilton	Pe
Robotics	Mi
439	443

	M
449	

428	432
US Pain Foundation	Thermo Fisher Scientific
Acadian Diagnostic Laboratories 329	Green Roads Wellness 333

Prescient

436 RxAssurance	438 Firstox	440 Healthpac Computer	442 CMHC	444 A4M
Drug Testing Program Management 337	ABS 339	SHC-USA 341	Waters Corp 343	Disc Disease Solutions 345

Recharge	
Lounge	
349	

336 Quantum Analytics	338 MedTest	340 Pharma Centra	342 drugscan	344 INSYS Therapeutics	346 NH Solutions	348	350 T.M.M.S.
Recro Pharma 237	Global Medical Management 239	Noble Medical 241	Laboratory Management 243	Pain Medicine News 245	Carolina Liquid Chemistries 247	249	251

226 Infinity Massage	228 J&J CI	230 Acetaminophen Awareness Coalition/ KnowYourDose	232
PharmaTech 127	Regenesis Biomedical 129	Applied VR 131	GENSCO 133

231

126	128	130	132
Aegis	LimitLIS Cloud	Practical Pain Management	

236 Elite Pain Management	238 SCIEX	240 Global Analytical	242 Phlight Pharma	Precision	246 Depomed Medical Information		250
Psyche Systems 137	AEVA 139	Global Gadgets 141	Clinical Pain Advisor 143	Indiba USA 145	147	149	151





FRiday 9.8

10:00a - 12:30p 2:30p - 4:30p

2:30p - 5:00p

Closing Reception

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.

THURSDAY 9.7

10:00a - 12:30p

WEDNESDAY 9.6

7:00p – 9:00p Welcome Reception

Booth	Organization	Description
339	ABS www.shopabs.com	ABS is an ISO-certified leading supplier of high-performance mass spectrometry, toxicology and chemistry measurement systems. We offer a comprehensive line of analyzers, reagents, consumables, laboratory data management systems, and customized service agreements.
329	Acadian Diagnostic Laboratories www.acadianlab.com	Please visit our booth for more information.
230	Acetaminophen Awareness Coalition/KnowYourDose www.knowyourdose.org	In partnership with the Acetaminophen Awareness Coalition, the Know Your Dose campaign educates consumers on how to safely use medicines that contain acetaminophen. By reaching consumers when medicine safety is top of mind, the campaign seeks to raise awareness and promotes safe acetaminophen use.
421	Adapt Pharma Inc. www.adaptpharma.com	Adapt Pharma, makers of NARCAN® Nasal Spray, is an innovative small business focused on developing cutting-edge treatments for patients with special medical conditions.
423	Advanced Health Informatics www.apeasy.com	Advanced Health Informatics addresses complex healthcare IT challenges and lowers the technical barriers for customers by providing intuitive, easy, and simple to use software for your laboratory and/or practice. Come see the live demonstrations of the EasyTox LIS and Molecular In- sights LIS during the PAINWeek Exhibition!
126	Aegis Sciences Corporation www.aegislabs.com	Aegis Sciences Corporation is a laboratory sciences company providing science-driven testing and consulting services for clients such as health- care providers, pharmaceutical companies, professional and amateur sports organizations, leading college and university athletic programs, medical examiners, Fortune 500 corporations, and government agencies throughout the United States.
139	AEVA Pharmacy www.aevapharmacy.com	Please visit our booth for more information.
323	Akina Pharmacy www.akinapharmacy.com	Please visit our booth for more information.
433	Alere Toxicology www.aleretoxicology.com	Alere Toxicology is committed to helping you develop a robust drug- testing program that positively impacts patient outcomes. Our goal is to provide clinicians with the tools needed to make individualized treatment plan decisions. We offer smart drug screening and monitoring solutions, accurate laboratory services, and unparalleled support. Knowing now matters [™] .
444	American Academy of Anti-Aging Medicine www.a4m.com	Please visit our booth for more information.
тз	American Headache Society www.americanheadachesociety.org	The American Headache Society® (AHS) is the professional organization for the study and management of headache and face pain. AHS activities include an annual scientific meeting, a comprehensive headache sympo- sium, regional symposia for neurologists and family practice physicians, and publication of the journal <i>Headache</i> . AHS established the American Migraine Foundation to raise awareness about migraine and related disorders and raise funds to establish the American Registry for Migraine Research.
401	American Screening Corporation www.americanscreeningcorp.com www.asdrugtest.com	American Screening LLC is a ISO 13485 leading point of care manufacturer specializing in FDA, OTC/CLIA Waived Drug Testing Products, selling world-wide to 27 countries. We also sell saliva drug tests, alcohol, HCG, LH, H. Pylori, strep A, flu A/B, FOB, chlamydia, HIV, HBV, HCV and many more. OEM/ Private Label Services are available.

