

# CONFERENCE AGENDA

September 10, 2010 | FRIDAY

**7:00 a.m. – 7:50 a.m. Registration, Continental Breakfast and Exhibits**

**7:50 a.m. – 8:00 a.m. Welcome and Opening Remarks**

**8:00 a.m. – 8:40 a.m. The Psychology of Pain**

A study on the psychological aspects of low back pain concluded that individuals who suffer from chronic back pain have an increased incidence of depression and coexistent psychological stress. This session will provide practitioners the tools necessary to address the mental health aspects of patients suffering from pain. Attendees of this session will be able to:

- Identify the psycho-social effects of chronic pain, and the contributing factors to clinical depression.
- Understand the relationship between depression and pain — cause or effect.
- Diagnose and screen for depression, identify warning signs and when to refer.
- Address other psychological issues that may affect treatment outcomes.

Kathleen Vogler, PhD, HSPP

**8:45 a.m. – 10:00 a.m. Educational Tracks**

The following sessions will provide attendees an option of two educational tracks. Track One will provide practitioners the essentials to diagnosing and treating spinal pain, and will provide an overview of spinal anatomy, diagnosis and treatment options. Track Two will provide more in-depth and detailed information related to spinal diagnostics and treatment.

## TRACK ONE: Spinal Care Boot Camp | Diagnostics and Treatment

### Spinal Anatomy 101

Essential to the diagnosis of back and neck pain is an understanding of spinal mechanics and what is normal. This session will:

- Review the functional anatomy of the normal spine.
- Discuss the normal aging process of the spine, and the spine's degenerative cascading process.
- Highlight normal and abnormal spinal anatomy.

Kevin Macadaeg, MD

### The ABCs of Spinal Diagnostics

Key to effective treatment of patients with back pain is accurate diagnosis. This session will provide practitioners the tools for the practical assessment of back pain and will:

- Review the etiology of spinal pain and common spinal disorders that cause back pain.
- Identify indications and applications of spinal testing.
- Discuss evidence-based guidelines for the diagnosis of lower back and neck pain.
- Highlight the “red flags” of spinal pain.

John Arbuckle, MD

## TRACK TWO: More Specifics | Spinal Diagnostics and Treatment

### Spinal Imaging | Technology and Diagnosis

A critical tool in the diagnosis of the spinal patient is imaging studies. This session will take an in-depth look at various spinal imaging technologies and will:

- Highlight the latest developments in spinal imaging technology utilized in spinal diagnostics.
- Discuss the indications and applications of spinal imaging options, e.g. CT, MR spectroscopy, serial contrast MRI and PET.
- Review radiological findings and diagnostic indicators.

Stephen Pomeranz, MD

### The Electrodiagnostic Evaluation

An important diagnostic modality for evaluating the peripheral nervous system is electromyography. This session will take an in-depth look at the electrodiagnostic evaluation and will:

- Discuss the role and application of electromyography in the diagnosis of spinal diseases and disorders, including indications and benefits.
- Review case studies utilizing electromyography and identify specific diagnoses.

Shashank Davé, DO, FAAPM&R

**10:00 a.m. – 10:25 a.m. Refreshments and Exhibits**

**10:25 a.m. – 11:30 a.m. Educational Tracks Continue**

## TRACK ONE: Spinal Care Boot Camp | Diagnostics and Treatment

### Understanding Spinal Therapeutics

Often, back and neck pain can be treated effectively in the primary care setting. Learn about efficacious medical and minimally invasive treatment options. This session will:

- Identify medications used in the pharmacological management of acute and chronic back pain.
- Highlight common noninvasive spinal therapies specific to prevalent spinal disorders.
- Provide an overview of evidence-based minimally invasive spine therapies.
- Discuss which spinal diagnoses are amenable to minimally invasive therapies.

Jonathan Gentile, MD

### The Spine Surgery Patient

When patients do not show improvement after conservative treatment, surgery may be an option. This session will:

- Provide an overview of common surgical procedures, indications and expected outcomes.
- Discuss the applications and limitations of spinal surgery.
- Identify when to refer to a spine surgeon.

Paul Kraemer, MD

### Diagnostic and Therapeutic Injections of the Spine

One effective tool for the treatment and diagnosis of spinal pain is therapeutic injections. This session will provide a detailed look at this modality and will:

- Review and differentiate between the types of therapeutic injections.
- Discuss the evidence-based efficacy of the different types of injections, clinical protocols, indications and expected outcomes.

