The Future of Surgery: A Paradigm Shift
# Table of Contents

## Letters of Welcome
- Governor of Tennessee .................................. 4
- Mayor of Memphis ........................................... 5
- ICS World President ......................................... 6
- United States Section President ......................... 7

## Leadership
- International Executive Council ....................... 8
- United States Section Executive Council .......... 8
- US Section Planning Committee ...................... 9

## Continuing Medical Education
- Course Sponsor .............................................. 9
- Overall Course Objectives ............................... 9
- Disclosure Policy .......................................... 9
- Accreditation .............................................. 9
- Credit Designation ....................................... 9

## Scientific Program
- Featured Presentations .................................. 10
- Opening Ceremony and Special Lecture ............ 11
- Trauma Surgery in the 21st Century .................. 12
- Acute Care Surgery ....................................... 12
- Featured Lecture .......................................... 13
- Annual Ethics Forum .................................... 13
- Annual Research Scholarship Competition ....... 13
- Pediatric Surgery ......................................... 14
- Dr. Arno A. Roscher Endowed Lecture .............. 14
- Use of Ultrasound in Surgery Lectures .......... 14
- Alternatives in Minimally Invasive Colorectal Surgery Lecture Series .................................... 15
- Considerations in Surgical Oncology ............... 15
- Challenges in Vascular Surgery ....................... 16
- The Dr. Andre Crotti Award Recipient’s Lecture 16
- Multidisciplinary Platform Presentations ............ 17

## Hands-On Workshops
- Use of Ultrasound in Surgery ......................... 15
- Alternatives in Minimally Invasive Colorectal Surgery ........................................ 16
- Abdominal Wall Reconstruction: Management of the Open Abdomen and Complex Hernias 17

## Neurosurgical and Orthopaedic Scientific Sessions
- Neurosurgical and Orthopaedic Presentations Part I .............................................................. 18
- Neurosurgical and Orthopaedic Presentations Part II .............................................................. 19

## Social Activities
- John C. Scott Surgical Endowment Fund .......... 20
- Acknowledgements ......................................... 21
- With our Thanks ............................................ 21
- Scientific Abstracts ....................................... 23
- 77th Annual Surgical Update Announcement ..... 36
- General Meeting Information ......................... 37
- Moderator and Presenter Index ....................... 38
- Memphis Hilton, Floor Plans ............................. Inside Back Cover
- Schedule at a Glance ...................................... Back Cover
Dear Friends,

On behalf of the great State of Tennessee, I am pleased to extend a warm welcome to the attendees of the 76th Annual Surgical Update. We certainly are glad you’re here and extremely proud to have this event in our state.

During your stay, I hope you will have time to make new acquaintances and explore Memphis and all the Volunteer State has to offer. Wherever you travel in Tennessee, you will find friendly people known for authentic southern hospitality, eager to invite you back for another visit.

Again, welcome to Tennessee. Crissy and I send our very best wishes and hope your future endeavors are filled with joy and success.

Warmest regards,

Bill Haslam
June 11, 2014

International College of Surgeons, United States Section
The Future of Surgery: A Paradigm Shift
76th Annual Surgical Update
June 11-14, 2014

Dear Members:

As Mayor of the city of Memphis, Tennessee, it is indeed an honor and my pleasure to welcome each of you to our great city for your 76th annual surgical update. We are grateful that you have chosen Memphis as the host city for this event, and I hope that you will enjoy your visit.

The unique and lively city of Memphis embraces our southern hospitality within its diverse culture and remarkable heritage. As I am sure you know we are home to the world-renowned St. Jude Children’s Hospital, where we witness lifesaving medical innovations daily. In addition there is much to explore including the many fine restaurants and tourist attractions such as the famed Beale Street. Graceland – the home of Elvis Presley, the historic landmark where freedom still rings – our National Civil Rights Museum, and the Stax Museum of American Soul Music to name but a few.

On behalf of the citizens of Memphis, I extend best wishes to you for a successful event.

Best Regards,

A C Wharton, Jr.,
Mayor
On behalf of all Fellows of the International College of Surgeons in over 100 countries of the world, I have the pleasure to welcome you to the 76th Annual Surgical Update of the International College of Surgeons United States Section in Memphis, Tennessee.

The United States Section is one of the most highly esteemed sections within the College and has achieved much over the 76 years of its existence. It is noteworthy that the International College of Surgeons was founded in 1935 by Dr. Max Thorek and that the United States Section is celebrating its 76th meeting – the US Section has been active from the very beginning of the College.

The theme of this 76th Annual Surgical Update is "The Future of Surgery: A Paradigm Shift". Many leaders in the field of surgery have come from the ranks of the United States Section. All leaders, to varying degrees, break paradigms. In an era of rapid change in the field of surgery, the theme of this meeting is very appropriate and timely.

It is for the foregoing reasons that I welcome you to this very exciting 76th Surgical Update and to the warm and hospitable venue of Memphis, Tennessee. I look forward to personally being with you and to the privilege of meeting all of you.

Sincerely,

Professor Adel Ramzy
World President
International College of Surgeons
Dear Colleagues,

It is my distinct pleasure to welcome you to Memphis and the 76th Annual Surgical Update of the United States Section of the International College of Surgeons. In addition, I extend greetings to the members of the American Academy of Neurological and Orthopaedic Surgeons who once again join us for their Annual Scientific Meeting.

Our conference has been entitled The Future of Surgery: A Paradigm Shift and will focus on specialty specific approaches related to new and emerging trends in trauma and critical care surgery. The meeting is dedicated to the current needs of you, our attendees, and it will enhance your practice through improved Performance, Competence, Knowledge and positive Patient Outcomes. The overall goals of this conference are to enhance technique, to advance current surgical knowledge, foster continued training and improve patient care.

Included in the scientific program are original research as well as clinical cases of interest to general surgeons and all surgical specialists. As always, you have the opportunity for meaningful discussion and constructive critique of new and innovative surgical procedures, research findings, and observations made in the operating room, in the clinic, and in the laboratory.

We are honored to include many distinguished faculty from around the country, including significant participation from the University of Tennessee in Memphis and the St. Jude Children’s Research Hospital. ICSUS Tennessee Regent, Dr. Bhaskar Rao, was instrumental in developing a wonderful working relationship with Dr. Andrew Davidoff and his colleagues in Memphis. Also contributing significantly to the scientific program are many of my colleagues from Texas Tech University Health Sciences Center in Lubbock, such as Professors Bernhard Mittemeyer and John Griswold.

The social calendar is also quite interesting. I hope to see many of you at Graceland for our Thursday evening tour of Elvis Presley’s home. Memphis’ rich history of music will continue to be featured at our closing Gala Banquet, where I know everyone will have a tremendous time.

I also encourage everyone to join us for lunch each day as we feature presentations that will demonstrate how ICS answers the call of our founder, Dr. Max Thorek, through outreach activities as well as practice management topics that will guide you through these challenging times. I know you will enjoy these special presentations as well as all the other educational and social content of our Section’s annual gathering here in Memphis.

Sincerely,

Ari Halldorsson, MD
United States Section President
International College of Surgeons
## 2014 ICS Leadership

### International Executive Council

- **World President**
  - **Professor Adel F. Ramzy**
  - **Egypt**

- **President Elect**
  - **Professor Yik-Hong Ho**
  - **Australia**

- **Immediate Past President**
  - **Dr. Said A. Daei**
  - **United States of America**

- **First Vice President**
  - **Professor Ken Takasaki**
  - **Japan**

- **Corporate Secretary**
  - **Professor Manuel Huaman G.**
  - **Peru**

- **Treasurer**
  - **Professor N. Dorairajan**
  - **India**

- **African Federation Secretary**
  - **Professor Nduubuisi Eke**
  - **Nigeria**

- **Asian Federation Secretary**
  - **Professor Clement Chan**
  - **Hong Kong**

- **European Federation Secretary**
  - **Dr. Giorgios Tsoulfas**
  - **Greece**

- **Latin American Federation Secretary**
  - **Dr. Angel M. Vannelli**
  - **Argentina**

- **North American Federation Secretary**
  - **Dr. Juan Barron Blanco**
  - **Mexico**

- **Pacific Federation Secretary**
  - **Dr. Rudi Yuwana**
  - **Indonesia**

### United States Section Executive Council

- **President**
  - **Ari O. Halldorsson, MD**
  - **Lubbock, Texas**

- **President-Elect**
  - **Uretz John Oliphant, MD**
  - **Urbana, Illinois**

- **Immediate Past President**
  - **Larry S. Sasaki, MD**
  - **Bossier City, Louisiana**

- **Secretary**
  - **Michael J. Jacobs, MD**
  - **Birmingham, Michigan**

- **Treasurer**
  - **Chand Ramaiah, MD**
  - **Nashville, Tennessee**

- **Chair, Council of Specialty Groups**
  - **Francis J. Podbielski, MD**
  - **Chicago, IL**

### Representative at Large

- **Arno A. Roscher, MD**
  - **Chatsworth, California**

### Vice Presidents

- **Domingo Alvear, MD**
  - **Harrisburg, PA**

- **Frank Bongiorno, MD**
  - **Ann Arbor, MI**

- **Quyen D. Chu, MD**
  - **Shreveport, LA**

- **W. Craig Clark, MD**
  - **Eads, TN**

- **Maxime J.M. Coles, MD**
  - **Pittsfield, ME**

- **Anthony N. Dardano, Jr., DO**
  - **Boca Raton, FL**

- **Sharmila Dissanaike, MD**
  - **Lubbock, TX**

- **Clara Raquel Epstein, MD**
  - **Boulder, CO**

- **Zaki-Udin Hassan, MD**
  - **Lexington, KY**

- **Andrew Klein, MD**
  - **Los Angeles, California**

- **Phillips Kirk Labor, MD**
  - **Grapevine, TX**

- **M. Hosein Shokouh-Amiri, MD**
  - **Shreveport, LA**

- **Thavam C. Thambi-Pillai, MD**
  - **Sioux Falls, SD**

- **Jacob Varon, MD**
  - **Belaire, TX**

- **Sivamanithan Vithiananthan, MD**
  - **Providence, RI**

### Qualifications Council

- **Chair**
  - **Marco A. Pelosi, III, MD**
  - **Bayonne, NJ**

- **Secretary**
  - **Francis J. Podbielski, MD**
  - **Chicago, IL**

### Additional Members

- **Dr. Eddie Chang**
  - **Singapore**

- **Professor Biagio Ravo**
  - **Italy**

- **Dr. Nopadol Wora-Urai**
  - **Thailand**

- **Professor Hari Kapila**
  - **Australia**

- **Dr. Pierre Lam**
  - **Hong Kong**

- **Dr. Easaw Thomas**
  - **Singapore**

- **Dr. Wickii Vigneswaran**
  - **United States of America**

- **Qualifications Council**
Course Sponsor
International College of Surgeons - United States Section
An ACCME Accredited Provider

Overall Course Objectives
The Annual Surgical Update is designed to offer information regarding the latest surgical advancements and technology to address gaps in knowledge that may exist for practicing surgeons in all surgical specialties, residents in training, and allied health professionals. The desired outcome of this program is increased knowledge, better competency in cutting-edge treatment modalities, and enhanced treatment decision making. It is the expressed goal of the course to provide enough material that upon completion of the activity the participant can make educated decisions to incorporate the latest surgical techniques and technologies as well as discern when these procedures are warranted to provide optimum patient care.

Disclosure Policy
It is the policy of the International College of Surgeons-US Section that any individual who is involved in planning or presenting in a program designated for AMA Physician's Recognition Award Category 1 Credit™ must disclose all relevant financial relationships with a commercial interest prior to being included in the final program. This information is disclosed to the audience prior to the activity. The ICS-US has procedures in place to address a conflict of interest should one arise. Our complete Policy on Commercial Support and Independence is available on FICS Online or by request from Headquarters. Additionally, faculty members are asked to disclose when any discussion of unapproved use of a pharmaceutical or medical device occurs.

Accreditation
The International College of Surgeons-United States Section is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to sponsor Continuing Medical Education for physicians.

Credit Designation
The International College of Surgeons-United States Section designates this live activity for a maximum of 22 AMA PRA Category 1 Credits. Physicians should claim only the credit commensurate with the extent of their participation in the activity.
The Dr. Andre Crotti Award Recipient’s Lecture
The Importance of Surgical Leadership in Medicine
Professor Emeritus Bernhard T. Mittemeyer, MD, Texas Tech University Health Sciences Center, Lubbock, TX

Dr. Mittemeyer is Professor Emeritus of Urological Surgery in the Department of Urology of the School of Medicine at Texas Tech University Health Sciences Center in Lubbock. He has also been appointed by the Health Sciences President as his Special Assistant for Veterans Affairs. Since joining Texas Tech in 1986 he has held numerous prestigious positions such as Executive Vice President, Provost and Chief of the Division of Urology, Interim Dean of the School of Medicine, and Interim President of the School of Medicine. Prior to his tenure at Texas Tech, Professor Mittemeyer had a long and well respected career in the US Military. The nearly thirty years of service by Professor Mittemeyer culminated with significant decorations and positions such as; Commanding General of the Walter Reed Army Medical Center and Surgeon General for the Department of the Army.

Dr. Mittemeyer received his Doctor of Medicine Degree from the Temple University School of Medicine in Philadelphia. He has authored or co-authored more than 40 publications and has made numerous presentations in the areas of Urology, Surgery, Health Care Administration and Leadership over his more than 54 year career in medicine.

Thursday Keynote Presentation
Current Trends in Management of Major Burn Patients
Professor John A. Griswold, MD, Chair of the Department of Surgery at Texas Tech University Health Sciences Center in Lubbock, TX

Born and raised in Casper, Wyoming, Dr. Griswold attended the University of Notre Dame in South Bend, Indiana where he obtained a Bachelor of Science. He then attended Creighton University in Omaha, Nebraska where he obtained his M.D. degree, and then on to Texas Tech for general surgery residency. This was followed by fellowships at the University of Washington in Seattle involving burn, trauma, and critical care. Dr. Griswold returned to Texas Tech in 1992 and developed a busy general surgery practice. In addition he is the Chair of the Department of Surgery, Medical Director of the Level 1 Trauma Center (first to be verified in Texas by the state), and Medical Director of the Timothy J. Harnar Regional Burn Center. Besides being active in the care of injured and burn patients as well as critically ill surgical patients Dr. Griswold has an interest in patients with complex GI problems, malnutrition, and wounds.

Annual Ethics Forum
Bioethics in a Pluralistic Society: Can We Ever Find Agreement?
Dennis P. Hollinger, PhD, Professor of Christian Ethics at the Gordon-Conwell Theological Seminary, Hamilton, MA

Dennis Hollinger is President and the Colman M. Mockler Distinguished Professor of Christian Ethics at Gordon-Conwell Theological Seminary in South Hamilton, MA. Prior to assuming his present role in 2008, he served as President and Professor of Christian Ethics at Evangelical Theological Seminary in Myerstown, PA.

Over the years Dennis has served in administrative, pastoral and seminary teaching ministries, including Vice Provost at Messiah College, Pastor of the Washington Community Fellowship on Capitol Hill in Washington, D.C., and Associate Professor of Church & Society at Alliance Theological Seminary in Nyack, New York. He has served as an adjunct or visiting professor at several seminaries internationally, including Moscow Theological Seminary in Russia, Union Biblical Seminary in India, and the Eastern European Seminary for Evangelical Leadership in Ukraine. He is also a visiting professor of Christian Ethics at Trinity International University, in the graduate program in Bioethics.