Booth	Organization	Description
Τ10	American Society of Pain Educators www.paineducators.org	The American Society of Pain Educators (ASPE) is a professional organiza- tion dedicated to improving pain management through the education and training of healthcare professionals to become Certified Pain Educators (CPEs). As the only organization focusing on pain educator training, the Society teaches healthcare professionals to serve as resources to educate their clinical peers, as well as patients, families, and caregivers, on ways to relieve pain by the safest means possible. ASPE members are the frontline practitioners when it comes to treating pain. They are "go to" resources in their practices and organizations, imparting evidence based guidelines, translating care plans, and monitoring for safety, efficacy, and adherence. They are charged with delivering better health outcomes.
424	Amgen www.amgen.com	Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. A biotechnology pioneer since 1980, Amgen has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.
106	AnazaoHealth Corporation www.anazaohealth.com	AnazaoHealth is a nationwide 503A pharmacy and FDA-registered 503B outsourcing facility. Specializing in aesthetics, age management, hormone replacement therapy, men's and women's health, mesotherapy, urology, vitamin injectables, weight loss and more. Purity, potency, and quality have always defined our preparations and is documented throughout our fulfillment process.
131	appliedVR, LLC www.appliedvr.io	Please visit our booth for more information.
115	Arbor Pharmaceuticals, LLC www.arborpharma.com	Arbor Pharmaceuticals, headquartered in Atlanta, Georgia, is a spe- cialty 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 or ANDA approved products with over 35 more in development. For more information regarding Arbor Pharmaceuticals or any of its products, visit our website or send email enquiries to info@arborpharma.com.
431	ARUP Laboratories www.aruplab.com	ARUP Laboratories is a national clinical and anatomic pathology reference laboratory and a worldwide leader in innovative laboratory research and development. ARUP offers an extensive test menu of highly complex and unique medical tests, including comprehensive pain management and pharmacogenetics testing. ARUP's pain management testing is designed to meet the granularity requirements of monitoring pain management patients while being mindful of the cost to both the patient and the health system. ARUP is a nonprofit enterprise of the University of Utah.
324	BioDelivery Sciences, International www.bdsi.com	BioDelivery Sciences (BDSI [®]) is a specialty pharmaceutical company focusing on pain management and addiction medicine. We utilize our novel and proprietary BioErodible MucoAdhesive (BEMA [®]) and other drug delivery technologies to develop and commercialize, either on our own or in partnership, new applications of proven therapies to address important unmet medical needs.
403	BioStat www.biostathealth.com	BioStat Laboratories provide state-of-the-art laboratory service to our healthcare and patient community through a dedicated staff of profes- sionals focused on ensuring the delivery of accurate, cost-effective, and timely clinical information. BioStat Laboratories will be the national reference laboratory leader by offering innovative patient focused testing services. We value compassion, affordability, reliability, and excellence.

Booth	Organization	Description
Т4	Bull Publishing Company www.bullpub.com	Come pick up a signed copy! Just released, <i>Aches and Gains</i> , by Paul Christo, MD, pain specialist, Johns Hopkins University School of Medi- cine. This brand new book gives you and your patients the tools needed to identify the source of painful conditions and incorporate traditional, integrative and innovative therapies for pain treatment. We also have cop- ies of <i>Less Pain</i> , <i>Fewer Pills</i> ; <i>The Opioid-Free Pain Relief Tool Kit</i> ; and <i>Living</i> <i>a Healthy Life With Chronic Pain</i> .
442	Cardiometabolic Health Congress www.cardiometabolichealth.org	The Cardiometabolic Health Congress (CMHC) is more than an annual con- ference or regional meeting. CMHC provides a single point of access for busy practitioners to stay abreast of evolving science, clinical practice advances and continuing education in cardiometabolic disease prevention and man- agement. CMHC provides a complete platform of education spanning live and digital communications that extends the energy and experience of our national and regional conferences throughout the year and to a wider audi- ence of frontline clinicians with an interest in cardiometabolic health.
247	Carolina Liquid Chemistries Corp www.carolinachemistries.com	Carolina Liquid Chemistries makes drug testing in your facility easy and cost effective. Eliminate subjectivity and standardize your urine drug screens by using the EasyRA bench top designed for the smaller labora- tory. Carolina Liquid Chemistries offers a variety of cost-effective urine drug screening reagents for use on a variety of floor-model analyzers, along with service contracts.
т8	Century Medical cenmedservices.com	Please visit our booth for more information.
143	Clinical Pain Advisor www.clinicalpainadvisor.com	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.
109	Collegium Pharmaceutical, Inc. www.collegiumpharma.com	Collegium Pharmaceutical, Inc. is a specialty pharmaceutical company developing and commercializing novel, abuse-deterrent products for patients suffering from chronic pain. With a substantial number of patients suffering from chronic pain, Collegium is committed to develop- ing and commercializing products that help address the problems associ- ated with non-medical use, abuse and misuse of prescription products by leveraging the Company's proprietary DETERX® technology platform. DETERX® technology can be used with drugs that are commonly abused such as opioids and amphetamines, as well as drugs that have a narrow therapeutic index that would benefit from protection against misuse such as breaking, crushing, grinding, or dissolving the product.
422	Compulink Business Systems www.compulinkadvantage.com	Compulink is a leading provider of specialty specific solutions for EHR, practice management, revenue cycle management, patient engagement, and telehealth. We help more than 10,000 providers nationwide increase efficiency, get paid more, and improve outcomes.
223	CureRx Pharmacy www.curerxpharmacy.com	CureRx operates a full, non-sterile, mail-order compounding facility. Our formulations have been engineered by several pain management doctors and pharmacists to treat acute, chronic and neuropathic pain. With certified compounding specialists adhering to USP Chapter stan- dards developed specifically for the compounding pharmacy industry, CureRx is pioneering a level of patient care sure to benefit a physician's practice. Through independent potency, sterility and organoleptic testing, we ensure maximum effectiveness of the prescribed formula- tions, enhancing the patient experience on an individual basis. Our staff is highly experienced and trained in the third-party reimbursement process including most PPOS, HMOS and Medi-Care.

