Third Annual
Pittsburgh Spine Summit

Friday, September 7, 2012
SHANNOPIN COUNTRY CLUB
BEN AVON, PENNSYLVANIA

Saturday, September 8, 2012
GEORGE J. MAGOVERN, MD
CONFERENCE CENTER
ALLEGHENY GENERAL HOSPITAL
PITTSBURGH, PENNSYLVANIA

FEATURING SPECIAL SATURDAY SESSIONS DEVELOPED FOR PEDIATRICIANS,
PRIMARY CARE PHYSICIANS AND CHIROPRACTORS TARGETING THE TREATMENT
OF CONCUSSION AND LOW BACK PAIN MANAGEMENT

SPONSORED BY
Department of Neurosurgery
AND
Department of Orthopaedic Surgery
Allegheny General Hospital
Pittsburgh, Pennsylvania
OVERVIEW AND INTENDED AUDIENCE

The *Pittsburgh Spine Summit* is an annual meeting devoted to advancing the field of spine surgery through the exposition of surgical and technical complications. Every year a host of preeminent surgeons take the stage to discuss their most thought-provoking lessons gained from their surgical experience. Past keynote speakers have included Volker Sonntag, Hansen Yuan, Arthur Steffe and Edward Benzel.

The treatment of spine related issues is of great interest to a wide variety of healthcare practitioners. From the family practice doctor with physician assistants and nurse practitioners who treat aging patients, to the chiropractor who treats more patients each year seeking pain relief for spine ailments, to the orthopedic surgeon and neurosurgeon who need to keep up with innovative technology to treat complicated spine issues, spine care runs the gamut in healthcare today.

Friday’s conference will focus on complications and provide an opportunity for spine surgeons to learn from the experience of noted experts as they openly discuss complications they have encountered through the years and offer suggestions on how to best avoid them.

Saturday’s conference provides a unique educational opportunity for the broad spectrum of medical and surgical professionals who manage patients with two of today’s most common conditions: concussion and low back pain. Viewpoints from internal medicine physicians, pain specialists, physiatrists, neurologists and surgeons will be presented with time allotted for a panel discussion with the experts.

A Young Guns tract for neurosurgery and orthopaedic residents and newly graduated spine surgeons will also be provided on Saturday along with a special tract for those interested in the biomechanics of spine surgery.

Neurosurgery and orthopaedic spine surgeons, primary care, internal medicine, family practice physicians, pediatricians, chiropractors, physical therapists, physician assistants, residents and others interested in the treatment of spine-related issues will benefit from attending this summit.

EDUCATIONAL OBJECTIVES

At the conclusion of the symposium, participants should be able to:

- Discuss often seen complications related to spine surgical procedures.
- Review credible scientific evidence of newer technologies and techniques for spine surgery.
- Assess clinical outcomes between various treatment options.
- Provide an overview of current topics in concussive brain injuries.
- Provide an overview of multidisciplinary treatment modalities for low back pain.

In accordance with the Accreditation Council for Continuing Medical Education (ACCME) and the policy of Allegheny General Hospital, presenters must disclose all relevant financial relationships, which in the context of their presentation(s), could be perceived as a real or apparent conflict of interest, (e.g., ownership of stock, honoraria or consulting fees). Any identifiable conflicts will be resolved prior to the activity. Any such relationships will be disclosed to the learner prior to the presentation(s).
CONFERENCE DIRECTORS

JACK WILBERGER, MD, FACS
Professor and Chairman, Department of Neurosurgery
Drexel University College of Medicine
Chairman Department of Neurosurgery
West Penn Allegheny Health System

BOYLE C. CHENG, PHD
Associate Professor of Neurosurgery
Drexel University College of Medicine
Director of Research
Neuroscience Institute
Allegheny General Hospital

DONALD M. WHITING, MD
Professor of Neurosurgery
Drexel University College of Medicine and West Virginia University
Clinical Co-Director, Neurosurgery Spine and Biomechanics Research Laboratory
Vice-Chairman, Department of Neurosurgery
Allegheny General Hospital