Friday Keynote Presentation
Biology and Management of Neuroblastoma
Andrew Davidoff, MD, Chair of the Department of Surgery at St. Jude Children’s Research Hospital, Memphis, TN

Dr. Davidoff, a board certified pediatric surgeon, completed his residency training in general surgery at Duke University Medical Center and general and thoracic pediatric surgery at the Children’s Hospital of Philadelphia. His academic interests at St. Jude are focused on clinical and translational investigation and treatment of pediatric solid tumors, neuroblastoma, in particular. His research is focused on the development of new strategies for the treatment of neuroblastoma (and other tumor types). These include angiogenesis inhibition and gene therapy for cancer treatment. In addition, he has a significant effort in the area of gene therapy for monogenetic disorders, hemophilia in particular.
The Dr. Arno A. Roscher Endowed Lecture
Arno A. Roscher, MD, FICS (HON.) FCAP, FASCP, Los Angeles, CA

Dr. Arno A. Roscher, a trained surgeon who immigrated to the United States from Germany and pursued a successful career in Pathology, has been a Fellow of the International College of Surgeons since 1968. Dr. Roscher has remained active in ICS activities throughout his over 40 years as a member. He has also held numerous elected leadership positions at both the US Section and international levels. When he contributed $100,000 to the US Section in 2009 the Dr. Arno A. Roscher Endowed Lecture was established. This year marks the sixth anniversary of this special lecture that has featured renowned physicians presenting on varied topics ranging from the Reduction of Health Disparities to Molecular Genetic Testing.

The Need for a New ‘Gold Standard’ in Cancer Diagnosis: the Role of Immunohistochemistry
Clive Taylor, MD. 2014 Dr. Arno Roscher Endowed Lecture, Professor and Past Chairman of the Department of Pathology at the University of Southern California Keck School of Medicine, Los Angeles, CA

Dr. Taylor studied medicine at Emmanuel College, University of Cambridge, gaining M.A. and M.D. degrees with distinction. He moved to the Radcliffe Infirmary, Oxford for his clinical work, was appointed as a University Lecturer and earned M.A. and D. Phil degrees from the University of Oxford, simultaneously completing his residency training in Pathology. Dr. Taylor moved to the University of Southern California in 1975, establishing the first immunohistochemistry laboratory in the US. Dr Taylor was appointed to the Chair of Pathology in 1984, a position that he was to hold for 25 years. From 1998 to 2008 he also served as Dean for Academic Affairs, overseeing a complete overhaul of the curriculum, with USC students achieving scores in the top one percent nationally. Professor Taylor is a Fellow of the Royal College of Pathologists (U.K.) and the Royal College of Physicians of Ireland, a member of the Royal Society of Medicine, and a Diplomate of the American Board of Pathology. He served as President of the U.S. Association of Pathology Chairs, President of the U.S. Biological Stain Commission, and Chair of the FDA Advisory Panel for Diagnostic Devices. He is Editor-in-Chief of AIMM, ‘Applied Immunohistochemistry and Molecular Morphology.’ Dr. Taylor has well over 400 scientific papers to his name, and a score of books, in the fields of immunohistochemistry, cancer, lymphoma, and education.

Orthopaedic Surgery Keynote Speaker
Complications Associated with use of BMP in Adult Spinal Deformity
Shay Bess, MD. Orthopaedic Surgeon, Rocky Mountain Scoliosis & Spine, Denver, CO

Dr. Bess received his undergraduate degree from Columbia University, and medical doctorate from The Johns Hopkins University School of Medicine. He completed an orthopaedic surgery residency at Case Western Reserve University and completed a fellowship in pediatric and adult spinal surgery at the Washington University in St. Louis. Dr Bess is a member of the Scoliosis Research Society and North American Spine Society, actively participates in pediatric and adult scoliosis research with the International Spine Study Group and the Growing Spine Study Group and is a surgeon for the Foundation of Orthopaedics and Complex Spine which a charity organization that travels to Ghana, Africa to provide scoliosis and spine surgery for children in need. Dr. Bess’ treatment interests include pediatric and adult scoliosis, pediatric and adult spinal deformity, early onset scoliosis, kyphosis, revision spine surgery, cervical spine, and spine tumors.

Neurosurgical Keynote Speaker
Evaluation and Treatment of Peripheral Nerve Problems: Evolving Diagnostic Methods and Treatments
Michel Kliot, MD, Clinical Professor of Neurosurgery UCSF Medical Center, San Francisco, CA

After completing graduate work in Neurobiology at Stanford University, Dr. Kliot obtained his MD from Yale Medical School. His General Surgery Internship was followed by a Neurosurgical Residency at the Neurological Institute in New York City. Subsequently he did a traveling peripheral nerve fellowship, spending time with Dr. Alan Hudson at the University of Toronto and Dr. David Kline at LSU Medical School in New Orleans. He joined the Department of Neurological Surgery at the University of Washington in 1991 where he is currently an Associate Professor.

Dr. Kliot specializes in the diagnosis and treatment of peripheral nerve problems which include entrapment neuropathies such as carpal tunnel syndrome, traumatic nerve injuries such as those involving the brachial plexus, and masses involving peripheral nerves such as tumors. He and his colleagues have helped to develop improved methods of diagnosing and treating peripheral nerve problems using high resolution MRI techniques. He is involved in translational research that encompasses assessing clinical outcome and developing new methods of evaluating and treating patients with peripheral nerve problems; developing and applying non-invasive methods to assess intracranial pressure and tissue pathology generating pain; developing new ways of acutely repairing damaged axons using nanotechnology devices; and determining why some tumors grow and others do not.
THURSDAY JUNE 12, 2014

OPENING CEREMONY AND KEYNOTE LECTURE

8:00 - 9:00 AM  TN Grand Ballroom A

Moderator: Ari Halldorsson, MD

Welcome and Introductions
Ari Halldorsson, MD, ICS-US Section President

SPECIAL MESSAGE
William Mathews, MD, FICS, Chair, American Academy of Neurological and Orthopaedic Surgeons

KEYNOTE PRESENTATION: Current Trends in Management of Major Burn Patients
This presentation will identify treatment options for burn patients as well as burn related complications and issues. Participants in this session will gain practical knowledge about current burn therapies.

John Anthony Griswold, MD, Professor and Peter C. Canizaro Chairman Department of Surgery Texas Tech University Health Sciences Center Lubbock, Medical Director Timothy J. Harnar Regional Burn Center University Medical Center, Lubbock, TX

TRAUMA SURGERY IN THE 21ST CENTURY

9:00 - 10:30 AM  TN Grand Ballroom A

Moderators: Uretz Oliphant, MD & Mark Perlmutter, MD

This session offers a comprehensive review of various aspects of trauma related surgical issues including: new technology, geriatric considerations, how to implement educational models in remote locations and safer alternatives to achieve hemostasis. Participants in this course will increase their knowledge of the topics presented to provide improved patient care.

Implementation of Trauma Triage/Resuscitation Simulation Based Education with Web Based Follow Up In Rural Honduras
Ulises Torres, MD, FICS, University of Massachusetts Medical School, Worcester, MA

Advances in Patient Care Technologies for Trauma and Surgical Critical Care
Harry Linne Anderson, III, MD, FICS, Attending Surgeon Program Director, Surgical Critical Care Fellowship St. Joseph Mercy Ann Arbor Ann Arbor, Michigan Clinical Professor of Surgery Wayne State University School of Medicine Detroit, Ann Arbor, MI

Evolution of Geriatric Trauma
Steven Brooks, MD, FICS(J), Assistant Professor of Surgery Trauma, Surgical Critical Care and Acute Care Surgery Texas Tech University Health Science Center, Lubbock, TX

Hemostatic Agents in Trauma
Yana Puckett, MD, FICS(J), General Surgery Resident, PGY-2, Texas Tech University Health Sciences Center, Lubbock, TX

Surgery in the Geriatric Population
LeRone Simpson, MD, FICS(J), Resident - General Surgery, PGY 4, Texas Tech, Lubbock, TX

Coffee Break – 10:30 AM to 10:45 AM

ACUTE CARE SURGERY

10:45 - Noon  TN Grand Ballroom A

Moderators: Sharmila Dissanaike, MD & Steven Brooks, MD

This lecture series will define the specialty of acute care surgery, update the audience on the changing epidemiology of necrotizing soft tissue infections, outline optimal management of decubitus ulcers, and identify best practice with respect to acute cholecystitis.

Acute Care Surgery in Evolution
Heena Santry, MD, Assistant Professor of Surgery and Quantitative Health Sciences, University of Massachusetts Medical School, Worcester, MA

Surgical Management of Decubitus Ulcers
Sharmila Dissanaike, MD, FICS, Professor of Surgery, Texas Tech University Health Sciences Center, Lubbock, TX

Damage Control Strategies in the Management of Acute Injuries
Stephanie Savage, MD, MS, Assistant Professor of Surgery Trauma/Critical Care University of Tennessee Health Science Center, Memphis, TN

Necrotizing Soft Tissue Infections: An Increasingly Common Problem
Sharmila Dissanaike, MD, FICS, Professor of Surgery, Texas Tech University Health Sciences Center, Lubbock, TX

2014 Modern Treatment of Acute Cholecystitis
Steven Brooks, MD, FICS(J), Assistant Professor of Surgery Trauma, Surgical Critical Care and Acute Care Surgery Texas Tech University Health Science Center, Lubbock, TX
LUNCH PRESENTATIONS

Noon - 1:30 PM  TN Grand Ballroom B

**Moderator:** Demetrius E.M. Litwin, MD

The Global Burden of Surgical Disease in Children: How Serious is It and How Can We Help?
Domingo T. Alvear, MD, FICS, Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

Global Surgery
Paul Del Prado, MD, FICS(J), General Surgery Resident PGY 4, Texas Tech University, Lubbock, TX

**Featured Lecture**

1:30 - 1:50 PM  TN Grand Ballroom A

**Moderator:** Frank Bongiorno, MD

Light Adjustable Lens, Phase III FDA Study
Phillips Kirk Labor, MD, FICS, Founder, Eye Consultants of Texas, Grapevine, TX

ANNUAL ETHICS FORUM

1:50 - 3:20 PM  TN Grand Ballroom A

**Moderator:** Frank Bongiorno, MD

Bioethics faces a major challenge in light of the pluralistic nature of our society. Multiple religions, philosophical frameworks, worldviews and vocational commitments would seem to render impossible our ability to find a common framework for adjudicating our most pressing ethical challenges in the world of medicine. This lecture suggests human dignity as a framework for both making bioethical decisions and engendering virtues necessary for the ethical practice of medicine. Ample time will be allotted for audience discussion.

Bioethics in a Pluralistic Society: Can We Ever Find Agreement?
Dennis Hollinger, PhD, President & Colman M. Mockler Distinguished Professor of Christian Ethics, Gordon-Conwell Theological Seminary, Hamilton, MA

FRIDAY JUNE 13, 2014

ANNUAL RESEARCH SCHOLARSHIP COMPETITION

8:00 - 9:45 AM  TN Grand Ballroom A

**Moderator:** Anthony Dardano Jr., DO & Chand Ramaiah, MD

The Scholarship Committee of the ICS-US Section accepts submissions from medical students, surgical residents and surgical fellows. Participants have submitted an original clinical research paper with pertinent clinical application for this annual competition. All papers are judged and scored by the members of the ICSUS Section Scholarship Committee prior to the Annual Surgical Update. An additional panel of judges will score the oral presentation of the research during the meeting in Memphis. Scores will be tallied and those with the highest combined score will be awarded prizes. Participants in this session will be presented with the latest research being conducted by some of the brightest young minds in medicine and surgery.

Quality of Life Assessment After Peroral Endoscopic Myotomy
Yalini Vigneswaran, MD, General Surgery Resident PGY3, University of Chicago Medical Center, Chicago, IL

Mesna and Hydroxypropyl Methylcellulose Assist in Delayed Submucosal Dissection in a Rabbit Cecal Model
Gokulakkrishna Subhas, MD, FICS(J), Resident in General Surgery, Providence Hospital and Medical Centers, Southfield, MI

Impact of Plasma Glucose Level at the Time of FDG Administration on the Accuracy of FDG-PET/CT in the Diagnosis of Pancreatic Lesions
Alireza Hamidian Jahromi, MD, FICS, General Surgery Resident, Louisiana State University Health Shreveport, Shreveport, LA

Short-Term Surgical Missions: A Cost-Benefit Analysis
Jonathan Egle, MD, General Surgery Resident, Providence Hospital and Medical Centers, Southfield, MI

Patterns of Failure After Open Inguinal Hernia Repair with Mesh: A Study of Five Cases
Thomas Buddensick, MD, Resident in General Surgery, St. Agnes Hospital, Baltimore, MD

Kidney Access Device (KAD): A New Concept and Invention
Jasneet S. Bhullar, MD, MS, FICS(J), Junior ICS Fellow, General Surgery Resident, Department of Surgery, Providence Hospital & Medical Centers, Southfield, MI
Coffee Break – 9:45AM to 10:00AM

**Pediatric Surgery**

10:00 - Noon  
TN Grand Ballroom A

**Moderators:** Domingo Alvear, MD & Bhashkar Rao, MD

This session will review and define the most current approaches for the diagnosis and treatment of common and uncommon pediatric conditions. Participants will improve their ability to identify, treat and recommend treatment for diseases such as Wilms Tumor, Neuroblastoma, Abdominal Trauma, Liver Tumors and Omphalocele.

**Keynote Presentation**

**Biology and Management of Neuroblastoma**  
Andrew Davidoff, MD. Chairman, Department of Surgery, St. Jude Children's Research Hospital, Memphis, TN  
Professor of Surgery, Pediatrics and Pathology & Laboratory Medicine, University of Tennessee Health Science Center, Memphis, TN

**Abdominal Trauma in Children**  
James W. Eubanks, III, MD. Chief of Pediatric Surgery, Associate Professor of Surgery and Pediatrics, University of Tennessee Health Science Center, Medical Director of Trauma Le Bonheur Children's Hospital, Memphis, TN

**Biology and Management of Wilms Tumor**  
Andrew Davidoff, MD. Chairman, Department of Surgery, St. Jude Children's Research Hospital, Memphis, TN  
Professor of Surgery, Pediatrics and Pathology & Laboratory Medicine, University of Tennessee Health Science Center, Memphis, TN

**Omphalocele: Surprises Beyond the Size**  
Domingo T. Alvear, MD, FICS. Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

**Lunch Presentation**

Noon - 1:30 PM  
TN Grand Ballroom B

**Moderator:** Demetrius E.M. Litwin, MD

**Leadership and Legacy**  
Wickii T. Vigneswaran, MD, FICS. Professor of Surgery, Associate Chief of Cardiac and Thoracic Surgery, Director of Lung and Heart Lung Transplantation, University of Chicago Medical Center, Chicago, IL

**The Dr. Arno A. Roscher Endowed Lecture**

1:30 - 2:15 PM  
TN Grand Ballroom A

**Moderators:** Ari Halldorsson, MD & Arno Roscher, MD

For more than a century, histopathology, in the form of a tissue biopsy, has served as the Gold Standard for diagnosis and therapeutic decisions in cancer surgery. This era is drawing to a close. Participants in this special lecture will be presented with new information relating to clinically important means of subtyping tumors for optimal therapy.

**The Need for a New “Gold Standard” in Cancer Diagnosis: the Role of Immunohistochemistry**  
Clive Taylor, MD, MA, D. Phil. Professor of Pathology, Keck School of Medicine, University of Southern California, Los Angeles, CA

**Uses of Ultrasound in Surgery Lecture Series**

2:15 - 3:45 PM  
TN Grand Ballroom A

**Moderators:** Annette Rebel, MD & Zaki Hassan, MD

Many procedures are performed without image evaluation or guidance. This contributes to patient morbidity and mortality, failed procedures and unnecessary complications. This session through a series of didactic presentations will instruct the participant on the various uses of ultrasound in surgery. Upon completion of this session the participant will understand the basics of ultrasound and when the use of this technology is appropriate as well as beneficial in a surgical setting.