John Arbuckle, MD

### Surgical Perspectives | Fusion vs. Arthroplasty

When disc pathology requires surgery, newer technology provides patients with options. This session will provide an in-depth analysis of spinal fusion and arthroplasty and will:

- Discuss motion preservation modalities in the treatment of degenerative disc disease.
- Highlight the latest technology in lumbar and cervical artificial discs.
- Review research studies comparing clinical outcomes of fusion and arthroplasty.
- Discuss patient selection, indications and expected outcomes.

Rick Sasso, MD

## The Front Lines | Reflections of Iraq James McGreevy, MD

### 11:35 a.m. – 12:20 p.m. Keynote Address



One weapon to treat injuries of war is one of the largest U.S. military hospitals in Balad, Iraq – Balad Air Force Theater Hospital. This multispecialty trauma center treats soldiers, military personnel, civilians and sometimes insurgents. Having served two tours in Iraq, Dr. James McGreevy knows what it is like first-hand to care for the injured. In his keynote address, Dr. McGreevy will discuss the operations of the Balad Air Force Theater Hospital, describe the level of trauma care available to wounded civilians and military personnel, and highlight the common occupational health hazards associated with fighter type operations in a deployed environment.

James McGreevy, MD, is a trauma surgeon and Professor of Surgery at the University of Utah Medical Center and Chief of Surgery for the Salt Lake City VA Medical Center. Additionally, he is a Colonel in the United States Air Force Reserve and the Commander of the 419th Medical Squadron. In 2005 and 2007, Dr. McGreevy served in Operation Iraq Freedom in Balad as a flight surgeon.

## 12:20 p.m. – 1:35 p.m. Lunch and Exhibits

### 1:35 p.m. – 2:20 p.m. Making the Diagnosis | Differential Factors in Spinal Diagnosis

Effective to patient management is a working diagnosis. This is easier said than done, when many similar symptoms represent multiple diagnoses. To address this ongoing issue, this session will help the clinician to:

- Understand differential diagnoses of lower back and extremity pain.
- Identify the importance of recognizing coexisting conditions affecting spinal pain and treatment.
- Discuss spinal infections and inflammations that present as back and neck pain.

Kenneth Renkens, MD

### 2:20 p.m. – 3:05 p.m. The Silent Disease | Osteoporosis Updates

According to the National Osteoporosis Foundation, osteoporosis has been labeled a major public health threat. An estimated 10 million individuals in the U.S. have osteoporosis, with another 34 million estimated to have low bone mass. A report by the Office of the Surgeon General concluded that “*the burden of bone disease can potentially be avoided if at-risk individuals are identified and appropriate interventions (both preventive and therapeutic) are made in a timely manner.*” This session will provide the latest information on osteoporosis and will:

- Discuss the latest screening, diagnostic and treatment algorithms for osteopenia and osteoporosis.
- Address recommendations for various patient demographics such as teenagers and young adults, to prevent the onset of osteopenia and osteoporosis, including lifestyle habits and recommendations for over-the-counter medications.
- Review the indications and contra-indications of medications and hormone replacement therapy in the prevention and treatment of osteoporosis, addressing the menopausal and post-menopausal life stages.

William Schmalz, MD

## 3:05 p.m. – 3:25 p.m. Refreshment Break and Exhibits

## 3:30 p.m. – 4:15 p.m. Concurrent Sessions One

### 1. Myths and Realities | Treatment of Vertebral Compression Fractures

Vertebral compression fractures (VCFs) are one of the most common fragility fractures in the U.S. To address this medical issue, this session will highlight the symptoms, diagnosis and treatment indicators for VCFs. Case studies will be utilized to discuss indications and clinical outcomes of two common procedures for the treatment of VCFs – vertebroplasty and kyphoplasty. Additionally, other treatment options and their indications will be discussed, with an overview of research studies discussing their efficacy.

Kevin Macadaeg, MD



## 2. The Wellness Paradigm

A functional medicine approach has been applied to many illnesses caused by lifestyle, e.g. diabetes, high blood pressure. This strategy can also be applied to spine health, and this session will highlight and review the role of genetics, lifestyle and other contributing factors to overall spine health. Additionally, how to apply a wellness model to patient care and the role of functional medicine to improve the quality of a patient's back health will be discussed. This session will also review key patient education elements essential to a healthy lifestyle, including how to talk to patients about lifestyle modifications.