DANIEL T. ALTMAN, MD
Associate Professor of Orthopaedic Surgery
Drexel University College of Medicine
Director, Orthopaedic Spine Trauma
Department of Orthopaedic Surgery
Allegheny General Hospital

KEYNOTE SPEAKERS

FREDERICK A. SMEONE, MD, FACS
Retired Professor of Neurosurgery,
University of Pennsylvania School of Medicine
Emeritus Chairman of Neurosurgery
Thomas Jefferson University School of Medicine
Philadelphia, Pennsylvania

HAMILTON HALL, MD
Medical Director
Canadian Back Institute
Toronto, Ontario

MANOHAR PANJABI, PHD
Professor Emeritus of Orthopaedics and Rehabilitation
Yale School of Medicine
New Haven, Connecticut

INVITED FACULTY

ANAND AGARWAL, MD
Professor, Orthopaedic Spine Surgery and Bioengineering
The University of Toledo
Toledo, Ohio

PAUL A. ANDERSON, MD, MS
Professor of Orthopaedic Surgery
Department of Orthopedics and Rehabilitation
University of Wisconsin School of Medicine and Public Health
Madison, Wisconsin

JAMES P. BURKE, MD, PHD
Department of Emergency Medicine and Trauma Service
Altoona Regional Health System
Altoona, Pennsylvania

JOHN J. CARBONE, MD
Director, Orthopaedic Spine Services
Harbor Hospital
Baltimore, Maryland

ANTONIO E. CASTELLLVI, MD
Orthopaedic Spine Surgeon
Director of Spine Fellowship
Florida Orthopaedic Institute
Tampa, Florida

ANDERS COHEN, DO
Assistant Professor of Neurosurgery
Weil Cornell Medical College
Chief, Neurosurgery and Spine Surgery
The Brooklyn Hospital Center
New York, New York

DOMAGOJ CORIC, MD
Chief of Neurosurgery
Carolinas Medical Center
Joint Section on Disorders of the Spine and Peripheral Nerves of the AANS and CNS
President, North Carolina Spine Society;
North American Spine Society
Charlotte, North Carolina

NEIL CRAWFORD, PHD
Associate Staff Scientist
Spinal Biomechanics Laboratory
Barrow Neurological Institute
Phoenix, Arizona

VIJAY K. GOEL, PHD
Distinguished University Professor
Endowed Chair and McMaster-Gardner Professor of Orthopaedic Bioengineering
Co-Director, Engineering Center for Orthopaedic Research Excellence (E-CORE)
Departments of Bioengineering and Orthopaedic Surgery
Colleges of Engineering and Medicine
The University of Toledo
Toledo, Ohio

PAUL KIM, MD
Carolinas Medical Center
Charlotte, North Carolina

JOON LEE, MD
Department of Orthopaedic Surgery
University of Pittsburgh Medical Center
Pittsburgh, Pennsylvania

STEPHEN PIRRIS, MD
Assistant Professor
Department of Neurosurgery
Mayo Clinic
Jacksonville, Florida

JEREMY RAWLINSON, PHD
Principal Scientist
Applied Research, Spinal Research and Development
Medtronic Spinal
Memphis, Tennessee

DAVID ROSLER, MS
Visiting Research Assistant
School of Engineering
Brown University
Providence, Rhode Island
INVITED FACULTY (continued)

BRANDON SANTONI, PHD
Director of Biomechanics Operations
Phillip Spiegel Orthopaedic Research Laboratory
Foundation for Orthopaedic Research and Education (FORE)
Temple Terrace, Florida

MICHAEL STEINMETZ, MD
Associate Professor
Case Western Reserve School of Medicine
Chairman, Department of Neuroscience
MetroHealth Center
Cleveland, Ohio

SASIDHAR VADAPALLI, PHD
Research Engineer
Medtronic Spinal and Biologics
Memphis, Tennessee

WILLIAM C. WELCH, MD
Professor of Neurological Surgery
Penn Medicine
Chief of Neurosurgery
Pennsylvania Hospital
Philadelphia, Pennsylvania