Participation in this session is required if you are registered for the hands-on workshop that follows.

**Transcatheter Aortic Valve Replacement and Transesophageal Echocardiography**  
Randy Legault DO. Senior Assistant Professor, University of Kentucky, Lexington, KY

**Ultrasound Evaluation of a Hypotensive Patient**  
Annette Rebel, MD, FICS. Assistant Professor of Anesthesiology, Department of Anesthesiology, University of Kentucky, Lexington, KY
Ultrasound Assessment of Intracranial Pressure
Judson Mehl, DO, Critical Care Fellow, University of Kentucky, Lexington, KY

Hands-on workshop follows at 4:00 PM for paid participants in TN Grand Ballroom E

Coffee Break – 3:45PM to 4:00PM

Alternatives in Minimally Invasive Colorectal Surgery Lecture Series

4:00 - 6:00 PM  TN Grand Ballroom A

Moderators: Bryan Butler, MD & Larry S. Sasaki, MD

This session will discuss various methods to perform minimally invasive colorectal surgery. In addition, participants will learn techniques for successful use of stapling and energy devices. Surgeons that have attempted minimally invasive colorectal surgery in the past, but have encountered technical difficulties, would benefit from participating in this course. In addition, participation in this course will be beneficial for surgeons that are currently performing open colorectal procedures and are interested in exploring the options currently available for minimally invasive colorectal surgery.

The hands-on portion of this course will demonstrate the currently available techniques as discussed in the lectures. Participants will have the opportunity to practice the technique of their choice during the lab.

Upon completion of this course, participants should be able to:
Define patient selection for minimally invasive colorectal procedure;
Describe indications and contraindications for these procedures;
Discuss the different minimally invasive techniques currently available;
Describe the advantages and disadvantages of each technique;
Discuss preparation and positioning of the patient;
Discuss the currently available instrumentation that facilitates the performance of minimally invasive colorectal surgery.

Participation in this session is required if you are registered for the hands-on workshop that follows on Saturday.

Laparoscopic Colectomy
Brian Matier, MD, Colon and Rectal Surgeon, Buffalo Medical Group, PC, Buffalo, NY

Single Site Colectomy
Bryan N. Butler, MD, FICS, Clinical Assistant Professor, Section of Colon Rectal Surgery, State University of New York at Buffalo, Buffalo, NY

Hand-assisted Laparoscopic Colectomy
Larry S. Sasaki, MD, FICS, Assistant Clinical Professor of Surgery, Louisiana State University Medical Center, Shreveport, LA

Colon Interposition to Manage Long Gap Esophageal Atresia - Is it a Good Option?
Domingo T. Alvare, MD, FICS, Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

Robotics in Colorectal Surgery
Deepa Taggarshe, MD, FICS(J), Fellow in Colon and Rectal Surgery, University at Buffalo, SUNY, Buffalo, NY

Preventing and Managing Complications in Hand-Assisted Laparoscopic Colectomy
Bryan N. Butler, MD, FICS, Clinical Assistant Professor, Section of Colon Rectal Surgery, State University of New York at Buffalo, Buffalo, NY

SATURDAY June 14, 2014

Alternatives in Minimally Invasive Colorectal Surgery Workshop

8:00 - Noon  TN Grand Ballroom E

Hands-on section of workshop for paid participants.

Considerations in Surgical Oncology

8:00 - 9:45 AM  TN Grand Ballroom A

Moderator: Michael Jacobs, MD & Joshua Mammen, MD

Various oncologic issues are discussed in this session comprised of submitted abstracts. Participants will increase their knowledge as it relates to the unique complications of surgical oncology.

Results of Completion Lymph Node Dissection (CLND) in Sentinel Lymph Node-positive Pediatric Melanoma: A Single Institution Experience
Fazal Nouman Wahid, MD, Fellow, Pediatric Surgical Oncology, St Jude Children’s Research Hospital, Memphis, TN

Totally Laparoscopic Right HemiHepatectomy without Pringle Maneuver: Video-based Education Technique and Tips
Michael J. Jacobs, MD, FICS, Attending Surgeon Providence Hospital, Southfield, MI
A Comparative Analysis of Prostate Cancer Pre-Treatment Characteristics Stratified by Age
Anish Kapur, MS-4, Aureus University School of Medicine, Aruba, Colts Neck, NJ

Surgical Management of Colorectal Liver Metastases
Janak Parikh, MD, MSHS, Assistant Clinical Professor of Surgery, Wayne State University Clinical Professor of Surgery, St. John/Providence Health, Novi, MI

Surgical Management of Diseases of Thymus
Sarah Aftab Ahmad, MD, FICS(J), General Surgery Resident, Texas Tech University Health Sciences Center, Lubbock, TX

Surgical Management of Adrenocortical Carcinomas
Regan Williams, MD, Assistant Professor of Surgery and Pediatrics, University of Tennessee Health Science Center, Memphis, TN

Acute Adult and Pediatric Cardiovascular Cases: A Surgical Motion Picture Presentation
Adnan M. Cobanoglu, MD, Professor of Surgery, Immediate Past Chairman, Faculty Council, Case Western Reserve University School of Medicine, Cleveland, Beachwood, OH

May-Thurner Syndrome, Acute Presentation and Management
Dixon Santana, MD, Associate Professor in Surgery Vascular and Endovascular Surgery Texas Tech Health Sciences Center, Lubbock, TX

PICC Lines: Indications, Complications, Lessons Learned
Cheryl Kelley, RN, BSN, VA-BC, Independent Vascular Access and Infusion Therapy Consultant, Belington, WV

COFFEE BREAK (ICS) – 9:45AM to 10:00AM

CHALLENGES IN VASCULAR SURGERY
10:00 - Noon
TN Grand Ballroom A

Moderator: Dixon Santana, MD & Nikalesh Reddy, MD

This session will focus on the identification and treatment options for challenging cases in vascular surgery. Upon completion of this course participants will improve their understanding of the various options to treat the types of cases discussed and be better prepared to provide optimum patient care.

Complications Related to Long-Term in Dwelling Inferior Vena Cava Filters and Promoting Filter Retrieval
Roger L. Gonda, Jr., MD, FICS, Chairman Radiology: St. John Providence Hospital and Medical Centers Associate Clinical Professor of Radiology Michigan State University Staff Radiologist: Garden City Hospital, Southfield, MI &
Matthew Osher, MD, Radiology Resident PGY-3, St. John Providence Hospital and Medical Center, Royal Oak, MI

Splenic Artery Steal Syndrome - A Review
Soniya Pinto, MB, BS, Research Fellow, Department of Radiology, New York Presbyterian/ Weill Cornell Medical Center, Richmond Hill, NY

MODERATOR: Demetrius E.M. Litwin, MD

Asset Protection: Legal Risks and Rising Taxes How to Run a More Profitable Practice
Victoria J. Powell, JD, JD, LL.M, Director, Doctors Financial Education Network; Managing Member, Lifetime Investment Management, LLC, Phoenix, AZ

LUNCH PRESENTATION
Noon - 1:30 PM
TN Grand Ballroom B

The Dr. Andre Crotti Award for Distinguished Service to the Profession of Surgery Recipient’s Lecture
1:30 - 2:15 PM
TN Grand Ballroom A

Moderator: Ari Halldorsson, MD

The Importance of Surgical Leadership in Medicine
Bernhard T. Mittemeyer, MD, Professor Emeritus at Texas Tech University Health Sciences Center, Lubbock, TX
**SCIENTIFIC MEETING PROGRAM**

**MULTIDISCIPLINARY PLATFORM PRESENTATIONS**

2:15 - 5:00 PM  
TN Grand Ballroom A

**Moderators:** Reza Saidi, MD & Thavam Thambi-Pillai, MD

Addressing the varied surgical specialties that are represented within the College, this session will include submitted abstract presentations from ICS Fellows, Non-members, Residents and Medical Students. Participants will increase their comprehension of the topics and cases discussed allowing for optimal patient care.

**Empyema; an Old Disease Making a Comeback**  
Ari O. Halldorsson, MD, FICS, President, ICS-US Section, Professor of Surgery Residency Program Director Texas Tech University Health Sciences Center, Lubbock, Texas Medical Director Trauma/Surgical ICU at University Medical Center, Lubbock, TX

**Usage of Robotics in General Surgery**  
Caleb Sallee, MD, General Surgery Resident, Texas Tech University, Lubbock, TX

**Management of Pneumothorax and Intrathoracic Airspaces**  
Francis J. Podbielski, MD, MS, FICS, Visiting Clinical Associate Professor of Surgery, University of Illinois at Chicago Medical Center, Chicago, IL

**Prevention, Evaluation, and Management of Post-Operative Complaints After Laparoscopic Sleeve Gastrectomy**  
Thomas D. Willson, MD, FICS(J), Saint Joseph Hospital, Chicago, IL

**An Epigenetic Assay That May Avoid Unnecessary Repeat Prostate Biopsies and Lower Healthcare Costs**  
Arnold J. Willis, MD, FICS, Professor of Urology, Associate Dean of Clinical Sciences Aureus University School of Medicine, Aruba, Alexandria, VA

**The True Cost of Noise in Hernia Repairs**  
Shamik Dholakia, MD, MRCS, MBBS, BSc, Surgical Registrar, Heath Park, Cardiff, Wales

**Laparoscopic Completion Cholecystectomy for Retained Gallbladder Post-Cholecystectomy**  
Michael J. Jacobs, MD, FICS, Attending Surgeon Providence Hospital, Southfield, MI

**Liver Transplantation for Malignant Neoplasms**  
Reza F. Saidi, MD, FICS, FACS, Assistant Professor of Surgery, Alpert Medical School of Brown University, Rhode Island Hospital, Department of Surgery, Division of Organ Transplantation, Providence, RI

**The Effect of Dialysis Within 24 Hours of Transplantation on the Incidence and Length of Delayed Graft Function**  
Farah Karipineni, MD, Surgical Resident, Albert Einstein Medical Center, Philadelphia, PA

**ABDOMINAL WALL RECONSTRUCTION: MANAGEMENT OF THE OPEN ABDOMEN AND COMPLEX HERNIAS**  
(Lectures and Demonstration)

1:30 - 5:30 PM  
TN Grand Ballroom E

Offering a comprehensive review of pre-clinical and clinical data this session will discuss the management of the open abdomen as well as complex hernias and the challenges posed to even the most experienced surgeon. New technologies using both biological and synthetic mesh as well as the latest applications utilizing wound closure devices will be demonstrated. During this interactive workshop participants will learn how to identify appropriate indications and appropriate operative techniques in management of the complex abdominal wall hernia. Participants will also increase their knowledge of hernia repair techniques, materials and indications for use.

**Faculty**

Anthony Dardano Jr, DO, FICS, Associate Professor of Clinical Biomedical Sciences and Founding Program Director General Surgery Residency Program Florida Atlantic University, Charles E. Schmidt College of Medicine President-elect Medical Staff Boca Raton Regional Hospital, Boca Raton, FL

Jose F. Yeguez, MD, FICS, Department of Surgery at Boca Raton Regional Hospital and Delray Medical Center, Boca Raton, FL
Friday June 13, 2014

Neurological & Orthopaedic Surgery Part I

8:30 - Noon

TN Grand Ballroom C

A primary goal of the United States Section of the International College of Surgeons is to foster relationships with like-minded organizations to advance the art and science of surgery. For more than 10 years, the College has worked with the American Academy of Neurological and Orthopaedic Surgeons (Academy) to develop scientific programming in the specialties of Neurosurgery and Orthopaedic Surgery. The following sessions have been developed with the support and assistance of the Academy, its Board of Directors and Scientific Organizing Committee.

38th Annual Scientific Meeting

The American Academy of Neurological and Orthopaedic Surgeons is a scientific and educational association of orthopedists and neurosurgeons that was founded in 1976 in order to improve the quality of care provided to patients in these two major subspecialty fields.

Opening Ceremony

Welcome and Introductions

Moderators: William Mathews, MD & Craig Clark, MD

Orthopaedic Surgery Keynote Speaker
Disability Associated with Adult Spinal Deformity
Shay Bess, MD. Orthopaedic Surgeon, Rocky Mountain Scoliosis & Spine, Denver, CO

Neurosurgical Keynote Speaker
Evaluation and Treatment of Peripheral Nerve Problems: Evolving Diagnostic Methods and Treatments
Michel Kliot MD, Clinical Professor of Neurosurgery UCSF Medical Center, San Francisco, CA

Experience with Mazor Robot in Lumbar and Thoracic Spine Fusion
James R. Feild, MD, MS, FICS. Private Practice Neurosurgery, Memphis TN

Update on Endovascular Management of Stroke
Gustavo Luzardo, MD. Associate Professor of Neurosurgery, Chief of Endovascular Surgery University of Mississippi Medical Center, Jackson, MS

Post Traumatic Epilepsy
Leo Chen, MD. Neurologist, The Permanente Medical Group, Kaiser Foundation Hospital, Assistant Clinical Professor, Volunteer Series. UC Davis Department of Neurology, Sacramento, CA

Lunch Presentation

Noon - 1:30 PM

TN Grand Ballroom B

Moderator: Demetrius E.M. Litwin, MD

Leadership and Legacy
Wickii T. Vigneswaran, MD, FICS. Professor of Surgery, Associate Chief of Cardiac and Thoracic Surgery, Director of Lung and Heart Lung Transplantation, University of Chicago Medical Center, Chicago, IL
Saturday June 14, 2014

Neurological & Orthopaedic Surgery Part II

9:00 - Noon  TN Grand Ballroom C

Moderators: Maxime Coles, MD & Jeffrey Epstein, MD

Cerebral Perfusion Pressure and Intracranial Pressure Management
Quirico U. Torres, MD, FICS, Neurosurgeon, Abilene, TX

Damage Control Spine Surgery
Gene E. Bolles, MD, FICS, Associate Professor of Neurosurgery, University of Colorado Medical Center and Denver Health Medical Center, Denver, CO

Digital Protractor as a Supplement to Posterior Cervical Spine Instrumentation: A Cadaveric Study
Chris Karas, MD, Assistant Professor, Ohio University, Attending Neurosurgeon, Ohio Health, Westerville, OH

Peripheral Nerve Pathology That Can Mimic Spinal Radiculopathy
Michel Kliot, MD, Clinical Professor of Neurosurgery UCSF Medical Center, San Francisco, CA

Recombinant Human Bone Morphogenetic Protein-2 (rhBMP-2) Use in Adult Spinal Deformity (ASD) Does Not Increase Major, Infectious or Neurological Complications and May Decrease Return to Surgery at One Year: A Prospective, Multicenter Analysis
Shay Bess, MD, Orthopaedic Surgeon, Rocky Mountain Scoliosis & Spine, Denver, CO

Advanced Imaging in Management of Brain Tumors
Lucia Zamorano, MD, FICS, Professor of Neurological Surgery William Beaumont Oakland University School of Medicine, Birmingham, MI

Use of Epidural Steroids to Treat Lumbar Disc Disease
Charles Xeller, MD, Orthopaedic Surgeon, League City, TX

Use of a Bone Filler to Augment Fixation of Proximal Humerus Fractures
Gerald Q. Greenfield, Jr., MD, MS, FICS, Clinical Assistant Professor UTHSC-San Antonio, San Antonio, TX

Perilunate Dislocation of the Carpus. Case Study and Literature Review of Carpal Instability
Sudhir B. Rao, MD, Orthopaedic Surgeon, Big Rapids Orthopaedics PC and Premier Hand Center, Big Rapids, MI