Nate Blume, DC

## 4:20 p.m. – 5:00 p.m. Concurrent Sessions Two

### 3. The Nutritionally Healthy Spine

Often heard is the saying, “*you are what you eat.*” When people think of eating healthy, they usually focus on the goals of losing weight or lowering their cholesterol. But healthy nutrition is also essential to a healthy spine. This session will provide important patient recommendations for a nutritionally healthy spine and will review the latest research on the role of nutrition on spinal health. Key elements of a healthy spine diet, including nutrition, lifestyle and environmental factors will be highlighted. Popular over-the-counter herbal, vitamin and nutritional supplements and their claims to spinal health, and patient recommendations based on clinical evidence-based research will be reviewed.

Lori Petrie, RD

### 4. Back Pain | Chronic and Failed

Chronic back pain can be debilitating, not only physically but emotionally. An estimated 10 – 40% of patients continue to have ongoing pain following back surgery. This session will address both chronic back pain and failed back syndrome and will discuss the differentiation factors, and the diagnostic perils. Treatment options, indications and patient selection for pain management, minimally invasive, and interventional treatments will be discussed. Attendees will also review and discuss patient cases of chronic back pain and failed back syndrome and review recommended treatments.

Jonathan Gentile, MD

## 5:00 p.m. – 5:30 p.m. Treatment Highlights | A Review of Case Studies

This session will provide an opportunity for attendees to ask questions and discuss patient cases. Case studies will be presented which will highlight the diagnoses and treatments discussed throughout the day. Additionally, a panel will provide a multidisciplinary approach to patient treatment, as well as provide an opportunity for questions and answers.

Moderator: Thomas Reilly, MD

## 5:30 p.m. – 7:00 p.m. Cocktail Reception and Exhibits

**September 11, 2010 | SATURDAY**

## 7:00 a.m. – 7:50 a.m. Continental Breakfast and Exhibits

## **7:50 a.m. – 8:40 a.m.      Concurrent Sessions Three**

### **5. The Anatomy of the Exam**

This clinical workshop will provide an in-depth look at the patient exam and utilize a live-model to demonstrate the critical components of the physical exam. This will include a discussion of the importance and identification of the key elements of the patient history. We will identify what is normal and abnormal during both the cervical and lumbar exam, and address the elements of the neurological exam. This session will also discuss multiple problems that present as back or shoulder/neck pain, highlight differentiating factors to determine the underlying cause, and review clinical algorithms based upon findings during the physical exam.

Kevin Macadaeg, MD, and Alta Skelton, RN, MSN, NP-C

### **6. Active and Injured | A Look at Sports Injuries**

The benefits of an active lifestyle are numerous. In some instances, it can also be detrimental, when individuals overdo it or do not train or warm-up properly. This session will take a look at common sports injuries related to specific types of popular “recreational” activities of adults, e.g. golf, weights/fitness training, tennis and running. It will review the anatomic and physiologic functional changes of the spine that result with aging, and the effects of sports on the spine. Additionally, this session will discuss the patient assessment of those that present with spinal pain and injuries from sports-related activities, identify the red flag symptoms, and review the appropriate level of care.

Tony Origer, DC, ATC

### **7. The Workplace | Back Pain and Injuries**

Annually, more than one million workers injure their backs. This represents one out of five workplace injuries, according to the Bureau of Labor Statistics. Common workplace spinal injuries and contributing factors to back pain, and their short- and long-term effects on the worker’s status and well-being will be reviewed in this session. Spinal conditions and physical attributes that predispose an individual to back injuries will be identified, and the indications and treatment options for low back pain will be discussed. Attendees will also gain an understanding of what other factors contribute to disability following a workplace injury.

Marc Duerden, MD, FAAPM&R, CIME

## **8:50 a.m. – 9:40 a.m.      Concurrent Sessions Four**

### **8. The Adolescent Spine**

Defined as the age group of 11 to 17 years old, adolescence is usually a challenging time for parents, and it can also be challenging for physicians. As this a major time of development of the adolescent, it is also a period where the spine is still developing, increasing bone density and strength. This session will take a look at these developmental years and will address common spinal conditions affecting adolescent patients, including genetic, chronic and traumatic. The latest scoliosis screening and treatment recommendations will be reviewed. Additionally, attendees will have an understanding of the treatment of the adolescent patient that presents with back pain, and the diagnostic triage and identification of underlying conditions. Treatment protocols for common spinal diagnoses and nuances of the adolescent patient will be discussed.