JOHN WILSON, MD
Associate Professor of Neurosurgery and Radiology
Department of Neurosurgery
Wake Forest Baptist Medical Center
Winston-Salem, North Carolina

WPAHS FACULTY

EUGENE A. BONAROTI, MD
Department of Neurosurgery

DANIEL COOK, MS
Manager, Spine and Biomechanics Laboratory
Department of Neurosurgery

SUSAN L. DEAKIN, DO
Department of Medicine

PETER J. JANNETTA, MD
Professor Emeritus
Department of Neurosurgery

JACK KABAZIE, MD
Director, Institute for Pain Management
Program Director, Pain Management Fellowship

KEVIN KELLY MD, PHD
Director Neuroscience Research Center
Department of Neurology

MARK SANGIMINO, MD
Assistant Professor, Orthopaedic Surgery
Drexel University College of Medicine
Temple University School of Medicine
Director, Division of Pediatric Orthopaedic Surgery

EDWARD SNELL, MD
Assistant Professor of Orthopaedic Surgery
Assistant Professor of Family Practice
Drexel University School of Medicine
Director, Primary Sports Medicine Fellowship

BARBARA E. SWAN, MD
Medical Director, Inpatient Rehabilitation Unit
Department of Internal Medicine

NESTOR TOMYCZ, MD
Department of Neurosurgery

CONFERENCE SCHEDULE

THURSDAY, SEPTEMBER 6, 2012

5:00 p.m. Welcome Reception at the Renaissance Pittsburgh Hotel

FRIDAY, SEPTEMBER 7, 2012

7:00 a.m. Registration and Continental Breakfast

7:30 a.m. Welcome, Introduction and Overview
Jack Wilberger, MD and Boyle C. Cheng, PhD

7:45 a.m. KEYNOTE ADDRESS
Why We Do the Wrong Operation for a Common Disease?
Frederick A. Simeone, MD

8:45 a.m. Complications with Robotic Surgery
William C. Welch, MD

9:05 a.m. Complications with Combined Treatments for the Spine
Domagoj Coric, MD

9:25 a.m. BREAK

9:40 a.m. Complications in the Cervical Spine
Paul A. Anderson, MD

(continued)
FRIDAY, SEPTEMBER 7, 2012

10:00 a.m.  Complications with New Technologies  
Antonio Castellvi, MD

10:20 a.m.  Complications with Old Technologies  
John J. Carbone, MD

10:40 a.m.  B R E A K

10:50 a.m.  Complications at the Lumbosacral Junction  
Anders Cohen, DO

11:10 a.m.  Complications Across the Cervicothoracic Junction  
Mark Sangimino, MD

11:30 a.m.  L U N C H

12:40 p.m.  Shotgun Start: Headshots Golf Classic

6:00 p.m.  Cocktails and Dinner

SATURDAY, SEPTEMBER 8, 2012

6:30 a.m.  Registration and Continental Breakfast

GENERAL SESSION
6:55 a.m.  Introductions  
Boyle C. Cheng, PhD

7:00 a.m.  KEYNOTE ADDRESS  
Patient Selection for Operative Intervention  
Hamilton Hall, MD

8:00 a.m.  Initial Management of the Acute Low Back Pain Patient  
Susan Deakin, DO

8:30 a.m.  Fireside Chat with Dr. Peter Jannetta

9:10 a.m.  B R E A K

MANAGEMENT OF CONCUSSION  
AND LOWER BACK PAIN TRACT

9:30 a.m.  The Concussion Epidemic  
Jack Wilberger, MD

9:50 a.m.  Medical Management of the Concussion Patient  
Kevin Kelly, MD, PhD

10:15 a.m.  Panel Discussion  
Concussion Management  
Moderator  Jack Wilberger, MD  
Panelists  Kevin Kelly, MD, PhD  
Edward Snell, MD

10:35 a.m.  Management of the Low Back Pain Patient: A Surgeon’s Perspective  
Eugene Bonaroti, MD

10:55 a.m.  Management of the Low Back Pain Patient: A Pain Specialist’s Perspective  
Jack Kabazie, MD