Fractures and Dislocation in the Pediatric Shoulder
Maxime J.M. Coles, MD, FICS, Orthopaedic Surgeon, Sebasticook Valley Hospital, Pittsfield, ME

Sacroiliitis
W. Craig Clark, MD, PhD, FICS, Staff Neurosurgeon, Greenwood Leflore Neurosurgery Clinic, Greenwood, MS

Lunch Presentation

Noon - 1:30 PM  TN Grand Ballroom B

Moderator: Demetrius E.M. Litwin, MD

Asset Protection: Legal Risks and Rising Taxes How to Run a More Profitable Practice
Victoria J. Powell, JD, JD, LL.M, Director, Doctors Financial Education Network; Managing Member, Lifetime Investment Management, LLC, Phoenix, AZ

1:30 -3:00 PM  TN Grand Ballroom C

Moderators: Charles Xeller, MD & Lucia Zamorano, MD

The First Reported Case of Spontaneous Upper Arm Compartment Syndrome in a Patient on Clopidogrel
Daniel Sherif Zakaria Boctor, MA, MBBChir, MRCS, MRCP, Orthopedic Resident, Lister Hospital, Ilford, Essex, UK

Spinal Epidural Arteriovenous Malformations: Report of a Case and Discussion of Classification Schemes and Recommended Treatment
Caitlin Clark, Third Year Medical Student, University of Texas-Houston, Houston, TX

Surgical Treatment of the Aging Lumbar Spine
Jeffrey Epstein, MD, FICS, St Catherine of Siena Medical Center Brookhaven Memorial Hospital Medical Center, Babylon, NY

Navigation, Robotics and Endoscopy in MISS (Minimally Invasive Spine Surgery)
Lucia Zamorano, MD, FICS, Professor of Neurological Surgery William Beaumont Oakland University School of Medicine, Birmingham, MI

Marjolin Ulcer: Review of the Literature and Case Report
Alfonso E. Pino, MD, FICS, Emeritus Orthopedic Comanche County Medical Center Vice Chair Orthopedic ICS USA Secretary American Fracture Association, Dublin, TX

Chronic Joint Pain with the Interarticular Injection of Hyaluronate Components
Richard Gershanik, MD, Miami, FL
Welcome Reception
Wednesday 6:00-7:00 PM  TN Grand Ballroom D&E
Our first evening in Memphis begins with a cocktail reception. Join us as we kick off the 76th Annual Surgical Update; reconnect with old friends and meet members you may not have encountered before.

Explore Memphis
Thursday  10:00-11:00 AM  Director’s Row 1
This event, geared toward Alliance members, spouses, and family members who are visiting Memphis during the Annual Meeting will provide attendees with an overview of how Memphis came to be what it is today and an understanding of the not-to-be-missed highlights of the city during your visit. A representative from the Memphis Convention and Visitors Bureau will share the historical importance and highlights of our host city.

Alliance Board of Directors & General Membership Meeting
Thursday  11:00-12:00 PM  Director’s Row 1
Please join us to discuss Alliance plans for the Annual Meeting and beyond. Topics will include future leaders, and current & future social activities for the Alliance. If you have ever wondered what the Alliance is or does, then this meeting shouldn’t be missed.

Graceland Tour Excursion
Thursday  3:30 PM-7:30 PM  Gather at Registration
Graceland is a destination NOT to be missed when you visit Memphis. We are especially pleased to offer this tour to ALL attendees - Thursday’s CME schedule will end early in order that all meeting attendees can participate. Thanks to a generous donation from US Section President Ari Halldorsson the ticket cost for each attendee has been reduced substantially.

Experience life as Elvis did at Graceland with an audio-guided tour featuring commentary and stories by Elvis and his daughter, Lisa Marie. The journey through the Mansion includes the decorated funky styles of the Jungle Room, racquetball court, and Meditation Garden, where Elvis rests.

After the Mansion tour, you will visit the Automobile Museum and see over 33 vehicles owned by Elvis, including the famous Pink Cadillac. Adjacent to the Automobile Museum are his custom jets; your tour begins in an airport terminal and then continues aboard the Lisa Marie, an aircraft customized by Elvis. Before the end of the tour, visit Sincerely Elvis, an exhibit that changes annually and currently features, “ICON: The Influence of Elvis Presley Presented by Fender”. Curated by the Graceland archives team in partnership with the Rock and Roll Hall of Fame and Museum, this groundbreaking exhibit features 75 artifacts on loan from the famed Cleveland museum, along with items from the collections of many of today’s biggest names in music who have been influenced by the King of Rock ‘n’ Roll. The exhibit celebrates Elvis’ status as a music pioneer and icon that paved the way for many of today’s artists and celebrities. Price: $45 per person. Check with Registration for On-Site Availability.

5th Annual AANOS Fundraising Event and Awards Dinner
Friday  7:00 PM  TN Grand Ballroom C
The 5th Annual AANOS Fundraising Event and Awards Dinner will feature an elegant dinner, award presentations, and entertainment. Price: $100 per person. Check with Registration for On-Site Availability.

United States Section Convocation & Presidential Recognition Ceremony
Saturday  6:30 PM  TN Grand Ballroom B
All attendees, families, friends and guests are invited to attend this hallmark event, the 76th Annual Convocation of the US Section. Brimming with splendor and pageantry, this impressive ceremony includes the formal induction of New Fellows and this year’s Honorary Fellow into the College. Join us in this celebration of the College, all of its Fellows, and their accomplishments.

New Fellows Reception
Saturday  7:30 PM  TN Grand Foyer
Immediately following the Convocation and Presidential Recognition Ceremony, this reception will afford you the opportunity to meet your National Section and International Officers, and others! Here is your chance to meet and mingle with your newest colleagues from coast to coast, and of course, honor our incoming President and award winners. All attendees are encouraged to attend.

Gala Dinner
Saturday  8:30 PM  Southeast Ballroom
We end our meeting and our week together as we started it; in Fellowship, join us as we come together for one last event before we bid farewell until next year. We have some wonderful entertainment planned to celebrate our host city of Memphis and its contributions to the history of rock and role. Black Tie attire is optional. Price: $125 per person. Check with Registration for On-Site Availability.
The Surgical Endowment is organized to provide permanent financial resources for the future of surgery by supporting charitable programs involving medicine, including those of the International College of Surgeons–United States Section (ICS-US). The Surgical Endowment is a separate entity and has its own tax exemption under Internal Revenue Service Section 501(c)(3). A direct link exists to ICS-US through the Surgical Endowment’s Board of Trustees, which has substantial representation from within the ICS-US membership.

Principal contributions to the Surgical Endowment can become a permanent asset of the Endowment if so designated. Revenue generated from investments will be allocated by the Board of Trustees of the Surgical Endowment to the programs of the International College of Surgeons–United States Section or other worthy causes. It is the goal of this fund to one day have an adequate financial base to satisfy all the needs of the programs it was organized to support.

Recently the Surgical Endowment Fund of the United States has supported scholarships and the continuing medical education program of the ICS-US.

All contributors will receive a personal letter of thanks from the President of the John C. Scott, MD, Surgical Endowment Fund of the United States, and their names will be published in the ICS-US newsletter International US Surgeon. In addition, depending on the size of your contribution, various other forms of recognition will be provided. See the ICS-US staff at the registration desk for more details.

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This Scientific Meeting would not be possible without the generous support from the following:

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Acknowledgements

With Our Thanks

The following individuals made financial contributions during the past twelve months to support the United States Section of the International College of Surgeons and its many worthy programs.

Elie D. Aboulafia
Azeez P. Adeedunfant
Sebastian Adibe
Marcel Admoni
Gregorio Aglipay
Ahmad W. Ahad
Jihad Alammar
Ludwig A. Allegra
Louis M. Alpern
Domingo T. Alvear
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Lucia Zamorano
Jeffrey Zauderer
Alan Zeitlin
The following Abstracts are listed in alphabetical order by presenting author.

They have been reproduced as submitted with limited editing.
**COLON INTERPOSITION TO MANAGE LONG GAP ESOPHAGEAL ATRESIA - IS IT A GOOD OPTION?**

Domingo Alvear, MD, FICS
Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

**Purpose:** Long Gap Esophageal Atresia is seen when the distance between the proximal and distal atretic segments of the esophagus is 2 cm or more making primary anastomosis impossible without complications. Esophageal Atresia can occur in 1:5000 live births and the most common type is when there is a proximal atresia and a tracheo-esophageal fistula in 86% of the cases. Primary anastomosis can usually be accomplished with this type. In 7% of the cases, there is proximal and distal atresia without a fistula and the gap between the two segments will not allow primary anastomosis. Substitution of the esophagus with stomach, jejunum and colon have been tried. Each substitution has their own unique advantages and disadvantages, as well as their short term and long term complications. Esophageal ‘stretching’ followed by delayed primary anastomosis is a new approach that is promising but long term results are not yet complete.

**Methods:** In this paper, 7 patients with colon interposition for Long Gap Esophageal Atresia seen in the last 30 years will be reviewed.

**Results:** All 7 patients are alive and well. Two patients required balloon dilatations for esophago-colic stricture. Operative pictures and post-operative radiographs will be shown.

**Conclusions:** The surgical management of Long Gap Esophageal Atresia remains to be a major challenge. Colon interposition to replace the esophagus may have less long term complications that the use of the stomach or jejunum. The newer method of esophageal stretching followed by delayed primary anastomosis is a new approach that is promising but long term results are not yet available.

**THE GLOBAL BURDEN OF SURGICAL DISEASE IN CHILDREN: HOW SERIOUS IS IT AND HOW CAN WE HELP?**

Domingo Alvear, MD
Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

**Purpose:** 11% of global burden of disease is attributable to surgical conditions. Congenital anomalies account for 9% and 4% perinatal complications. Hirschsprung’s Disease occurs in 1:5000 live births and similarly imperforate anus occurs in 1:5000 live births.

**Methods:** In low income countries like Honduras and the Philippines, the incidence of these anomalies could easily be 1:3000 live births. Corrective surgery will improve the lives of these children so long as they can achieve social continuity.

**Results:** Good follow-up care following any surgery is extremely important to have good results. Working with our local counterparts is essential for success.

**Conclusions:** I will be presenting our experience for 1998 to 2013.

**OMPHALOCELE: SURPRISES BEYOND THE SIZE**

Domingo Alvear, MD, FICS
Department of Pediatric Surgery, Pinnacle Health Hospital, Harrisburg, PA

**Purpose:** Omphalocele is an abdominal wall defect through the umbilicus covered by a translucent sac from which the umbilical cord extends. It is seen in 1:5000 live births with a slight male preponderance. The sac may contain liver or the intestines. 30–50% of the cases may have serious cardiac or chromosomal abnormalities. Primary closure is recommended if the defect is less than 5 cm, and the use of a ‘Silo’ followed by secondary closure if the defect is over 5 cm.

**Methods:** Review of our experience over the last 30 years yielded some surprises:

1. Jejunal or ileal atresia
2. Patent Meckel’s Diverticulum
3. Inverted Meckel’s Diverticulum
4. Primary closure possible with the defect over 5 cm

**Results:** Review of all cases treated in this institution and during surgical missions will be presented.

**Conclusions:** Careful inspection of the omphalocele sac regardless of the size of the defect may yield ‘surprises’ that will change the surgical approach to this anomaly.

**ADVANCES IN PATIENT CARE TECHNOLOGIES FOR TRAUMA AND SURGICAL CRITICAL CARE**

Harry Anderson, III, MD
Attending Surgeon, Program Director, Surgical Critical Care Fellowship, St. Joseph Mercy, Ann Arbor, MI; Clinical Professor of Surgery, Wayne State University School of Medicine, Detroit, MI; Adjunct Clinical Professor, University of Michigan, Ann Arbor, MI

**Purpose:** The injured and critically ill patient of 2014 presents with a combination of greater physiologic derangement, more comorbid illnesses, and invariably now, at greater age than 25 years ago. Though the injuries and diseases which are treated (e.g., motor vehicle crash, abdominal aortic aneurysm or mesenteric ischemia) are really no different, it is through better techniques and systems of care that patients are now being kept alive to actually make it to the surgical intensive care unit, and ultimately out of the hospital, alive.

**Methods:** With advances in computer technology, namely faster processing speeds and greater information storage, miniaturization, and with smaller and more unique sensors, many more diagnostic devices and therapeutic interventions are now brought to the bedside. For example, with a minimally invasive or noninvasive approach, hemodynamic parameters (such as end-diastolic volume, and cardiac output) are now continuously derived and displayed - the Swan-Ganz catheter is becoming more of a device relegated to historical discussion rather than current implementation and use. For the most part, patients don’t need to undergo central venous catheterization, with the risks of pneumothorax, vascular injury and infection, and remembering all the nuances of cardiovascular waveform interpretation, which are being lost on a new generation of caregivers.

**Results:** Wireless technology, when properly enabled with encryption, now allows infusion devices, the mechanical ventilator and patient monitors to deliver real-time information about measured parameters and
functional status. Advanced imaging can now be brought to the patient's bedside, and immediate answers as to the presence or absence of pathology, or following of trends in altered anatomy (and observed perturbations in physiology) can be confirmed, with images and data immediately uploaded for remote or delayed retrieval. Organ support systems for the heart, lung, liver and kidney can be employed which will either bridge the patient transplantation, or minimize iatrogenic injury brought on by support technology, which was intended to sustain the patient during the healing process.

Conclusions: As the future brings challenges of an aging population, with more common and problematic comorbid illnesses (obesity, diabetes mellitus, etc.), and with the competing need to rein in healthcare expenditures, we will need to be wise about which technologies we adopt, and which we will bypass. We must nonetheless continue to advance the science of patient care through medicine and surgery. With continuing improvements in information processing and technology, evaluation and care of injured and critically ill patients is certain to advance and mature at a much more rapid pace.

THE FIRST REPORTED CASE OF SPONTANEOUS UPPER ARM COMPARTMENT SYNDROME IN A PATIENT ON CLOPIDOGREL
Daniel Sherif Zakaria Matta Doctor, MA MBChir MRCS MRCP
Ilford, Essex, United Kingdom

Purpose: Compartment syndrome is a limb-threatening orthopaedic emergency. Spontaneous compartment syndrome is very rare with most localised to the lower leg and forearm compartments. To our knowledge there is only one reported case of spontaneous upper arm compartment syndrome to date. We present a second, and the first reported in a patient who was not on warfarin therapy.

Methods: A 70 year old female inpatient with emphysema, developed sudden painful swelling of the left upper arm overnight, with no history of trauma. Anticoagulant medications included 75 milligrams of clopidogrel daily for angina and 5000 units of dalteparin as standard daily thromboembolic prophylaxis for hospital patients.

On examination, she was obese. Her heart rate was 100. There was gross tender swelling of the anterior and medial aspects of the left upper arm. Peripheries were cool with a palpable radial pulse. However, there was no palpable ulnar pulse and decreased sensation over the index and middle fingers.

Results: Computed Tomography demonstrated an intramuscular hematoma of the left biceps. The patient underwent fasciotomy for compartment syndrome and evacuation of 600 millilitres of blood in the operating room. Further exploration revealed no source of bleeding which stopped spontaneously.

Conclusions: This case represents only the second reported case of spontaneous upper arm compartment syndrome, and the first in a patient who was not on warfarin. It highlights the importance of considering this serious diagnosis as a differential of arm swelling, even if in the upper arm, and on a background of only simple anticoagulants.
SPINAL EPIDURAL ARTERIOVENOUS MALFORMATIONS: REPORT OF A CASE AND DISCUSSION OF CLASSIFICATION SCHEMES AND RECOMMENDED TREATMENT

Caitlin Clark, BA
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Purpose: Spinal epidural AVMs are exceedingly rare lesions, with only about 100 cases reported in the literature. As a result very little is known regarding alternative treatments for patients with these lesions.