Paul Kraemer, MD



## 9. The Surgery Patient | Pre- and Post-op Care

An important element for the spine surgery patient is the care that is received prior to and following surgery. This session will review the critical factors during the patient's pre-surgical exam, including a discussion of recommended tests, coexisting conditions and other factors that can affect surgical outcomes and recovery. Patient care guidelines for the pre- and post-op surgical patient — with an understanding of pharmacological management and ongoing treatment will be discussed. Spinal rehabilitation of the patient will be reviewed, as well as the criteria for when the patient should return to physical activities and work. Attendees will also review the warning signs and red flags during the post-operative exam.

Alta Skelton, RN, MSN, NP-C, Jodi Hettermann Blume, PA-C, and Adam Ebbert, PT

## 10. A Look at Minimally Invasive Treatments | Case Reviews

Utilizing case studies, this session will provide an in-depth look at minimally invasive treatments for back and neck pain. Attendees will review the decision triage for applicable treatment modalities, highlighting IDET, rhizotomy and discectomy. Additionally, interventional treatment options for lower back and neck pain specific to diagnoses, their indications and expected outcomes will be discussed.

John Arbuckle, MD

**9:50 a.m. – 10:40 a.m.**

**Concurrent Sessions Five**

## 11. Making the Case | Spinal Imaging and Pathology

The saying “*a picture is worth a thousand words,*” can also be applied to spinal imaging studies. With proper imaging, the majority of spinal problems can be visualized. Utilizing spinal imaging studies, this session will review the diverse pathology that affects the spine and will include congenital and degenerative disorders and infections/inflammation. Additionally, neoplastic and vascular pathology of the spine will be reviewed.

Thomas Reilly, MD

## 12. An Update | Spinal Arthritis

According to the Arthritis Foundation, osteoarthritis (OA) affects nearly 27 million Americans. OA, also called osteoarthroses or degenerative joint disease, affects the joints of both the neck and lower back as well as the joints of the hip, knee and hands. This session will focus on spinal arthritis and will highlight the symptoms and diagnostic triage, and address the prevalence and indications of coexisting conditions. The latest evidenced-based treatment protocols for spinal arthritis will be discussed. Additionally, this session will review rheumatologic arthritis and other rheumatological disorders of the spine, including symptoms, diagnosis and treatment indications.

Michael Stack, MD, PhD



### 13. Perspectives | Nerve Entrapment and Radiculopathy

From a neurologist point of view, this session will focus on nerve entrapment and radiculopathy and will differentiate between orthopaedic pain and neurologic nerve entrapment. With a review of the unique anatomical features, the pathogenesis of different types of nerve entrapment and radiculopathy will be discussed. The symptoms and diagnostic triage of common and unusual nerve entrapments/radiculopathies including cervical, carpal tunnel syndrome, axillary nerve, upper extremity and more, will be highlighted during this session.

Larry Lett, MD

#### 10:40 a.m. – 11:05 a.m. Refreshment Break and Exhibits

#### 11:05 a.m. – 11:45 a.m. Cutting Edge | The Future of Spine Care

A new decade will bring forth new developments in the treatment of spinal patients. Spinal care continues to evolve as surgical procedures and treatment options become more sophisticated and less invasive. This session will:

- Identify newer technologies in spine surgery, the indications, advantages and disadvantages as compared to well-established surgical protocols.
- Review the role of advanced biologics in the future of spine surgery.
- Highlight the latest clinical studies in respect to advanced spinal therapies and treatments, e.g. stem cell research.

Rick Sasso, MD

#### 11:45 a.m. – 12:30 p.m. Grand Rounds | Surgical and Non-Surgical Case Studies

This interactive session, moderated by a spine surgeon and minimally invasive spine specialist, will highlight case studies of patients who present with back and neck pain. Imaging studies and the diagnostic triage of the case studies will be discussed, as well as recommended treatment options - non-operative, minimally invasive and surgical. Attendees of this session will:

- Analyze radiological and diagnostic studies and discuss pathological findings and spinal diagnoses, including spinal stenosis, spinal instability and disc herniation.
- Discuss minimally invasive and/or surgical treatment options, with an understanding of patient criteria, applications and expected outcomes.

Kenneth Renkens, MD, and Jonathan Gentile, MD

#### 12:30 p.m. – 12:45 p.m. Questions and Answers | Panel Discussion

This session will provide conference attendees an opportunity to ask questions, and to discuss patient cases.

Moderator: Kevin Macadaeg, MD

#### 12:45 p.m. Conference Adjourns