YOUNG GUNS SURGICAL TRACT

9:30 a.m.  Introduction and Overview  
Stephen Pirris, MD and Nestor Tomycz, MD

9:40 a.m.  Pearls for Spine Surgical Trainees in Preparing for the Next Phase of Your Career  
Stephen Pirris, MD

10:00 a.m.  Pros and Cons of Practicing in a General Neurosurgical Private Practice  
James Burke, MD, PhD

10:15 a.m.  Pros and Cons of Practicing in an Academic Practice  
Michael Steinmetz, MD

10:30 a.m.  Pros and Cons of Practicing in a Private Practice with an Academic Connection  
Paul Kim, MD

(continued)
CONFERENCE SCHEDULE (continued)

SATURDAY, SEPTEMBER 8, 2012

11:15 a.m. Management of the Low Back Pain Patient: A Physiatrist’s Perspective
Barbara Swan, MD

11:35 a.m. Panel Discussion
Low Back Pain Management
Moderator: Susan Deakin, DO
Panelists: Eugene Bonaroti, MD
Jack Kabazie, MD
Barbara Swan, MD

GENERAL SESSION: LUNCHEON PRESENTATION
Noon Clinically Relevant Biomechanics of the Spine
Manohar Panjabi, PhD

1:00 p.m. ADJOURNMENT

BIOMECHANIC TRACT
1:15 p.m. KEYNOTE ADDRESS
Spine Biomechanics — A Historical Perspective
Manohar Panjabi, PhD

1:45 p.m. Hybrid Testing/Adjacent Level Effects
Pro: David Rosler, MS and Con: Daniel Cook, MS

2:15 p.m. Utilization of Follower Load in Comparative Testing
Pro: Brandon Santoni, PhD and Con: Jeremy Rawlinson, PhD

2:45 p.m. Motion Preservation Devices: ROM as an Appropriate Metric
Pro: Sasi Vadapalli, PhD and Con: Neil Crawford, PhD

3:15 p.m. Future Expectations of Spinal Biomechanics
Vijay Goel, PhD

3:30 p.m. Panel Discussion
The Surgeon’s Role in Biomechanics
Moderator: Vijay Goel, PhD
Panelists: Anand Agarwal, MD
William C. Welch, MD
Antonio Castellvi, MD

4:00 p.m. ADJOURNMENT

HEADSHOTS GOLF CLASSIC
FRIDAY, SEPTEMBER 7, 2012
Shannopin Country Club
1:00 p.m.

The 6th Annual HeadShots Golf Classic includes 18-holes of golf in a scramble format, followed by cocktails, dinner and tournament awards. The event benefits the Allegheny General Hospital Department of Neurosurgery Education Fund. This fund allows resident physicians and department staff the opportunity to be exposed to the newest technology and ideas that are presented at local and national meetings and symposiums.
ACCREDITATION

**AMA PRA Category 1 Credits™**

Allegheny General Hospital is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Allegheny General Hospital designates this live activity for a maximum of 10.0 **AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**AAFP**

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

**Chiropractors**

[Logo]

10 hours of continuing education (CE) credit for chiropractors has been applied for in the State of Pennsylvania by National University of Health Sciences.

**Credit Breakdown**

- **Friday morning**: 4.0 **AMA PRA Category 1 Credits™**
- **Saturday**: 6.0 **AMA PRA Category 1 Credits™**

SEMINAR LOCATIONS AND PARKING

**FRIDAY, SEPTEMBER 7, 2012**

*Shannopin Country Club*
Ben Avon Heights
Pittsburgh, Pennsylvania

**SATURDAY, SEPTEMBER 8, 2012**

*Magovern Conference Center*
Allegheny General Hospital
320 East North Avenue
Pittsburgh, Pennsylvania

**PARKING**

On Saturday, parking is available in the hospital garage located on James Street, adjacent to the hospital. Parking tickets will be validated at the conference registration desk for a discounted fee of $4.00. Please bring your parking ticket to the registration desk.