Methods: This study was a retrospective review of the case in question, with an exhaustive search of the historical and current literature.

Results: Most common classification schemes ignore true spinal epidural AVMs. As with dural AV fistulas, treatment consists of obliteration of the arteriovenous communication without any treatment of any intradural veins that may be enlarged or engorged due to venous hypertension.

Conclusions: By understanding the most common classification schemes and the current consensus for treatment of each class, the surgeon can make better treatment decisions for his/her patient.

SACROILITIS

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Purpose: In recent years the number of lumbar fusions has skyrocketed. Recent research has shown that one of the long term consequences of lumbar fusion is developing dysfunction of the sacroiliac joint or sacroilitis. In fact, latest studies would indicate that this is as high as 75% at five years post fusion. The purpose of this study is to explore this diagnosis and options for treatment available to this increasing cohort of patients.

Methods: The present study is a review of current literature to establish the historical context of the diagnosis, current clinical means to make an accurate diagnosis, and the treatment options available to these patients. Recommendations are then made based on these criteria and the author’s developing clinical experience with this entity.

Results: Sacroilitis is far more common than generally realized, and may account for 20-25% of the back pain patients seen in the typical neurosurgical practice. Surgical fixation/fusion of the sacroiliac joint may offer excellent symptomatic relief in properly selected patients. Options for achieving this fixation/fusion are equally efficacious, and selection of the method of fixation/fusion should be based on surgeon preference and familiarity with the instrumentation and technique.

Conclusions: Every neurosurgeon who treats back pain should be familiar with the techniques of diagnosis and treatment of this entity. The role of surgical fixation/fusion continues to evolve, and will develop over time as treatment of this disorder becomes more commonplace.

BIOLOGY AND MANAGEMENT OF NEUROBLASTOMA

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Neuroblastoma is a heterogeneous disease; tumors can spontaneously regress or mature, or display an aggressive, therapy-resistant phenotype. Increasing evidence indicates that the biologic and molecular features of neuroblastoma significantly influence and are highly predictive of clinical behavior. Because of this, neuroblastoma has served as a paradigm for biological risk assessment and treatment assignment. Most current clinical studies of neuroblastoma base therapy and its intensity on a risk stratification that takes into account both clinical and biologic variables predictive of relapse. For example, surgery alone offers definitive therapy with excellent outcome for patients with low-risk disease, while patients at high-risk for disease relapse are treated with intensive multimodality therapy. In this review recent advances in the understanding of the molecular genetic events involved in neuroblastoma pathogenesis are discussed, and how they are impacting the current risk stratification and providing potential targets for new therapeutic approaches for children with neuroblastoma. In addition, the results of significant recent clinical trials for the treatment of neuroblastoma are reviewed.

BIOLOGY AND MANAGEMENT OF WILMS TUMOR

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Wilms tumor accounts for nearly six percent of all pediatric cancers and more than 95 percent of all kidney tumors in children. Fortunately, survival for patients with Wilms tumor is generally excellent. This review will outline the results of prior clinical trials that have lead to this excellent outcome and how information gleaned from these trials has lead to the development of the current series of clinical trials for the management of children with Wilms tumor. Tumor stage and histologic subtype have long been recognized as important prognostic factors in Wilms tumor. More recent evidence suggests that in certain instances patient age, tumor size, response to therapy, and genetic abnormalities, specifically the loss of genetic material on chromosomes 1p and 16q, provide additional prognostic information. These factors have, therefore, been incorporated into a new risk stratification system that is currently being used to assign patients with Wilms tumor to specific protocol-based therapies. Survival for patients with Wilms tumor when considered as a whole, once <30%, is currently greater than 90%, with this dramatic improvement being due, in part, to the systematic manner in which the approach to therapy has evolved. Further refinement in therapy is being undertaken, with the current trials aiming to maintain the excellent survival for children being treated for Wilms tumor, while minimizing therapy-related toxicity.
GLOBAL SURGERY
Paul Del Prado, MD
General Surgery Resident PGY 4 - Texas Tech, Lubbock, TX

Purpose: There is growing evidence that surgical conditions, especially injuries, obstetric emergencies, and congenital anomalies, are important public health problems.

Methods: To gather data and review the global disease burden of conditions requiring emergency surgery. Data collected from world health organization statistics on sub-saharan Africa and Asia.

Results: An estimated 234 million surgical and obstetrical procedures are performed globally each year, one in every 25 people.

Conclusions: All surgeons should be able to recognize NSTI and administer timely and appropriate treatment.

Conclusions: Recognition and prompt and aggressive surgical debridement remain the cornerstones of treatment.

THE TRUE COST OF NOISE IN HERNIA REPAIRS
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Purpose: The aims of this study were to assess whether noise levels in the operating theatre are associated with development of Surgical Site Infection; to elucidate the extent to which this affects the financial burden of surgery.

Methods: Prospective data collection from elective day case male patients undergoing elective hernia repairs was undertaken. Patients were included if fit and low risk for SSI. Sound levels during procedures was measured using a decibel meter and correlated with incidence of SSI which was measured against NICE guidelines. Inclusion criteria were: Male gender with a left sided inguinal hernia, No evidence of a previous SSI, Normal BMI (20-25), ASA score of 1 and no known co-morbidity associated with SSI - (diabetes or other systemic illness, smoker, steroid use, and immuno-suppression). Exclusion criteria were Female gender, previous or existing SSI, and any recent emergency procedure/operation. Data analysis was done using SPSS.

Results: Five (7.81%) of the 64 patients developed an SSI. All 5 were subsequent infections and treated with oral antibiotics. Overall the noise levels were significantly higher in patients with SSI from time point of 50 minutes onwards, which correlated to when wound closure was happening.

Conclusions: The ability of surgical treatment to prevent disability and death, and the best strategies for improving surgical care in settings of limited resources.

SURGICAL TREATMENT OF THE AGING LUMBAR SPINE
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Purpose: To discuss the various surgical treatment of the aging spine, as well as to address some of the newer options, some of which have already fallen by the wayside.

Methods: Discuss the surgical treatment and indications for each.

Results: Discuss the results of the treatments.

Conclusions: Discuss the pros and cons of these treatment, as well as introduce new options.

EXPERIENCE WITH MAZOR ROBOT IN LUMBAR AND THORACIC SPINE FUSION
James Feild, MD, MS, FCIS
Private Practice Neurosurgery, Memphis, TN

Purpose: To evaluate the usefulness of this machine in spine surgery in my experience so far.

Methods: Use of this robot in placing the cavity or seat for the guidewire for the pedicle screw. A picture demonstration or motion picture will be shown.

Results: Representative post-operative x-rays will be shown.

Conclusions: So far it’s use is simplistic and accurate. It will save time and reduce x-ray exposure. It will reduce blood loss correctly used.

CHRONIC JOINT PAIN WITH THE INTRAARTICULAR INJECTION OF HYALURONATE COMPONENTS
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This is a new approach to acute or chronic joint pain performed in our pain center. We have been the ‘first’ one to extend the use of hyaluronate/hyaluronic acid components to most of the affected joints, which have been originally designed to use only in patients with severe intractable knee pain, second to osteoarthritis which had not had relief with conventional Tx. Performed in our institute, this study analyzed the several Visco-supplement products on the market. Provided to a group of 468 patients, 92% with a follow-up of four years, 94% completed treatment. To degree of osteoarthritis, pain parameter, range of motion, joint overuse, priorarthrocentesis or surgery, weight, job and sports related injuries (which most of the time were related to younger population). Epidemiology: Incidence, most of these patients underwent nerve blocks previously because chief complaint of MJP, including and not limited to the spine, low back syndrome, neck pain/occ. H/A, with radicular manifestation and localized joint pain over-imposed. 92% of this group the mean age was 69.6 years old. Knee P (2nd to arthritis) was the most affected joint (45%), followed by the shoulders (38%), hips (35%), hands...
(15%), foot and ankle (14%) 2nd to osteoarthritis and traumatic arthropathies incidence are most of the time recorded. Prevalence: Of those with osteoarthritis, 58% were female and 42% were male. Inflammatory arthritis (in younger population, osteoarthritis in population >60). Risk factors: Obesity, avascular necrosis, septic arthritis, advanced age, and trauma. DM was present in 18% of this group of patients. Etiology: No cause is known related to idiopathic osteoarthritis. The common alteration is the progressive loss of the articular cartilage with increasing overload of the joint. Several hyaluronic components via interarticular injection have been provided after conventional Tx. Including and not limited to: 1) General measures, 2) Special Physical Therapy, 3) Avoidance or discontinuation of heavy impact activities, 4) Use of a cane to reduce stress, 5) Alternative therapy, 6) Medications, 7) Nutrients, 8) Opioid pain meds (have not been used), 9) intra-articular joint blocks and/or corticoids have been provided by others or by referral physicians. These products have been provided to patients with severe, sometimes intractable pain, in which the joint’s alignment was preserved, and on poor candidates for surgery or those who refuse surgery under any circumstances.

COMPLICATIONS RELATED TO LONG-TERM IN DWELLING INFERIOR VENA CAVA FILTERS AND PROMOTING FILTER RETRIEVAL
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Matthew Osher, MD
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Purpose: Inferior Vena Cava filters placement is a commonplace procedure in many interventional departments. While deployment is moderately straightforward for most skilled interventionalists, there are numerous inherent short- and long-term risks which are extensively cited in the literature. This includes caval penetration, filter migration and strut fracture. Recent reports of media publicity regarding these complications have surfaced and there is a new public awareness of the potential risks of leaving an IVC filter in long-term. The purpose of our review is to determine the incidence of caval penetration related to IVC filter placement, utilizing subsequent post-deployment computed tomography. An interventionalist must carefully weigh the risks and benefits involved in filter deployment and should be knowledgeable regarding complications associated with long-term indwelling IVC filter placement. Furthermore, a conscious effort must be made to remove the filter when clinically feasible.

Methods: A retrospective analysis was performed of all IVC filters placed at our institution in the last five years. This query totaled 621 filters deployed by our department, of which 188 (30.3%) of those patients had subsequent computed tomography performed at our institution for reasons unrelated to filter placement. The incidence of IVC filter caval penetration, migration and strut fracture were recorded. The incidence of IVC filter caval penetration was determined pursuant to the Society of Interventional Radiology practice guidelines for IVC filters and was recorded only if a filter strut extended more than 3mm beyond the IVC lumen.

Results: Post-procedure CT imaging was available in a total of 188 filters placed at our institution. Of those, 88 (36.2%) had caval penetration. 3 (1.6%) migrated from original placement, 3 filters had a fractured strut. Major caval penetration into adjacent viscera/aorta was seen in 6 (3.2%) of the filters deployed. Incidentally, 3 patients developed caval thrombosis. Evaluation of IVC thrombosis was somewhat limited as several of the CTs reviewed were performed without IV contrast. The rate of IVC filter retrieval also increased by over 400%.

Conclusions: Interventional radiologists must be evermore cognizant of potential risks of filter deployment. Although often the only viable treatment for DVT, IVC filter placement is not always a benign procedure and carries risk to the patient, both pre- and post-procedurally. Patients and referring physicians should be educated regarding these risks and the decision to place an IVC filter, often for the remainder of the patient’s life, is not one that should be taken lightly.

USE OF A BONE FILLER TO AUGMENT FIXATION OF PROXIMAL HUMERUS FRACTURES
Gerald Greenfield, Jr, MD, MS, FICS
Clinical Assistant Professor UTHSC- San Antonio, San Antonio, TX

Purpose: The purpose of the study was to evaluate the efficacy of the use of a bone substitute to augment fixation of proximal humerus fractures in osteoporotic bone.

Methods: Prior reports by our group have documented the efficacy of the use of percutaneously placed plates for fixation of proximal humerus fractures. Paucity of bone in osteoporotic fractures often makes stable fixation difficult. We used a bone substitute to augment fixation in order to obtain a more stable fixation. Ten consecutive patients comprised our initial trial of this technique. All were treated by the authors in a continuation of our previously described technique.

Results: Use of a bone substitute to augment fixation in osteoporotic fractures allowed a stable construct which enabled earlier motion and restoration or improve functional ability. There were no infections associated with the bone substitute. All fractures healed and there was no hardware failure.

Conclusions: Use of a bone substitute to augment fixation in unstable osteoporotic proximal humerus fractures improved functional restoration.

CURRENT TRENDS IN MANAGEMENT OF MAJOR BURN PATIENTS
John Griswold, MD
Professor and Peter C. Canizaro Chairman, Department of Surgery, Texas Tech University Health Sciences Center, Lubbock, TX

Management of severe burn patients continues to evolve and improve. Several new advances in the last decade have significantly improved outcome both mortality and long term functionality after major burns. In the United States the care of these major burn patients has been shifted as much as possible to specialized burn centers that are equipped to handle not only the initial resuscitation and systemic issues with these patients but also in the best way possible, restore skin functionality with
various biologic, grafts and ultimately skin grafts from the patient’s unaffected areas. The Timothy J. Hamar Burn Center at Texas Tech University Health Sciences Center in Lubbock, Texas is one of the most active burn centers in the country. Over the last several decades it has been on the forefront in improving patient care in the burn population and many of the research activities at the institution both bench and clinical had led to significant improvement in outcomes and have become adopted in other burn centers in the United States. This talk will specifically concentrate on the advancements made in the initial resuscitation and management of the severely burned patient and the latest developments in local wound care to the burn area. Specific emphasis will be put on fluid resuscitation, various new methods to control and modify the surface response, overall intensive care management of these patients including ventilatory management, nutrition, infection prevention, etc. In addition, I will specifically address the local wound care and discuss the current methods of managing the burn area including early excision, biologic or xenografts as a temporary cover followed by skin grafts in management of the burned area.

**EMPYEMA: AN OLD DISEASE MAKING A COMEBACK**

Ari Halldorsson, MD, FICS
President – US Section of ICS, Professor of Surgery, Residency Program Director, Texas Tech University Health Sciences Center, Medical Director, Trauma/Surgical ICU at University Medical Center, Lubbock, TX

Bacterial infections in the pleural cavity (empyema) are a disease that has been recognized and dealt with for hundreds of years. In the last 100 years or so, the etiology has shifted from tuberculosis as the main infection agent to other bacterial etiologies; staphylococcal, pneumococcal or very often mixed. With the advancements made in diagnosing and treating pneumonia which is the usual precursor of this disease, the incidence decreased. In addition, the overall health of the population in western countries including nutrition, access to healthcare, and better antibiotic agents, a few decades ago it was predicted that this disease might become almost eradicated completely and mostly confined to trauma an immunocompromised patients. At Texas Tech and several other institutions, the incidence seems to have gone up significantly in the last 10–15 years without a good explanation and/or documentation of that statement. This retrospective study looks at one person, on institution experience over a ten year period diagnosing and managing empyemas. We looked at incidence, patient characteristics, etiology, diagnosis, treatment and lastly outcome. This study seems to verify findings from other institutions in the United States that this disease is increasing and continues to be a significant and growing source of morbidity and mortality to the patient population at risk for empyema.

**IMPACT OF PLASMA GLUCOSE LEVEL AT THE TIME OF FDG ADMINISTRATION ON THE ACCURACY OF FDG-PET/CT IN THE DIAGNOSIS OF Pancreatic Lesions**

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Objectives: High fasting plasma glucose (FPG) levels before fluorodeoxyglucose (FDG) administration for positron emission tomography/computed tomography (PET/CT) might affect the accuracy of FDG-PET/CT in diagnosis of pancreatic lesions. Current guidelines require FPG levels <200 mg/dL before FDG administration; however, the literature on the effect of FPG levels <200 mg/dL on the accuracy of FDG-PET/CT is scarce. The aim of this study was to evaluate the effect of FPG levels <200 mg/dL on the accuracy of FDG-PET/CT in diagnosis of pancreatic lesions.