Booth	Organization	Description
201	Daiichi Sankyo, Inc. www.dsi.com	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.
101	Depomed www.depomed.com	Please visit our booth for more information.
246	Depomed Medical Information www.depomed.com	Please visit our booth for more information.
345	Disc Disease Solutions, Inc www.ddsbrace.com	Please visit our booth for more information.
342	DRUGSCAN www.drugscan.com	DRUGSCAN is a preeminent national toxicology laboratory that delivers a range of solutions to improve patient care; from medical management and drug testing to enhancing pharmaceutical drug development through Category 1 abuse-deterrent studies. DRUGSCAN is proud of its distinction as a CAP accredited and SAMHSA certified toxicology laboratory. We're committed to delivering unparalleled customer service. DRUGSCAN pro- vides reliable and convenient solutions to help you protect your patients and practice.
337	Drug Testing Program Management www.dtpm.com	Serving over 450 labs in 45 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. National in scope. Local in service.
116	Electromedical Products International, Inc. www.alpha-stim.com	Please visit our booth for more information.
236	Elite Pain Management LLC www.elitepainmanagement.md	We specialize in the medical management of chronic pain and opioid dependency. At Elite Pain Management, our goal is to improve the qual- ity of life for every patient who chooses our services. Medications are very commonly prescribed for pain, but the source of the pain is usually forgotten. For those patients who have chronic pain despite undergoing corrective surgery and/or procedures we offer custom-tailored outpatient programs, using strict protocols and our proprietary EMR system, to treat our patient's pain responsibly. We also provide consulting and practice management services.
438	Firstox www.firstox.com	At Firstox, our mission is to provide innovative medication monitoring solutions to help combat the prescription drug epidemic. Using a minimally invasive blood collection technique, we provide physicians with specific, actionable information for improved patient care. This includes whether patients are taking more or less medication than prescribed and if they are at a possibly toxic blood concentration level. Firstox also provides an extensive menu of prescription and illicit urine drug tests. Offering high-quality, affordable testing, we work closely with healthcare providers to ensure medical necessity.

Booth	Organization	Description
133	Gensco www.genscopharma.com	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. Gensco [®] Pharma: healthcare visionaries, boundless
240	Global Analytical Development www.gadevelop.com	Global Analytical Development is a leader in laboratory setup and testing solutions. We work with physicians and rehabilitation treatment centers to establish and manage a sustainable, compliance-driven laboratory. Services include licensing, accreditation compliance, technical consultants, audit and inspection support, analyzers and LIS software, and a broad test menu. For more information, go to website or call 855-425-9428.
141	Global Gadgets www.globalgadgetsus.com	Please visit our booth for more information.
239	Global Medical Management www.globalmedicalmgmt.com	Medical billing services specializing in anesthesia and pain management practices.
333	Green Roads Wellness www.greenroadswellness.com	Green Roads (est. 2013) is one of the world's leading suppliers of cannabidiol/ hemp derived CBD products. Offering patients a safe, effective alternative to prescription painkillers, other toxic prescription and over-the-counter drugs that contain harsh chemical compounds alien to nature's perfect remedies. Green Roads products are formulated by a compounding licensed pharmacist in an ISO6 clean room to ensure the highest quality finished products. We believe "THERE'S ALWAYS A NATURAL ALTERNATIVE."
439	Hamilton Robotics www.hamiltoncompany.com	Please visit our booth for more information.
440	Healthpac Computer Systems, Inc. www.healthpac.net	Healthpac is a national developer of healthcare billing and practice man- agement software. In business for 36 years, the experts at Healthpac have made it their mission to bring our clients breakthrough robust healthcare billing and technology solutions that allow you to survive and thrive in today's market place! With powerful software scrubbers and error check- ing processes, Healthpac empowers its over 35,000 healthcare providers to collect revenue daily more efficiently and at much higher levels. Stop by our booth and let the experts at Healthpac tell you more about how we eliminate healthcare revenue leakage!
121	Humantouch www.humantouch.com	Please visit our booth for more information.
429	INC Research www.incresearch.com	INC Research (Nasdaq: INCR) is a leading global contract research organization (CRO) providing the full range of Phase I to Phase IV clinical development services for the biopharmaceutical and medical device indus- tries. Leveraging the breadth of our service offerings and the depth of our therapeutic expertise across multiple patient populations, INC Research connects customers, clinical research sites and patients to accelerate the delivery of new medicines to market. The Company was named "Best Contract Research Organization" in December 2015 by an independent panel for Scrip Intelligence, and ranked "Top CRO to Work With" among large global CROs in the 2015 CenterWatch Global Investigative Site Relationship Survey. INC Research is headquartered in Raleigh, North Carolina, with operations across six continents and experience spanning more than 100 countries.