ACCOMMODATIONS

**Renaissance Pittsburgh Hotel**
107 6th Street
Pittsburgh, Pennsylvania 15222

A block of rooms at the Renaissance Pittsburgh Hotel has been set aside for registrants attending the Pittsburgh Spine Summit at the per night rate of $179 + tax. Reservations may be made by calling **1 (866) 454-4400** and ask for in-house reservations. Please indicate that you are attending the Pittsburgh Spine Summit in order to receive special group rates. Reservation deadline is August 23, 2012.

**Residence Inn Pittsburgh North Shore**
574 West General Robinson Street
Pittsburgh, Pennsylvania 15212

A block of rooms at the Residence Inn Pittsburgh North Shore has been set aside for registrants attending the Pittsburgh Spine Summit at the per night rate of $129 + tax. Reservations may be made by calling **1 (800) MARRIOTT** and ask for the Pittsburgh Spine Summit in order to receive special group rates, or online at [www.marriott.com/hotels/travel/pitrn?grouppcode=spnspna&app=rsvlink&fromDate=9/6/toDate=9/9/12](http://www.marriott.com/hotels/travel/pitrn?grouppcode=spnspna&app=rsvlink&fromDate=9/6/toDate=9/9/12). Reservation deadline is August 6, 2012.
REFUND POLICY

A refund of the registration fee, less a $25 processing fee, will be made when a written request or a telephone request followed by a written confirmation is received prior to August 24, 2012. After this date, refunds cannot be made. Fees will not be refunded for failure to attend.

REGISTRATION INFORMATION

The registration fee includes the course materials, continental breakfast, lunch, break refreshments and receptions.

FEE:

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<td>Physicians, Chiropractors</td>
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* Registration must be accompanied by a letter from Program Director.

DEADLINE: Friday, August 24, 2012

(Registrations will be taken after the deadline date on a space-available basis.)

TO REGISTER:

To register online, please go to www.aghcmce.org. To mail or fax your registration, please complete the registration form and return it with the registration fee or fax to:

Continuing Medical Education
Allegheny General Hospital
320 East North Avenue
Pittsburgh, Pennsylvania 15212-4772

Fax (412) 359-8218

The preferred method of payment is by VISA, MasterCard, American Express or Discover; however checks will be accepted made payable to Allegheny General Hospital.

ADDITIONAL INFORMATION

For additional information concerning the conference, please contact the Continuing Medical Education office by e-mail at cjacket@wpahs.org, by telephone at (412) 359-4952.
REGISTRATION FORM

PLEASE INDICATE:

☐ I will attend the Summit.
☐ I will attend the Summit and Golf.
   (If you need to rent golf clubs, please e-mail dcantell@wpahs.org)

Saturday Tracts
I will attend the following tract on Saturday morning:
☐ Concussion and Lower Back Tract
☐ Young Guns Surgical Tract

I will attend the following tract on Saturday afternoon:
☐ Biomechanics Tract

Social Activities
☐ I will attend the Welcome Reception on Thursday at the Renaissance Pittsburgh Hotel.
   Number attending: _________
☐ I will attend the Dinner on Friday at the Shannopin Country Club.
   Number attending: _________

Transportation
   Friday:
☐ I will need transportation from the hotel to Shannopin Country Club.
☐ I will NOT golf and will need transportation to the hotel after the morning session.
☐ I will need transportation from the hotel to Shannopin Country Club for dinner.
   Saturday:
☐ I will need transportation to and from the hotel and conference at the hospital.

NAME

DEGREE

AFFILIATION

ADDRESS

CITY STATE ZIP

TELEPHONE ( ) E-MAIL ADDRESS

METHOD OF PAYMENT:
☐ Credit Card
☐ Check

CREDIT CARD TYPE:
☐ Visa
☐ MasterCard
☐ American Express
☐ Discover

If you require assistance with hearing, vision or mobility to make this conference accessible to you, please check this box and contact the CME office at (412) 359-4952 at least two weeks prior to the conference date.

TOTAL AMOUNT

CREDIT CARD # EXPIRATION DATE

NAME ON CARD

SIGNATURE*

* By signing this form, I authorize Allegheny General Hospital to charge my credit card for the above amount. My signature also indicates that I will not dispute this charge in the future through my credit card company.