Methods: In this retrospective study, 161 patients who had FDG-PET/CT for initial diagnosis of pancreatic lesions were included. FPG levels before FDG administration were recorded. Accuracy of FDG-PET/CT in diagnosis of pancreatic lesions was compared between patients who were normoglycemic (FPG<126 mg/dL) and hyperglycemic (126≤FPG<200 mg/dL).

Results: Thirty four patients were hyperglycemic and 127 normoglycemic. Sensitivity, specificity, positive predictive value and negative predictive value of FDG-PET/CT were 90%, 88%, 87% and 91% in normoglycemic and 82%, 92%, 95% and 73% in hyperglycemic patients, respectively. Overall, the accuracy was higher in normoglycemic than hyperglycemic patients (89% vs. 85%).

Conclusion: Accuracy of FDG-PET/CT is higher in patients with FPG levels <126 mg/dL than in patients with FPG levels between 126–200 mg/dL.

**BIOETHICS IN A PLURALISTIC SOCIETY: CAN WE EVER FIND AGREEMENT?**

Dennis Hollinger, Ph.D.
President & Colman M. Mockler Distinguished Professor of Christian Ethics, Gordon-Conwell Theological Seminary, Hamilton, MA

Bioethics faces a major challenge in light of the pluralistic nature of our society. Multiple religions, philosophical frameworks, worldviews and vocational commitments would seem to render impossible our ability to find a common framework for adjudicating our most pressing ethical challenges in the world of medicine. This lecture suggests human dignity as a framework for both making bioethical decisions and engendering virtues necessary for the ethical practice of medicine.

Draws on multiple ethical traditions to forge a philosophical framework for bioethics.

**LAPAROSCOPIC COMPLETION CHOLECYSTECTOMY FOR RETAINED GALLBLADDER POST-CHOLECYSTECTOMY**

Michael Jacobs, MD, FICS
Attending Surgeon, Providence Hospital, Southfield, MI

Purpose: Retained gallbladder following cholecystectomy is a known complication of cholecystectomy which although rare, should be considered as a possible cause for persistent post-cholecystectomy biliary symptoms. Incomplete cholecystectomy with transection of the gallbladder fundus/body instead of the cystic duct caused by incomplete dissection of Calot’s triangle has been cited as a reason for this complication. Surgeon inexperience and distorted anatomy from chronic cholecystitis may also be additional contributing factors for this entity. In considering this diagnosis, ultrasonography or MRCP are often effective in evaluating the biliary anatomy. The purpose of this presentation is to teach laparoscopic redo cholecystectomy.

Methods: Dissection in Calot’s triangle to obtain a critical view of safety in conjunction with judicious intraoperative cholangiography to demonstrate biliary anatomic variants are essential in preventing this complication at the index procedure.
Results: The key steps to performing completion laparoscopic cholecystectomy are presented within the video-based education module. Intraoperative cholangiography to exclude the presence of retained cystic duct gallstones, choledocholithiasis, and to exclude underlying undiagnosed biliary injury/stricture is discussed.

Conclusions: Laparoscopic completion cholecystectomy is a safe approach to definitively treat this condition.

TOTALLY LAPAROSCOPIC RIGHT HEMIHEPATECTOMY WITHOUT PRINGLE MANEUVER: VIDEO-BASED EDUCATION TECHNIQUE AND TIPS
Michael Jacobs, MD, FICS
Attending Surgeon, Providence Hospital, Southfield, MI

Purpose: Laparoscopic liver resection has evolved from simple peripheral wedge resections to major hepatectomies. The criteria for resection, both clinical and technical factors, are discussed using video-based education as a guide to understanding the technical aspects. Preoperative planning, patient positioning, trocar site placement, intraoperative resection techniques, and extraction techniques are discussed with an emphasis on video-based education, specifically intraoperative resection techniques.

Methods: The criteria for resection, both clinical and technical factors, are discussed using video-based education as a guide to understanding the technical aspects. Preoperative planning, patient positioning, trocar site placement, intraoperative resection techniques, and extraction techniques are discussed with an emphasis on video-based education, specifically intraoperative resection techniques.

Results: Surgery operative times, length of stay, complications and pros/cons of the technique are discussed.

Conclusions: Totally laparoscopic right hemihepatectomy is an option for patients requiring right liver resection for benign and malignant diseases.

A COMPARATIVE ANALYSIS OF PROSTATE CANCER PRE-TREATMENT CHARACTERISTICS STRATIFIED BY AGE
Anish Kapur, MS-4
Medical Student (Year 4), Aureus University School of Medicine, Aruba, Colts Neck, NJ

Purpose: To compare the pretreatment characteristics of prostate cancer. Prostate Specific Antigen (PSA), Digital Rectal Examination (DRE) and Gleason Sum Score (GSS) by the AUA stratified age groups, <55, 55-69 and >70 years old.

Methods: A retrospective analysis of 402 sequential prostate cancer patients, who had trans-rectal ultrasound guided 12 core prostate biopsy for either elevated PSA (over 2.5ng/ml) or positive DRE or both during a three period, 2010 to 2012. There were 36 patients <55 years, 226 patients 55 to 69 years and 140 patients =70 years (range 44-78 years old). This study was conceptualized after the American Urology Association (AUA) released prostate cancer screening guidelines in which men =70 were deleted from screening.

Results: Overall, compared with patients <70 years old, we found that in patients =70 years old:

1) 60.7% had high GSS (7-10) (p= 0.0234)
2) 39.3% had low GSS (6) (p= 0.0234)
3) 31% had PSA level = 10 ng/ml (p= 0.0010)
4) 69.1% had high GSS (7-10) in the presence of a positive DRE (p= 0.0278)

Conclusions: Patients =70 years old had a higher incidence of high GSS (7-10) compared to prostate cancer patients <70 years old. Patients =70 years old who also had a positive DRE had the highest incidence of high GSS.

DIGITAL PROTRACTOR AS A SUPPLEMENT TO POSTERIOR CERVICAL SPINE INSTRUMENTATION: A CADAVERIC STUDY
Chris Karas, MD
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Purpose: Current technologies for assisting in the placement of spine instrumentation include fluoroscopy and navigation systems. The disadvantage of these adjuncts to spine surgery include radiation exposure and high cost. The objective of this study is to test the ability of a novel device, specifically a digital protractor, to assist in the insertion of C3-7 lateral mass screws and C2 pedicle screws.

Methods: The cervical spine of a prone cadaveric specimen was exposed. A digital protractor was added to the handle of a surgical multi-axial screwdriver. The device was zeroed at a plane perpendicular to the lateral mass at previously defined entry points and screws were placed at specific known angles to within one degree. Postoperative CT scan was performed and lateral mass screw purchase was evaluated at C3-7. Bilateral C2 pedicle screw purchase was evaluated as well. All screws were placed without intraoperative fluoroscopy. The right side was placed by the attending spine surgeon. Left side was placed by a 1st year medical student.

Results: At C2, screws purchased the pedicles satisfactorily and bilaterally. At C3-7 all screws purchased the lateral masses satisfactorily and bilaterally.

Conclusions: The addition of a digital protractor to current cervical spine instrumentation is a useful adjunct to the accurate placement of C2 pedicle screws and subaxial lateral mass screws, is relatively inexpensive, and requires no radiation exposure. Future utilities may include a kinesthetic educational tool, research device, or complement to existing technology.

THE EFFECT OF DIALYSIS WITHIN 24 HOURS OF TRANSPLANTATION ON THE INCIDENCE AND LENGTH OF DELAYED GRAFT FUNCTION
Farah Karipineni, MD
Surgical Resident, Albert Einstein Medical Center, Philadelphia, PA

Purpose: Grafts from extended criteria donors (ECD), donors after cardiac death (DCD) and elderly donors have an increased risk of delayed graft function (DGF). A modifiable risk factor may be hypovolemia induced by dialysis. We reviewed our cohort to evaluate this.
Methods: We retrospectively reviewed our kidney transplants performed between 2008 and 2012. Preemptive transplantations, transplants associated with peritoneal dialysis, K > 5mg/dl, living donors and insufficient information were excluded. Transplants, which were associated with hemodialysis within 24 hours before transplantation (study group), were compared with the remainder of the cohort (control group).

Results: A total of 205 renal transplants were reviewed. 144/205 (70.24%) transplants were in the study group. The rate of DGF was 20.98 vs. 9.27% for the study and control groups (P = 0.4959). Mean length of DGF was 5.8 vs. 6.1 days for the study and control groups (P = 0.7323). Mean intra-operative IV fluid and Cold Ischemic Time were statistically similar between the two groups (p > 0.05). One-year graft and patient survival rates were not statistically different.

Conclusions: We showed that patients who did not undergo dialysis within 24 hours prior transplant demonstrated an equivalent incidence and duration of DGF, graft and patient outcomes compared to recipients who did. K > 5 mg/dl was excluded. Therefore, we conclude that dialysis within 24 hours before transplantation, absent absolute indications, can safely be avoided.

**PICC LINES: INDICATIONS, COMPLICATIONS, LESSONS LEARNED**

Cheryl Kelley, RN, BSN, VA-BC

Independant Vascular Access and Infusion Therapy Consultant, Belington, WV

Incorporation of peripherally inserted central venous catheters into clinical practice has skyrocketed over the last 10 years. Despite their ease of placement and their presumed innocuous risks, PICCs also have significant complications associated with them—infection and thrombosis being the most common. This discussion will review methods for reduction of these hazards and can be addressed from “both sides of the catheter”—that is from clinical practice and from product design. This presentation will present lessons learned and will recognize preservation of the venous system as a first priority.

**EVALUATION AND TREATMENT OF PERIPHERAL NERVE PROBLEMS: EVOLVING DIAGNOSTIC METHODS AND TREATMENTS**

Michel Kliot, MD

Clinical Professor of Neurosurgery, UCSF Medical Center, San Francisco, CA

Purpose: Review approaches to dealing with a broad range of peripheral nerve problems.

Methods: Review my personal experience and literature where relevant.

Results: We are developing new imaging methods to visualize axonal pathways in the setting of trauma and tumors.

Conclusions: New developments are improving the treatment of a variety of peripheral nerve problems.

**MARJOLIN ULCER: REVIEW OF THE LITERATURE AND CASE REPORT**

Alfonso E. Pino, MD, FICS

Emeritus Orthopedic Cornamche County Medical Center, Vice Chair Orthopedic ICS USA, Secretary American Fracture Association, Dublin, TX

Purpose: To review the diagnosis and treatment of this unusual type of lesion with difficult diagnosis unless a high index of suspicion and previous experience is present.

Methods: In this review of the literature and the case report we study the origin and possible causative pre cancerous condition. The initial symptom which point out to skin cancer, the difficult initial diagnosis with late arrival to the Surgeon. The case presented was a 72 years old, alcoholic, white male right handed, with lesion in opposite hand. History of previous burn several years ago years and later indolent ulcer in the site treated by Family physician. Eleven months ago an Orthopedic did biopsy and examination with a positive result for ‘Squamous Cell Carcinoma’ with poor prognosis due to the advanced stage of the disease. Patient did not returned and continued procrastinating his grave lesion and came to the senior author for second opinion and care. Temporary ray amputation and multiple biopsies were done and the exam showed metastasis in the axilla and chest, consult with oncologist was requested and patient did not return until later another staff member performed a mid forearm amputation an later demise.

Results: Marjolin Ulcers are diagnosed late, referral to surgeon comes in great number of cases when the metastatic disease is present and amputation in the extremities is one of the only modality of local care plus the Oncologist management of the metastasis. In the extremities Osteomyelitis is another entity which we need to deal with. The results are poor unless early diagnosis is done before propagation to other tissue is done.

Conclusions: Optimal management of Marjolin Ulcers involves a multimodality approach directed at a correct diagnosis which is difficult and aggressive treatment including the co morbidities. Early diagnosis is the best treatment today. In the elderly debilitated, with metastasis results are poor, survival depend of the team approach involvement. In the young if the resection is satisfactory and no metastasis are present results can be permanent.

**SPLENIC ARTERY STEAL SYNDROME- A REVIEW**

Sonja Pinto, MB, BS

Research Fellow, Department of Radiology, New York Presbyterian/ Weill Cornell Medical Center, Richmond Hill, NY

Purpose: To summarize, the etiology, clinical features, diagnostic and predictive criteria and preventive and treatment options for Splenic Artery Steal Syndrome.

Methods: A literature review from the last 15 years was conducted using the keywords ‘Splenic Artery Steal Syndrome’ on PubMed and Google scholar databases.


**HEMOSTATIC AGENTS IN TRAUMA**

Yana Puckett, MD

General Surgery Resident, PGY-2, Texas Tech University Health Sciences Center, Lubbock, TX

Purpose: Bleeding remains a significant drawback to the surgical treatment of burn patients, increasing the need for transfusions and the operative time required in order to achieve hemostasis. Traditionally, epinephrine-soaked dressings have been used to achieve hemostasis, and are a reliable and cost-effective method. However, epinephrine has been associated with adverse perioperative effects in burn patients such as hypertension, myocardial ischemia, and cardiac arrhythmias, especially in frail elderly patients. One alternative is a kaolin-based dressing. Kaolin is an inert mineral that has been used primarily in military settings. Hemostasis is achieved by an interaction with factor XII in the presence of kallikrein, which in turn activates Factor XI and triggers the activation of the intrinsic coagulation cascade. Kaolin has been shown to be safe in many settings; however there is little data on its efficacy in burns. In this pilot study, we compared time to hemostasis using a kaolin-based hemostatic dressing to the standard epinephrine soaked telfa pads.

**METHODS:** Legal research in the form of legislative and case law review is used for this study, as well as financial white papers, industry interviews, and current literature review.

**RESULTS:** Case law analysis allows discovery of the most common forms of lawsuits activity in the field of surgery, which guides the prevention methods destined to be the most useful in error avoidance. There are also creative business and insurance answers from industry which can be applied to the asset protection problem, as well as legal structuring. Corporations, trusts, qualified retirement plans, gifting, and insurance all play asset preservation roles. The known risk of rising taxes is also addressed with some of these techniques as well as with non-qualified plans, maximizing physician fringe benefits, tax-efficient investing and cash management.

**CONCLUSIONS:** Revenue driven profits are of primary importance to a healthy practice, but the preservation of savings from earnings has become increasingly difficult. In addition to threats from lawsuits, regulators and taxes, some argue that practice savings in the form of retirement assets may be targeted as bailout money if the future of quantitative easing and current taxes do not net a stable economy for the United States in the next decade. It is therefore important for surgeons to take advantage of every current favorable tax provision available today, especially those which provide asset protection for the funds set aside. There are numerous opportunities, many of which are complex and sophisticated, to be considered, any one or two of which can increase the profits retained year after year.

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**THE FUTURE OF SURGERY: A PARADIGM SHIFT**

Results: Portal hyperperfusion and lowered splenic arteriolar resistance cause diversion of celiac blood from the hepatic into the splenic artery. This condition is known as Splenic Artery Steal Syndrome (SASS). SASS presents within three months of liver transplantation with deranged LFTs. Ultrasound shows a resistive index of 0.8 or higher in the hepatic artery. Celiac angiogram shows a patent hepatic artery with sluggish flow with early filling of an enlarged splenic artery (>4 mm or 150% the diameter of the hepatic artery. Early splenic artery embolization reverses this syndrome and LFTs normalize. Celiac angiogram shows increased peripheral liver arterial filling without delay compared to other branches of the celiac trunk. Pre-operative CT-detected splenic volumes of over 829 ml and splenic artery diameters of over 4 mm are predictive of SASS. This has enabled surgeons to select patients for intra-operative splenic artery ligation or modification of anastomoses.