Booth	Organization	Description
145	Indiba USA www.indibausa.com	INDIBA®'s continuous leadership and scientifically backed molecular biology RF applications validates INDIBA®'s 448 kHz as a particularly effective frequency to induce subthermal and thermal biological effects. Applying INDIBA®'s CAP and RES electrodes achieves a new level of patient experi- ence due to the INDIBA® system delivering rapid pain relief and significant improvements in cellular metabolism.
226	Infinity Massage Chairs www.infinitymassagechairs.com	Please visit our booth for more information.
405/ 407	Inflexxion, Inc. www.inflexxion.com	Please visit our booth for more information.
344	INSYS Therapeutics www.insysrx.com	Please visit our booth for more information.
T17	International Pain Foundation www.internationalpain.org	Please visit our booth for more information.
T11	International Pelvic Pain Society, Inc. www.pelvicpain.org	Please visit our booth for more information.
416	ITelagen LLC www.itelagen.com/paincare	ITelagen [®] redefines healthcare IT for pain management practices by providing PainCare [™] EHR, a fully integrated technology, uniquely designed to meet the complexity and documentation needs of pain management physicians. PainCare [™] delivers workflows specific to the needs of pain management, developed with the help of leading physicians and EHR experts, and is part of a total solution including unlimited onsite and remote technical support for all staff, implementation, and secure hosting of patient data. ITelagen becomes the single point of contact for the IT and pain management EHR infrastructure.
228	Johnson & Johnson Consumer Inc. www.getreliefresponsibly professional.com	Please visit our booth for more information.
317	kaléo www.kaleopharma.com	kaléo is a pharmaceutical company dedicated to building innovative solutions that can help empower patients with certain serious and life-threatening medical conditions. We believe patients and caregivers are the experts on how medical conditions impact their lives, and so we include them as an integral part of our development process, and consider their needs foremost. kaléo products combine established drugs with innovative delivery platforms. kaléo is a privately-held company head- quartered in Richmond, Virginia. For more information, visit our website.
т16	Keck School of Medicine of USC—Pain Medicine Online painmed.usc.edu	Keck School of Medicine and Herman Ostrow School of USC present new and innovative interdisciplinary online masters and certificate programs in pain medicine for the practicing clinicians and providers from MDS, RNS, ODS, PAS, SW, and more.
243	Laboratory Management Consultants www.laboratorymanagement consultants.org	Laboratory Management Consultants is a full service lab consulting firm. We provide turn key service for moderate/highly complex toxicology laboratories. LMC can provide technical supervision, lab director staff- ing, CLIA/COLA compliance, operation assessment/enhancement, billing and credentialing services and reagent/instrumentation sales. We have a staff with over 30 years of experience in lab services including certifying scientists and Medical Technologists. LMC can design, equip, manage, and staff high complexity reference labs, moderately complex physician labs, and customized prescription compliance programs.

Booth	Organization	Description
128	LimitLIS Cloud limitlis.cloud	LimitLIS Cloud is a cost effective, comprehensive, cloud based Laboratory Information System designed to increase laboratory accuracy, efficiency, and productivity. We offer multiple affordable models to fit any size laboratory, from analyzers to full spectrum LC/MS solutions. Compliance comes first with LimitLIS Cloud. The system has the ability to document medical necessity, customize test orders per client, and print full patient record in one click. LimitLIS exceeds all CAP and COLA requirements with user friendly design for your lab staff. Compatible with mobile devices; custom reports; barcode scanner; instrument interfaces; EMR and billing integration; rapid development.
338	MedTest www.medtest.com	Please visit our booth for more information.
419	Millennium Health www.millenniumhealth.com	Please visit our booth for more information.
т6	ML International	Please visit our booth for more information.
⊺9	National Association of Drug Diversion Investigators www.naddi.org	Please visit our booth for more information.
T12	NEMA Research www.nemaresearch.com	Please visit our booth for more information.
413	NextGen Laboratories, Inc. www.nextgenlabs.com	At NextGen Laboratories, we take pride in our ability to offer you high impact diagnostic results derived from next generation technologies. Coupling our technical expertise with our dedication to provide person- alized customer service, we are confident that our services will exceed your expectations for a clinical laboratory. We provide premium testing solutions for a variety of businesses and non-profits. We are a service of advanced monitoring solutions that seek improved outcomes for our patients. Using innovative technology and resources, we make finding a custom tailored solution easier and more affordable.
346	NH Solutions	Please visit our booth for more information.
425	NMS Labs www.nmslabs.com	For over 45 years, NMS Labs has been setting the standard for excel- lence in clinical toxicology and forensic testing—responding to the needs of healthcare providers, medical researchers, coroners, and the criminal justice system with state-of-the-art tests that other labs don't or can't provide. A national reference laboratory, NMS Labs is unsurpassed in its scope of tests, accuracy of results, client service, scientific expertise, and innovation in the areas of forensic toxicology and criminalistics; clinical toxicology and esoteric testing; clinical research support; expert consulta- tive services. At our state-of-the-art headquarters which includes clinical, forensic and research facilities, our dedicated and secure crime laboratory, and a staff of more than 350 highly trained professionals, NMS Labs suc- cessfully handles the needs of over 2,000 clients worldwide each year.
241	Noble Medical www.noblemedical.com	Please visit our booth for more information.
100	Oxford University Press academic.oup.com/painmedicine	Oxford University Press (OUP) publishes the highest quality journals and delivers this research to the widest possible audience. <i>Pain Medicine</i> is a multidisciplinary journal published by OUP that is dedicated to pain clini- cians, educators and researchers with an interest in pain from various medical specialties. Readers benefit from both cutting-edge original clinical and translational research and scientific reviews. <i>Pain Medicine</i> pro- motes both the visibility and development of pain medicine as a worldwide interdisciplinary medical specialty within a multidisciplinary pain field and also promotes the specialty's collaboration with health services towards a population-based approach to pain management for the public health.