Conclusions: Awareness of clinical and radiological presentation and focus on prevention of Splenic Artery Steal Syndrome are crucial to prevent graft loss.

**MANAGEMENT OF PNEUMOTHORAX AND INTRATHORACIC AIRSPACES**

Francis J. Podbielski, MD, MS, FICS

Visiting Clinical Associate Professor of Surgery, University of Illinois at Chicago Medical Center, Chicago, IL

Purpose: Pneumothorax (n.): the presence of air or gas in the pleural cavity (Gk. pneumon – lung; Gk. – thorax – breastplate). The simple definition of ‘air in the chest’ is not always sufficient to guide clinicians to an appropriate treatment plan in management of this commonly encountered problem. The goal of this discussion is to ask physicians to reconsider how they think about ‘pneumothorax’ in terms of the dynamic movement of air into and out of the thorax.

**METHODS:** Patients presenting to the emergency department for evaluation and those having undergone thoracic procedures were reviewed, with illustrative cases of ‘active’ pneumothorax versus ‘passive’ airspace being selected for presentation and discussion.

**RESULTS:** While standard surgical teaching mandates that all intrathoracic airspaces require some type of drainage (standard chest tube, radiology-guided catheter, needle aspiration), asymptomatic or minimally symptomatic patients are often successfully managed with observation only.

**CONCLUSIONS:** Optimal (and cost-effective) management of pneumothoraces and inert intrathoracic airspaces requires a thorough understanding of dynamic chest wall and lung parenchymal physiology. Many small pneumothoraces and asymptomatic thoracic airspaces do not require active surgical intervention.

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**ASSET PROTECTION, LEGAL RISKS AND RISING TAXES: HOW TO RUN A MORE PROFITABLE PRACTICE**

Victoria Powell, JD, LLM

Director, Doctors Financial Education Network; Managing Member, Lifetime Investment Management, LLC, Phoenix, AZ

Purpose: The purpose of the presentation is threefold: 1) to examine current developments in asset protection methods useful for surgeons and surgical practices from a legal perspective; 2) to review current case law in medical negligence and identify preventive lessons therefrom; and 3) to explain new tax laws effective in 2014 and provide solutions surgeons can use to mitigate them for increased retention of practice profits.

**METHODS:** Legal research in the form of legislative and case law review is used for this study, as well as financial white papers, industry interviews, and current literature review.

**RESULTS:** Case law analysis allows discovery of the most common forms of lawsuits activity in the field of surgery, which guides the prevention methods destined to be the most useful in error avoidance. There are also creative business and insurance answers from industry which can be applied to the asset protection problem, as well as legal structuring. Corporations, trusts, qualified retirement plans, gifting, and insurance all play asset preservation roles. The known risk of rising taxes is also addressed with some of these techniques as well as with non-qualified plans, maximizing physician fringe benefits, tax-efficient investing and cash management.

**CONCLUSIONS:** Revenue driven profits are of primary importance to a healthy practice, but the preservation of savings from earnings has become increasingly difficult. In addition to threats from lawsuits, regulators and taxes, some argue that practice savings in the form of retirement assets may be targeted as bailout money if the future of quantitative easing and current taxes do not net a stable economy for the United States in the next decade. It is therefore important for surgeons to take advantage of every current favorable tax provision available today, especially those which provide asset protection for the funds set aside. There are numerous opportunities, many of which are complex and sophisticated, to be considered, any one or two of which can increase the profits retained year after year.
After removal of both dressings, photographic documentation of the adequacy of primary hemostasis was obtained, and time to complete hemostasis using cautery was measured and compared.

Results: Average time to hemostasis was similar, at 20 minutes and 16 seconds in kaolin based product and 18 minutes and 42 seconds in epinephrine soaked telfa pads. However primary hemostasis appeared superior with epinephrine.

Conclusions: Kaolin based dressing was equivalent to epinephrine in this pilot study. Since kaolin is associated with fewer side effects than epinephrine it may present as a good alternative in older high risk patients sensitive to epinephrine side effects.

PERILunate DISLOCATION OF THE CARPUS. CASE STUDY AND LITERATURE REVIEW OF CARPAL INSTABILITY
Sudhir Rao, MD
Orthopaedic Surgeon, Big Rapids Orthopaedics PC and Premier Hand Center, Big Rapids, MI

Ligamentous injury to the carpus results in a spectrum of instability. Perilunar dislocation of the wrist is the most severe form of injury. This is an uncommon injury which is sometimes missed at initial presentation. Early recognition and timely surgical intervention is necessary to optimize outcome and minimize complications and sequelae. This presentation aims to explain the injury complex through case study and review of literature.

LIVER TRANSPLANTATION FOR MALIGNANT NEOPLASMS
Reza Saidi, MD, FICS
Assistant Professor of Surgery, Alpert Medical School of Brown University, Rhode Island Hospital, Department of Surgery, Division of Organ Transplantation, Providence, RI

Purpose: Liver transplantation for malignancies has emerged as proven treatment modality for selected group patients.

Methods: Review of literature.

Results: Currently, around 30% of all liver transplants performed in US are for hepatocellular cancer (HCC). Hepatoblastoma is an excellent indication in pediatric patients with unresectable tumors. Similarly, liver transplantation for HCC in the adult population yields good results for patients whose tumor do not exceed the Milan criteria. It remains to be determined whether patients with more extensive tumors can be reliably selected to benefit from the procedure. Adjunctive procedures like radiofrequency ablation, chemoembolization, or cryotherapy might be indicated to limit tumor progression for patients on waiting lists. Epithelioid hemangioendothelioma is also an appropriate indication for liver transplantation. Metastatic liver disease is not an indication for liver transplantation, with the exception of cases in which the primary is a neuroendocrine tumor, for which liver transplantation can result in long-term survival and even cure in a number of patients. Cholangiocarcinoma might qualify if aggressive neoadjuvant therapies, including chemotherapy and radiotherapy followed by liver transplantation, are carried through. Survival in these selected patients can approach that for other patients with end-stage liver disease.

Conclusions: Liver transplantation is the treatment of choice for selected group of patients with hepatic neoplasms.

ACUTE CARE SURGERY IN EVOLUTION
Heena Santry, MD
Assistant Professor of Surgery and Quantitative Health Sciences, University of Massachusetts Medical School, Worcester, MA

Purpose: Acute Care Surgery (ACS) as a practice model encompassing emergency general surgery (EGS) has evolved since first proposed as a surgical specialty more than a decade ago. This didactic session will review the evolution and direction of acute care surgery with a review of the literature, qualitative data, survey data, and epidemiologic data.

Methods: We reviewed the existing literature on the evolution of ACS and designed a multi-modal project examining the specialty and its patient base consisting of trauma and EGS patients. Methods including face to face interviews with key stakeholders at hospitals with ACS then conducted a national survey of university-affiliated hospitals on their EGS practices. Additionally, we utilized administrative data from the Nationwide Inpatient Sample and Medicare to better describe ACS patients during the same time frame.

Results: ACS is still diffusing in the US today with less than 1/3 of university affiliates using the model. There is no one size fits all model of ACS today but it is filling a growing need at the population of EGS patients grows exponentially with a relatively stable pool of trauma patients.

Conclusions: ACS is a necessary model of care that must be applied to meet the unique needs in each practice environment. The demand for surgeons interested in practicing ACS will continue to grow.

MESNA AND HYDROXYPROPYL METHYLCELLULOSE ASSIST IN DELAYED SUBMUCOSAL DISSECTION IN A RABBIT CECAL MODEL
Gokulakrishna Subhas, MD, FICS(J)
Resident in General Surgery, Providence Hospital and Medical Centers, Southfield, MI

Purpose: When large flat polyps are diagnosed during colonoscopy in the endoscopy suites, they are referred to the surgeon for consideration of either colectomy or re-attempt of colonoscopic removal of polyp in the operating room (OR) after taking a biopsy of the polyp. If the polyp is benign, then the surgeon (based on his expertise) can consider performing an endoscopic submucosal dissection of the polyp in the OR with or without laparoscopic visualization. We hypothesized that injecting mesna or hydroxypropyl methylcellulose in the submucosal plane during the initial colonoscopy would help in subsequent submucosal dissection attempted in 2 days without increasing the risks of perforation.

Methods: New Zealand white rabbits underwent a midline laparotomy and longitudinal typhlotomy before they were injected submucosally with 0.2 ml of normal saline (NS), mesna (MS) or hydroxypropyl methylcellulose (HMC) [n=8/group]. The injection site was marked with suturing before the typhlotomy and abdominal wall were closed. Two days later, after laparotomy and typhlotomy, 0.2 ml of saline was injected submucosally to lift the mucosa at the site of the previous injection. Submucosal dissection of a 1x1 cm of mucosa was performed using flat-tip cautery. During the dissection, excess bleeding was soaked with epinephrine soaked telfa pads. However primary hemostasis appeared superior with epinephrine.

Conclusions: Liver transplantation is the treatment of choice for selected group of patients with hepatic neoplasms.
CEREBRAL PERFUSION PRESSURE AND INTRACRANIAL PRESSURE MANAGEMENT (BRAIN RESUSCITATION) IN HEAD INJURY

Quirico Torres, MD, FICS
Volunteer Consultant, Abilene Medical Mission, Department of Neurosurgery, Hendrick Medical Center, Abilene, TX

Purpose: Treatment of Traumatic brain injury patients are directed towards the timely management of Cerebral Perfusion Pressure (CPP = MAP - ICP) and intracranial Pressure to produce a better outcome in Rehabilitation. Maintenance of CPP of 60-70 mmHg and ICP management of less than 18-20 mmHg is associated with better outcome. Identification of specific abnormal ICP wave pattern will help in further control of impending brain decompression. Emergency room and Critical care management team approach in managing brain trauma patients plays a big role. Brain Trauma Foundation Guidelines was also discussed to update the participants. Use of critical care medications and dosages will be shared to the participants.

Results: Early detection of abnormal ICP wave pattern followed with surgical decompression improved the survival.

Conclusions: Proper management of severe head trauma has improved the quality and outcome and shortened the rehabilitation period.

IMPLEMENTATION OF TRAUMA TRIAGE/RESUSCITATION SIMULATION BASED EDUCATION WITH WEB BASED FOLLOW UP IN RURAL HONDURAS

Ulises Torres, MD, FICS
University Of Massachusetts Medical School, Worcester, MA

Purpose: Surgical missions leave an impact in underserved areas; unfortunately this does not bring change to practice unless a concrete educational program is put in place. We propose a method to implement this.

Methods: We recognized the lack of structured approach to trauma triage and resuscitation in Honduras, Central America. After analyzing their needs we implemented a comprehensive educational module containing lectures of basic knowledge in trauma and physiology, hands-on recognition and extrication techniques for pre-hospital personnel, relating this with a hands-on hospital personnel training containing techniques and protocols of trauma resuscitation, operating room safety techniques, followed by immediate constructive feedback and web-based educational modules tracking the progress through the remaining of the year to complete the educational experience. The audience consists of the local physicians finishing their required social service practice year before graduation from Medical School, local Surgeons, rescue personnel, Operating Room nurses and emergency department personnel.

Results: Improvement on the basic knowledge of trauma triage and resuscitation and how to approach those opportunities with the limited available resources. Achievement of a close educational and clinical relationship with a rural hospital in Honduras, Central America.

Conclusions: We present the process of implementation of this educational opportunity, pitfalls, lessons learned and recommendations for the development of programs like this in other locations. Emphasis is given to the creation of web-based educational modules with interaction capabilities as well as on-site evaluations in order to demonstrate change.
Purpose: To determine the incidence, predictive factors and survival outcomes of NSLN metastasis following CLND for positive SLNB in pediatric melanoma.

Methods: The records of patients = 21 years diagnosed with cutaneous melanoma between 1999-2012 who underwent CLND for a positive SLNB were reviewed. Clinicopathologic factors (age, gender, race, site, Breslow thickness, histology and ulceration) were correlated with positive NSLNs on CLND and event-free survival (EFS) and overall survival (OS) using logistic and Cox regression analysis, respectively.

Results: Of 47 patients who underwent SLNB, 30 (64%) had tumor deposits in the SLN and were the subject of this analysis. Median age was 9.1 years (15 male). The extremity was the most common primary site (n=17), 18 had spitzoid melanoma and 10 had ulceration. Six (20%) patients had NSLN metastasis on CLND. No clinicopathologic factors were associated with NSLN metastasis on CLND. Surgical complications occurred in 7 (26%), including lymphedema (n=6) and paresthesia (n=1). Median follow-up was 4.1 years. Estimated 4-yr EFS and OS for all patients was 77%±9.8% and 93%±6.1%, respectively. Estimated 4 yr EFS (OS) for CLND positive and negative patients was 31%±18.3% (83%±19.6%) and 86%±8.8% (96%±5.3%), respectively. Three patients died. Three (10%) loco-regional and 3 (10%) distant recurrences occurred in 5 patients. Male gender, non-spitzoid histology, positive nodes at the time of CLND, and other than stage IIIA disease were significantly associated with inferior EFS (p<0.05).

Conclusions: SLN positivity is higher in children compared to adults but NSLN metastasis on CLND is comparable. Predictors for positive NSLNs on CLND could not be identified in our cohort. The complication rate of CLND in children is low. Hence these findings support its continued practice in pediatrics. A better understanding of the impact of CLND on outcome in children is needed.

AN EPGENETIC ASSAY THAT MAY AVOID UNNECESSARY REPEAT PROSTATE BIOPSIES AND LOWER HEALTHCARE COSTS
Arnold Willis, MD, FICS
Professor of Urology, Associate Dean of Clinical Sciences Aureus University School of Medicine Aruba, Alexandria, VA

Purpose: To quantify using a budget impact model, the effect of the relatively new epigenetic assay on healthcare costs for commercial health-care plans that reimburse for the assay. The costs are lowered by avoiding unnecessary repeat prostate biopsies and their attendant risks.

Methods: A budget impact model was developed to test the hypothesis that an epigenetic test can produce cost saving benefits for healthcare plans as well as clinical benefits to urologists and patients with risks of prostate cancer. These tests provide guidance on how to offer patients more appropriate and less costly care. The budget impact model is presented from a perspective of a hypothetical commercial healthcare plan. Costs are calculated over a year.

Results: Based on this analysis utilization of this epigenetic assay on patients with negative biopsies will result in reduction of 1106 unnecessary biopsies for a healthplan with one million members. Additionally this data translates into an annual savings of $ 580,800 for the plan.

Conclusions: This study shows the net costs for a million member plan would be reduced by over a half million dollars a year just on prostate biopsy costs alone. More importantly, patients with histopathologically negative biopsies and negative epigenetic testing would be saved additional interventions, and of course an improved psychological outcome. Using this genetic based test assay can save costs to the health system in general. It will also improve the clinical management of patients with elevated PSA levels.

PREVENTION, EVALUATION, AND MANAGEMENT OF POST-OPERATIVE COMPLAINTS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY
Thomas Willson, MD, FICS
St. Joseph Hospital, Chicago, IL

Purpose: Obesity remains a significant challenge to healthcare systems worldwide. In the United States, nearly two-thirds of adults are overweight and more than 200,000 weight loss surgeries are performed each year. As sleeve gastrectomy has become a more popular choice among surgical weight loss patients, the appropriate methods for handling common post-operative complaints has become a topic of interest. This study was performed to outline approaches that have been found effective for evaluating and managing as well as preventing these complaints in our, and other, bariatric centers.