Booth	Organization	Description
245	Pain Medicine News www.painmedicinenews.com	Pain Medicine News (PMN), the best-read pain publication in the United States according to Kantar Media, is mailed 10 times annually to 47,475 pain-treating physicians. This newspaper offers extensive coverage of pain-related presentations at major clinical meetings and feature articles on topics relevant to practicing clinicians. PMN also presents in-depth clini- cal and educational reviews written by thought leaders, as well as cutting- edge practice management articles.
T15	PainPathways www.painpathways.org	Please visit our booth for more information.
118	Parkway Clinical Laboratories www.parkwayclinical.com	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 primarily focused on serving the behavioral health, addiction and chronic pain management specialist. Located outside Philadelphia, Pennsylvania, PCL is fully equipped to per- form the following tests on urine and saliva specimens: semi-quantitative drug screening using enzyme immunoassay (EIA) methodology and LC/MS/ Ms quantitative confirmations on saliva specimens.
443	Pereg Milano www.peregmilano.com	Pereg Milano was founded in Las Vegas, Nevada. Throughout the years Pereg Milano has evolved in many ways. Pereg Milano's initial focus was everything related to hair such as professional tools, professional prod- ucts, hair restoration and more. As our company has grown, the number of our sales representatives has increased, every single one of our sales representatives are encouraged to deliver the most detailed information about the care and use of our product to keep a happy client. Now Pereg Milano has successfully incorporated skin care to its line of products. As a company we travel all over the United States, where we promote all our beauty products, allowing us to build our clientele immensely. In the past four years our sales have increased by 35%. Our main goal as a company is to provide each and every single one of our customers with the highest quality and innovative products in the beauty industry.
217	Pernix Therapeutics www.pernixtx.com	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 targets underserved therapeutic areas such as CNS, including neurology and pain management, and has an inter- est in expanding into additional specialty segments. Pernix promotes its branded products to physicians through its two sales forces and markets its generic portfolio through its wholly owned subsidiaries, Macoven Pharmaceuticals, LLC and Cypress Pharmaceutical, Inc.
340	PharmaCentra, LLC www.pharmacentra.com	Please visit our booth for more information.
127	PharmaTech www.pharmatechnology.net	Please visit our booth for more information.
242	Phlight Pharma www.phlightpharma.com	Phlight Pharma is a specialty pharmaceutical company based in Ocean Springs, Mississippi. We are dedicated to developing and commercializing prescription products in the U.S. through our nationwide salesforce and professional relationships. With an aggressive product development team, we bring competitive products to the market economically, such as: Allzital (butalbital 25mg/acetaminophen 325mg), a low-dose tension headache tablet; a schedule III acetaminophen 325mg/caffeine 30mg/ dihydrocodeine bitartrate 16mg tablet indicated for moderate to severe pain; topical 510(k) skin emulsions to manage and relieve the burning and itching experienced with various types of dermatoses; and convenience kits.

Booth	Organization	Description
130	Practical Pain Management www.practicalpainmanagement.com	Practical Pain Management (PPM), in its 17th year, is the nation's premier teaching journal for more than 44K pain practitioners. PPM provides the tools, information, 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.
244	Precision Diagnostics precisiondxlab.com	Please visit our booth for more information.
231	Prescient Medicine www.prescientmedicine.com	Please visit our booth for more information.
137	Psyche Systems Corp www.psychesystems.com	Psyche Systems Corporation is a private, profit-driven software company that has focused exclusively on delivering laboratory information software to hospitals, clinics, reference and private labs since 1976. It is this unwav- ering focus on serving our core customer base that has enabled Psyche to maintain strong customer loyalty and deliver on our commitment to high quality products and services. Psyche Systems' laboratory information software are best-of-breed products designed to meet the specific needs of anatomic pathology, cytology, histology, dermatopathology, GI, toxicol- ogy, microbiology and molecular laboratories. We at Psyche work closely with our customer base during product development to ensure we are delivering the highest quality products and services at a competitive price.
336	Quantum Analytics www.lqa.com	Quantum Analytics is a value-added distributor for analytical instrumenta- tion across the United States. We make it easier for customers to get the lab equipment they need through flexible financing solutions and value- added services, including cross-platform system integration, installation, training, application development and product support. Quantum Analytics is an authorized distributor, financing partner and service provider for Agilent Technologies. We work with start-ups or clinical labs that are looking at expanding their testing capabilities. Our product range includes LC triple quads, automated sample prep, immunoassay analyzers, clinical analyzers, GC-MS via headspace, liquid handling systems, and more.
220	Quest Diagnostics questdiagnostics.com	Please visit our booth for more information.
122	Quick Care Pharmacy www.quickcarepharmacy.com	Quick Care Pharmacy is a leading provider of specialty pharmacy services in the pain management industry. We service the needs of patients in the highly-regulated pain industry while working closely with leading phar- maceutical manufacturers and pain management physicians to provide comprehensive patient management programs. Quick Care Pharmacy provides prior authorization assistance and a best-in-class compliance program to optimize treatment outcomes for our patients. Quick Care Pharmacy is committed to providing the highest level of pharmacy services through collaborative relationships with patients, physicians and pharmaceutical manufacturing partners.
237	Recro Pharma www.recropharma.com	Recro Pharma is a revenue-generating, specialty pharmaceutical company focused on products for hospitals and ambulatory care settings that is currently developing non-opioid products for the treatment of acute pain. Our lead investigational product is a proprietary injectable form of meloxicam that has completed Phase III clinical trials. On July 31, 2017, we announced that a New Drug Application (NDA) for intravenous (IV) meloxi- cam 30mg was submitted to the FDA for the treatment of moderate to severe, acute postoperative pain.
129	Regenesis Biomedical, Inc. www.regenesisbio.com	Regenesis Biomedical is a medical device company dedicated to improving human welfare through the research, design, manufacture, and sale of energy-based medical products and services that alleviate pain, restore health, and improve quality of life.

Booth	Organization	Description
436	RxAssurance www.opisafe.com	OpiSafe gives prescribers a tool to quickly and easily manage opioid patients. Merging data from state PDMPs, toxicology labs, and patient clinical assessments, we triangulate information and provide easy to use clinical decision support to assure best practices and guideline adherent care. OpiSafe also generates billable revenue codes for pain and function, risk, and other assessments, and integrates with EHR and scheduling systems to streamline work flow and productivity, while managing risk. OpiSafe PocketPDMP is a new mobile app to perform quick, easy PDMP checks, and offer guideline recommended "next step" to prescribers for managing their patients effectively and safely.
211	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.
238	SCIEX www.sciex.com	SCIEX helps to improve the world by enabling scientists and laboratory analysts to find answers to the complex analytical challenges they face in basic research, drug discovery and development, in addition to food and environmental testing, forensics and clinical research and diagnostics. As part of SCIEX, SCIEX Diagnostics brings the power, flexibility, reliability and accuracy of mass spectrometry technology to clinical testing labora- tories. SCIEX Diagnostics offers an expanding portfolio of mass spec- trometry based solutions and assays for in vitro diagnostic use, enabling customers to deliver high-quality results to clinicians who make decisions affecting patient care.
341	SHC-USA www.symptomshealingcreams usa.com	Please visit our booth for more information.
427	Synergy Health Services www.synergyrx.com	Synergy Health Services presents quality and value to patients as a means of achieving optimal health by providing a series of product lines to ad- dress pharmacological topical pain management, home medical equip- ment, workers compensation, auto injuries, and workplace health injuries. Our strong and consistent results are a reflection of the best practices in the industry. We accomplish these offerings through providing superior clinical expertise, maintaining a state-of-the-art facility, and by employ- ing highly skilled individuals who understand the importance of care and compassion to our patients and the communities we serve.
T1	Take Courage Coaching www.takecouragecoaching.com	Please visit our booth for more information.
311	Takeda Pharmaceuticals U.S.A. Inc. www.amitiza.com	Please visit our booth for more information.
Т7	Taylor & Francis www.tandfonline.com	Please visit our booth for more information.
432	Thermo Fisher Scientific www.thermofisher.com	Please visit our booth for more information.
350	Total Medical Management Solutions www.tmms.care	Please visit our booth for more information.
T5	University of Maryland, Baltimore graduate.umaryland.edu/palliative	Please visit our booth for more information.

Booth	Organization	Description
428	US PAIN FOUNDATION www.uspainfoundation.org	Created in 2011, the U.S. Pain Foundation is a 501(c)(3) organization estab- lished 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 also 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 nearly 1,000 volun- teers. It offers dozens of resources, programs, campaigns, and events— including its flagship program, the INvisible Project, that highlights the real stories of people living with pain.
343	Waters Corporation www.waters.com	Please visit our booth for more information.
Τ2	WHERE www.wheretraveler.com/lasvegas	WHERE is a publication dedicated to providing information about the city. WHERE to eat. WHERE to Dine. WHERE to play. We provide an onsite con- cierge that can assist in all your needs while in Las Vegas. Prior to arrival, WHERE concierge can make all your reservations—while in town and even when you return on your personal time.

GRALISE® (gabapentin) tablets

Rx Only

BRIFF SUMMARY OF FULL PRESCRIBING INFORMATION

This does not include all the information needed to use GRALISE safely and effectively. See full Prescribing Information for GRALISE.

INDICATIONS AND USAGE

GRALISE is indicated for the management of postherpetic neuralgia.

GRALISE is not interchangeable with other gabapentin products because of differing pharmacokinetic profiles that affect the frequency of administration.

DOSAGE AND ADMINISTRATION

GRALISE should be titrated to an 1800 mg dose taken orally, once-daily, with the evening meal. GRALISE tablets should be swallowed whole. Do not crush, split, or chew the tablets. For recommended titration schedule, see DOSAGE AND ADMINISTRATION in full Prescribing Information.

- If GRALISE dose is reduced, discontinued, or substituted with an alternative medication, this should be done gradually over a minimum of 1 week or longer (at the discretion of the prescriber)
- Renal impairment: Dose should be adjusted in patients with reduced renal function. GRALISE should not be used in patients with CrCI less than 30 mL/min or in patients on hemodialysis.

CONTRAINDICATIONS

GRALISE is contraindicated in patients with demonstrated hypersensitivity to the drug or its ingredients. WARNINGS AND PRECAUTIONS

GRALISE is not interchangeable with other gabapentin products because of differing pharmacokinetic profiles that affect the frequency of administration.

The safety and effectiveness of GRALISE in patients with epilepsy has not been studied.

Suicidal Behavior and Ideation

Antiepileptic drugs (AEDs), including gabapentin, the active ingredient in GRALISE, increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with any AED for any indication should be monitored for the emergence or worsening of depression, suicidal thoughts or behavior, and/or any unusual changes in mood or behavior.

The increased risk of suicidal thoughts or behavior with AEDs was observed as early as one week after starting drug treatment with AEDs and persisted for the duration of treatment assessed.

Table 1: Risk by Indication for Antiepileptic Drugs (including gabapentin, the active ingredient in GRALISE) in the Pooled Analysis

Indication	Placebo Patients with Events Per 1000 Patients	Drug Patients with Events Per 1000 Patients	Relative Risk: Incidence of Events in Drug Patients/Incidence in Placebo Patients	Risk Difference: Additional Drug Patients with Events Per 1000 Patients
Epilepsy	1.0	3.4	3.5	2.4
Psychiatric	5.7	8.5	1.5	2.9
Other	1.0	1.8	1.9	0.9
Total	2.4	4.3	1.8	1.9

The relative risk for suicidal thoughts or behavior was higher in clinical trials for epilepsy than in clinical trials for psychiatric or other conditions, but the absolute risk differences were similar for the epilepsy and psychiatric indications

Anyone considering prescribing GRALISE must balance the risk of suicidal thoughts or behavior with the risk of untreated illness. Epilepsy and many other illnesses for which products containing active components that are AEDs (such as gabapentin, the active component in GRALISE) are prescribed, are themselves associated with morbidity and mortality and an increased risk of suicidal thoughts and behavior. Should suicidal thoughts and behavior emerge during treatment, the prescriber needs to consider whether the emergence of these symptoms in any given patient may be related to the illness being treated

Patients, their caregivers, and families should be informed that GRALISE contains gabapentin, which is also used to treat epilepsy and that AEDs increase the risk of suicidal thoughts and behavior and should be advised of the need to be alert for the emergence or worsening of the signs and symptoms of depression, any unusual changes in mood or behavior, or the emergence of suicidal thoughts, behavior, or thoughts about self-harm. Behaviors of concern should be reported immediately to healthcare providers.

Withdrawal of Gabapentin Gabapentin should be withdrawn gradually. If GRALISE is discontinued, this should be done gradually over a minimum of 1 week or longer (at the discretion of the prescriber).

Tumorigenic Potential

In standard preclinical *in vivo* lifetime carcinogenicity studies, an unexpectedly high incidence of pancreatic acinar adenocarcinomas was identified in male, but not female, rats. The clinical significance of this finding is unknown.

In clinical trials of gabapentin therapy in epilepsy comprising 2,085 patient-years of exposure in patients over 12 years of age, new tumors were reported in 10 patients, and pre-existing tumors worsened in 11 patients, during or within 2 years after discontinuing the drug. However, no similar patient population untreated with gabapentin was available to provide background tumor incidence and recurrence information for comparison. Therefore, the effect of gabapentin therapy on the incidence of new tumors in humans or on the worsening or recurrence of previously diagnosed tumors is unknown.

Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS)/Multiorgan Hypersensitivity Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), also known as Multiorgan Hypersensitivity, has been reported in patients taking antiepileptic drugs, including GRALISE. Some of these events have been fatal or life-threatening. DRESS typically, although not exclusively, presents with fever, rash, and/or lymphadenopathy in association with other organ system involvement, such as hepatitis, nephritis, hematological abnormalities, myocarditis, or myositis sometimes resembling an acute viral infection. Eosinophilia is often present. Because this disorder is variable in its expression, other organ systems not noted here may be involved.

It is important to note that early manifestations of hypersensitivity, such as fever or lymphadenopathy, may be present even though rash is not evident. If such signs or symptoms are present, the patient should be evaluated immediately. GRALISE should be discontinued if an alternative etiology for the signs or symptoms cannot be established.

Laboratory Tests

Clinical trial data do not indicate that routine monitoring of clinical laboratory procedures is necessary for the safe use of GRALISE. The value of monitoring gabapentin blood concentrations has not been established.

ADVERSE REACTIONS

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

In clinical trials in patients with postherpetic neuralgia, 9.7% of the 359 patients treated with GRALISE and 6.9% of 364 patients treated with placebo discontinued prematurely due to adverse reactions. In the GRALISE treatment group, the most common reason for discontinuation due to adverse reactions was dizziness

Table 2: Treatment-Emergent Adverse Reaction Incidence in Controlled Trials in Neuropathic Pain Associated with Postherpetic Neuralgia (Events in at Least 1% of all GRALISE-Treated Patients and More Frequent Than in the Placebo Group)

	•	
Body System – Preferred Term	GRALISE N = 359	Placebo N = 364
	%	%
Ear and Labyrinth Disorders		
Vertigo	1.4	0.5
Gastrointestinal Disorders		
Diarrhea	3.3	2.7
Dry mouth	2.8	1.4
Constipation	1.4	0.3
Dyspepsia	1.4	0.8
General Disorders		
Peripheral edema	3.9	0.3
Pain	1.1	0.5
Infections and Infestations		
Nasopharyngitis	2.5	2.2
Urinary tract infection	1.7	0.5
Investigations		
Weight increased	1.9	0.5
Musculoskeletal and		
Connective Tissue Disorders		
Pain in extremity	1.9	0.5
Back pain	1.7	1.1
Nervous System Disorders		
Dizziness	10.9	2.2
Somnolence	4.5	2.7
Headache	4.2	4.1
Lethargy	1.1	0.3

The following adverse reactions with an uncertain relationship to GRALISE were reported during The following adverse reactions with an uncertain relationship to Graduat, were reported during the clinical development for the treatment of postherpetic neuralgia. Events in more than 1% of patients but equally or more frequently in the GRALISE-treated patients than in the placebo group included blood pressure increase, confusional state, gastroenteritis, viral herpes zoster, hypertension, joint swelling, memory impairment, nausea, pneumonia, pyrexia, rash, seasonal allergy, and upper respiratory infection.

Postmarketing and Other Experience with Other Formulations of Gabapentin

In addition to the adverse experiences reported during clinical testing of gabapentin, the following adverse experiences have been reported in patients receiving other formulations of marketed gabapentin. These adverse experiences have not been listed above and data are insufficient to support an estimate of their incidence or to establish causation. The listing is alphabetized: angioedema, blood glucose fluctuation, breast enlargement, elevated creatine kinase, elevated liver function tests, erythema multiforme, fever, hyponatremia, jaundice, movement disorder, Stevens-Johnson syndrome.

Adverse events following the abrupt discontinuation of gabapentin immediate release have also been reported. The most frequently reported events were anxiety, insomnia, nausea, pain, and sweating.

DRUG INTERACTIONS

In vitro studies were conducted to investigate the potential of gabapentin to inhibit the major cytochrome P450 enzymes (CYP1A2, CYP2A6, CYP2C9, CYP2C19, CYP2D6, CYP2E1, and CYP3A4) that mediate drug and xenobiotic metabolism using isoform selective marker substrates and human liver microsomal preparations. Only at the highest concentration tested (171 mcg/mL; 1mM) was a slight degree of inhibition (14% to 30%) of isoform CYP2A6 observed. No inhibition of any of the other isoforms tested was observed at gabapentin concentrations up to 171 mcg/mL (approximately 15 times the C_{max} at 3600 mg/day).

Hvdrocodone

Coadministration of gabapentin immediate release (125 mg and 500 mg) and hydrocodone (10 mg) reduced hydrocodone C_{max} by 3% and 21%, respectively, and AUC by 4% and 22%, respectively. The mechanism of this interaction is unknown. Gabapentin AUC values were increased by 14%; the magnitude of the interaction at other doses is not known.

Antacid (containing aluminum hydroxide and magnesium hydroxide)

An antacid containing aluminum hydroxide and magnesium hydroxide reduced the bioavailability of gabapentin immediate release by approximately 20%, but by only 5% when gabapentin immediate release was taken 2 hours after the antacid. It is recommended that GRALISE be taken at least 2 hours following the antacid (containing aluminum hydroxide and magnesium hydroxide) administration.

Drug/Laboratory Test Interactions False positive readings were reported with the Ames-N-Multistix SG® dipstick test for urine protein when gabapentin was added to other antiepileptic drugs; therefore, the more specific sulfosalicylic acid precipitation procedure is recommended to determine the presence of urine protein.

USE IN SPECIFIC POPULATIONS

Pregnancy Category C: GRALISE should be used during pregnancy or in women who are nursing only if the benefits clearly outweigh the risks. See full Prescribing Information for more information about use of GRALISE in pregnancy.

Pediatric Use

The safety and effectiveness of GRALISE in the management of postherpetic neuralgia in patients less than 18 years of age has not been studied.

Geriatric Use

The total number of patients treated with GRALISE in controlled clinical trials in patients with postherpetic neuralgia was 359, of which 63% were 65 years of age or older. The types and incidence of adverse events were similar across age groups except for peripheral edema, which tended to increase in incidence with age

Renal Impairment

GRALISE is known to be substantially excreted by the kidney. Dosage adjustment is necessary in patients with impaired renal function. GRALISE should not be administered in patients with CrCl between 15 and 30 or in patients undergoing hemodialysis. [see Dosage and Administration in full Prescribing Information].

DRUG ABUSE AND DEPENDENCE

The abuse and dependence potential of GRALISE has not been evaluated in human studies. OVERDOSAGE

Acute oral overdoses of gabapentin immediate release in humans up to 49 grams have been reported. In these cases, double vision, slurred speech, drowsiness, lethargy and diarrhea were observed. All patients recovered with supportive care.

Gabapentin can be removed by hemodialysis. Although hemodialysis has not been performed in the few overdose cases reported, it may be indicated by the patient's clinical state or in patients with significant renal impairment.





Relief Uninterrupted



Bring 24-hour relief into their routine



GRALISE is the **only true once-a-day** gabapentinoid that offers Night to Day control of PHN pain¹

- Patients receiving GRALISE experienced significant pain reduction vs placebo beginning Week 1 and continuing throughout the 10-week study (*P*<0.05)^{2,3}
- Average daily pain score reduction for GRALISE was -2.1 vs -1.6 with placebo (P=0.013)²

Study Design: Patients from 89 investigative sites participated in this randomized, double-blind, parallel design, placebo-controlled, multicenter clinical trial. The study period included a 1-week baseline period, followed by randomization and a 2-week titration to a once-daily dose of 1800 mg G-GR or matched placebo, followed by an 8-week maintenance-dose period, followed by a 1-week dose-tapering period. 452 patients were randomized, with 221 receiving 1800 mg of GRALISE and 231 receiving placebo.² *Primary endpoint:* change in the baseline observation carried forward (BOCF) average daily pain score from the baseline week to Week 10 of the efficacy treatment period.²

Learn more today at www.Gralise.com

INDICATIONS AND USAGE

GRALISE is indicated for the management of postherpetic neuralgia (PHN). GRALISE is not interchangeable with other gabapentin products because of differing pharmacokinetic profiles that affect the frequency of administration.

IMPORTANT SAFETY INFORMATION

ADVERSE REACTIONS

The most common side effects were dizziness (10.9%) and somnolence (4.5%).

USE IN SPECIFIC POPULATIONS

Reductions in GRALISE dose should be made in patients with age-related compromised renal function.

WARNINGS AND PRECAUTIONS Suicidal Behavior and Ideation

Antiepileptic drugs (AEDs) including gabapentin, the active ingredient in GRALISE, increase the risk of suicidal thoughts or behavior in patients taking these drugs for any indication. Patients treated with any AED for any indication should be monitored for the emergence or worsening of depression, suicidal thoughts or behavior, and/or any unusual changes in mood or behavior.

For more information about GRALISE, please see Brief Summary on the following page.

References: 1. GRALISE [prescribing information]. Newark, CA: Depomed Inc.; December 2012. **2.** Sang CN, Sathyanarayana R, Sweeney M. Gastroretentive gabapentin (G-GR) formulation reduces intensity of pain associated with postherpetic neuralgia (PHN). *Clin J Pain.* 2013;29:281-288. **3.** Argoff CE, Chen C, Cowles VE. Clinical development of a once-daily gastroretentive formulation of gabapentin for treatment of postherpetic neuralgia: an overview. *Expert Opin Drug Deliv.* 2012;9:1147-1160.