Methods: A total of 200 patients who underwent laparoscopic sleeve gastrectomy between January 2009 and December 2012 at St. Joseph Hospital in Chicago, IL - USA were reviewed retrospectively. Records were reviewed for demographics, length of stay, and complications in the early post-operative period. The literature regarding early post-operative complications after laparoscopic sleeve gastrectomy was also reviewed.

Results: Over the study period, only 4 patients required reoperation or invasive intervention within 30 days of their initial operation (range day 5-30). There were 21 emergency room visits resulting in 12 readmissions for bariatric surgery-related complaints, for a 6% readmission rate within 30 days of surgery. Nausea (n=6) and pain (n=5) were the two most common reasons for return to the emergency department, while leak and hernia each occurred only once.

Conclusions: Although feared complications such as leak, bleeding, and hernia do occur in the bariatric population, patients are more likely to return to the emergency department for issues such as post-operative pain and nausea. Patient education, operative planning, and multi-modal symptom control can all help to prevent these problems before they occur while an expeditious symptom-directed workup can help in the early detection of true complications.

USE OF EPIDURAL STEROIDS TO TREAT LUMBAR DISC DISEASE
Charles Xeller, MD
Member, Board of Directors, American Academy of Disability Evaluating Physicians, League City, TX

Purpose: The purpose of this study is to review the literature to ascertain appropriate indications, methods and results of utilizing epidural steroids to treat lumbar spine back pain.

Methods: Review of recent literature to ascertain results of epidural steroids and to reach conclusions regarding appropriate injection methods to treat lumbar spine pain.

Results: In general lumbar epidural steroids to treat low back pain do NOT improve the average level of function, or reduce the need for surgery, or provide long term pain relief beyond 3 months. The routine use of these injections is NOT recommended.

Conclusions: In general, results indicate that current scientific evidence is insufficient to support the use of injection therapy in patients with low back pain or sciatica.
Mark your Calendars

June 10-13, 2015

Westin Annapolis
General Meeting Information

Cancellation Policy
The cancellation deadline was May 24, 2014. Refunds will be issued, minus a $50 processing fee, upon receipt of written notification via fax or mail. Verbal or written cancellations after May 24 will not be honored. Please allow four to six weeks after the meeting for your refund.

Language
The official language of this conference is English, and all sessions and events shall be conducted in English.

Meeting Registration
Everyone attending or participating in educational sessions, including faculty, is expected to register for the meeting.

Spouse/Guest Supplement
Anyone attending the meeting who is not a registered attendee should be registered as a spouse/guest. The $150 fee covers the costs such as lunches, breakfasts and coffee breaks etc. This includes: Spouses, Domestic Partners and Relatives. This category is not appropriate for physicians who will attend CME Sessions.

To register for the meeting, please visit the Meeting Registration Desk.

Airport Transportation:
Hilton Airport shuttle:
The Hilton Memphis complimentary shuttle will depart on the hour (by request), between the hours of 6am and 10pm. Shuttle schedules subject to change during inclement weather.

Parking
Valet parking $9/day
Self parking complimentary
Hotel concierge can assist with on-site rental car arrangements.

Taxi
City Wide Taxi Cab Co, (901) 324-4202
DeSoto Taxi Cab, (901) 457-5411
Yellow Cab Co, (901) 577-7777

Attire
Business casual attire is recommended in educational sessions. Casual attire is appropriate for most social events. Evening attire is recommended for the Convocation and New Fellows Reception. Black tie is optional for the Gala Banquet.

Continuing Medical Education (CME) Information
CME Program Evaluation Forms are included in each registrant’s packet. To receive CME Credit, you must complete a Program Evaluation Form for each educational sessions you attend. Leave the packets intact; including any blank sessions.

Program Evaluation Forms must be completed and returned to the Meeting Registration Desk prior to the conclusion of the conference. You may also mail your forms to:

ICS-US Headquarters
Department of CME
1516 North Lake Shore Drive
Chicago, IL 60610-1694

Convocation
Pre-registered participants in the convocation should return to the registration area by 5:30 pm to receive your gown and ceremony instructions. Anyone who arrives after this time will not be able to participate in the convocation. If you did not meet the April 7 pre-registration deadline it will not be possible to participate in this year’s ceremony.

You may prefer to leave your suit jacket with a friend or relative or hang it at the Registration Desk during the Ceremony. (Please do not leave any valuables with the jacket.) Participants will be formally processing in to the event; please do not carry anything with you (bags, cameras, etc.)

Convocations guests should be seated in TN Grand Ballroom B by 6:20pm to allow the ceremony to begin on time. If you have previously participated in the convocation, please plan to attend this event so that we can offer a robust welcome to all of your new ICS colleagues.

Speaker Prep Area
A laptop computer has been set up near the registration area. Speakers who did not submit their presentations in advance of the meeting should load their PowerPoint files the day before their presentation. Speakers may also use this laptop to preview/view their slides.

Special Needs and Questions
If you have any special needs that must be addressed to ensure your comfort and/or if you require information not listed in this brochure, please see the ICS-US Staff at the Registration Desk during the hours listed above. Every effort will be made to facilitate your request.

Tickets/Workshop Registration
Tickets for social events and workshop registration MAY be available onsite on a VERY limited basis. However, staff is not responsible for events that are sold-out/unavailable or cancelled. Check with the Meeting Registration Desk as soon as possible.

The deadline for submission of all CME Program Evaluation forms is Monday, July 14, 2014.
# Moderator and Presenter Index

| A | Ahmad, Sarah Aftab ................................................................. | 16 |
|   | Alver, Domingo T. .................................................................. | 13, 14, 15, 24 |
|   | Anderson, III, Harry Linn .................................................. | 12, 24 |
| B | Bess, Shay.................................................................................. | 11, 18, 19 |
|   | Bhullar, Jasneet S. .................................................................. | 13 |
|   | Boctor, Daniel Sherif Zakari ................................................ | 19, 25 |
|   | Bolles, Gene E. ........................................................................... | 19, 25 |
|   | Bongiorno, Frank ....................................................................... | 13 |
|   | Brooks, Steven ............................................................................. | 12, 25 |
|   | Buddensick, Thomas ................................................................... | 13 |
|   | Butler, Bryan N. ........................................................................ | 15 |
| C | Chen, Leo...................................................................................... | 18 |
|   | Clark, Caitlin ............................................................................ | 19, 26 |
|   | Clark, W. Craig ......................................................................... | 18, 19, 26 |
|   | Cobanoglu, Adnan M. .................................................................. | 16 |
|   | Coles, Maxime J.M. ..................................................................... | 19 |
| D | Dardano, Jr., Anthony ............................................................ | 13, 17 |
|   | Davidoff, Andrew ....................................................................... | 10, 14, 26 |
|   | Del Prado, Paul .......................................................................... | 13, 27 |
|   | Dhokia, Shamik ........................................................................... | 17, 27 |
|   | Dissanaike, Sharmila .................................................................... | 12 |
| E | Egle, Jonathan............................................................................ | 13 |
|   | Epstein, Jeffrey ......................................................................... | 19, 27 |
|   | Ebanks, III, James W. ................................................................ | 14 |
| F | Feild, James R. ............................................................................ | 18, 27 |
| G | Gershanik, Richard .................................................................... | 19, 27 |
|   | Gonda, Jr., Roger L. .................................................................. | 16, 28 |
|   | Greenfield, Jr, Gerald Q. ......................................................... | 19, 28 |
|   | Griswold, John Anthony .......................................................... | 10, 12, 28 |
| H | Halldorsson, Ari O. .................................................................... | 12, 14, 16, 17, 29 |
|   | Hamidian Jahromi, Alireza ...................................................... | 13, 29 |
|   | Hassan, Zaki ................................................................................ | 14 |
|   | Hollinger, Dennis ....................................................................... | 10, 13, 29 |
| J | Jacobs, Michael J. ..................................................................... | 15, 17, 29, 30 |
| K | Kapur, Anish .............................................................................. | 16, 30 |
|   | Karas, Chris ............................................................................... | 19, 30 |
|   | Karipineni, Farah ........................................................................ | 17, 30 |
|   | Kelley, Cheryl ............................................................................ | 16, 31 |
|   | Klit, Michel .................................................................................. | 11, 18, 19, 31 |
| L | Labor, Phillips Kirk .................................................................... | 13 |
|   | Legault, Randy ............................................................................ | 14 |
|   | Litwin, Demetrius ....................................................................... | 13, 14, 16, 18, 19 |
|   | Luzardo, Gustavo ......................................................................... | 18 |
| M | Mammen, Joshua......................................................................... | 15 |
|   | Matier, Brian ................................................................................ | 15 |
|   | Matthews, William ...................................................................... | 12, 18 |
|   | Mehl, Judson ............................................................................... | 14 |
|   | Mittermeyer, Bernhard T. ......................................................... | 10, 16 |
| O | Oliphant, Uretz .......................................................................... | 12 |
|   | Osler, Matthew .......................................................................... | 16, 28 |
| P | Parikh, Janak ............................................................................ | 16 |
|   | Pertmutter, Mark ........................................................................ | 12 |
|   | Pinto, Alfonso E. ...................................................................... | 19, 31 |
|   | Pinto, Sonya ............................................................................... | 16, 31 |
|   | Podbielski, Francis J. ................................................................ | 17, 32 |
|   | Powell, Victoria J. ..................................................................... | 16, 19, 32 |
|   | Puckett, Yana ............................................................................. | 12, 32 |
| R | Ramaiah, Chand ......................................................................... | 13 |
|   | Rao, Sudhir B. ............................................................................. | 14, 19, 33 |
|   | Rebel, Annette .......................................................................... | 14 |
|   | Reddy, Nikalesh ......................................................................... | 16 |
|   | Roscher, Arno ............................................................................ | 11, 14 |
| S | Saidi, Reza F. ............................................................................ | 17, 33 |
|   | Saliie, Caleb .............................................................................. | 17 |
|   | Santana, Dixon .......................................................................... | 16 |
|   | Santry, Heena ............................................................................ | 12, 33 |
|   | Sasaki, Larry S. ......................................................................... | 15 |
|   | Savage, Stephanie ..................................................................... | 12 |
|   | Simpson, LeRone ....................................................................... | 12 |
|   | Subhas, Gokulakkrishna ........................................................ | 13, 33 |
| T | Taggarshie, Deepa .................................................................... | 15 |
|   | Taylor, Clive............................................................................... | 11, 14, 34 |
|   | Thambi-Pillai, Thavam ................................................................ | 17 |
|   | Torres, Quirico ......................................................................... | 19, 34 |
|   | Torres, Ulises ............................................................................. | 12, 34 |
| V | Vigneswaran, Wickii T. ............................................................ | 14, 18 |
|   | Vigneswaran, Yalini ................................................................... | 13 |
| W | Wahid, Fazal Nouman ................................................................ | 15, 35 |
|   | Williams, Regan ......................................................................... | 16 |
|   | Willis, Arnold J. ........................................................................ | 17, 35 |
|   | Willison, Thomas D. .................................................................. | 17, 35 |
| X | Xeller, Charles .......................................................................... | 19, 35 |
| Y | Yeguez, Jose ............................................................................... | 17 |
| Z | Zaimorano, Lucia ....................................................................... | 19 |
### SCHEDULE AT A GLANCE

**WEDNESDAY JUNE 11**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-4:00 PM</td>
<td>Meeting Registration Prefunction</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>7:00-9:00 AM</td>
<td>Officer Breakfast</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>8:00-8:30 am</td>
<td>Endowment Fund, Board of Trustees Meeting</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>8:30-12:30 pm</td>
<td>US Section Standing Committee Meetings</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>10:00-1:30 pm</td>
<td>Officer Luncheon</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>1:30-3:00 pm</td>
<td>Board of Regents Meeting</td>
<td>Southeast Ballroom</td>
</tr>
<tr>
<td>3:00-5:00 pm</td>
<td>Executive Council &amp; House of Delegates Joint Meeting</td>
<td>Southeast Ballroom</td>
</tr>
<tr>
<td>6:00-7:00 pm</td>
<td>Welcome Reception</td>
<td>TN Grand Ballroom D&amp;E</td>
</tr>
</tbody>
</table>

**THURSDAY JUNE 12**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-3:00 PM</td>
<td>Meeting Registration</td>
<td>TN Grand Foyer</td>
</tr>
<tr>
<td>7:00-9:00 AM</td>
<td>Continental Breakfast</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>8:00 - 9:00 AM</td>
<td>Opening Ceremony and Keynote Lecture</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>9:00 - 10:30 AM</td>
<td>Trauma Surgery in the 21st Century</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>10:00-11:00 AM</td>
<td>Explore Memphis</td>
<td>Director's Row 1</td>
</tr>
<tr>
<td>11:00-12:00 PM</td>
<td>Alliance Board of Directors &amp; General Membership Meeting</td>
<td>Director’s Row 1</td>
</tr>
<tr>
<td>10:45 - Noon</td>
<td>Acute Care Surgery</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>Noon - 1:30 PM</td>
<td>Lunch Presentations</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>1:30 - 1:50 PM</td>
<td>Featured Lecture</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>1:50 - 3:20 PM</td>
<td>Annual Ethics Forum</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>3:30 PM-7:30 PM</td>
<td>Graceland Tour Excursion</td>
<td>Gather at Registration</td>
</tr>
</tbody>
</table>

**FRIDAY JUNE 13**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-4:00 PM</td>
<td>Meeting Registration</td>
<td>TN Grand Foyer</td>
</tr>
<tr>
<td>7:00-9:00 AM</td>
<td>Continental Breakfast</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>8:00 - 9:45 AM</td>
<td>Annual Research Scholarship Competition</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>8:30 - Noon</td>
<td>Neurological &amp; Orthopaedic Surgery Part I</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>10:00 - Noon</td>
<td>Pediatric Surgery</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>Noon - 1:30 PM</td>
<td>The Dr. Arno A. Roscher Endowed Lecture</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>1:30 - 2:15 PM</td>
<td>Uses of Ultrasound in Surgery Lecture Series</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>2:00 - 5:00 PM</td>
<td>AANOS Board of Directors Meeting</td>
<td>TN Grand Ballroom D</td>
</tr>
<tr>
<td>4:00 - 6:00 PM</td>
<td>Uses of Ultrasound in Surgery Hands-On Workshop</td>
<td>TN Grand Ballroom E</td>
</tr>
<tr>
<td>4:00 - 6:00 PM</td>
<td>Alternatives in Minimally Invasive Colorectal Surgery Lecture Series</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>7:00 PM</td>
<td>5th Annual AANOS Fundraising Event and Awards Dinner</td>
<td>TN Grand Ballroom C</td>
</tr>
</tbody>
</table>

**SATURDAY JUNE 14,**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-4:00 PM</td>
<td>Meeting Registration</td>
<td>TN Grand Foyer</td>
</tr>
<tr>
<td>7:00-9:00 AM</td>
<td>Continental Breakfast</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>8:00 - Noon</td>
<td>Alternatives in Minimally Invasive Colorectal Surgery Hands-On Workshop</td>
<td>TN Grand Ballroom E</td>
</tr>
<tr>
<td>8:00 - 9:45 AM</td>
<td>Considerations in Surgical Oncology</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>9:00 - 3:00 PM</td>
<td>Neurological &amp; Orthopaedic Surgery Part II</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>10:00 - Noon</td>
<td>Challenges in Vascular Surgery</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>Noon - 1:30 PM</td>
<td>Lunch Presentations</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>1:30 - 2:15 PM</td>
<td>The Dr. Andre Crotti Award Recipient’s Lecture</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>2:15 - 5:00 PM</td>
<td>Multidisciplinary Platform Presentations</td>
<td>TN Grand Ballroom A</td>
</tr>
<tr>
<td>1:30 - 5:30 PM</td>
<td>Abdominal Wall Reconstruction Lectures and Demonstration</td>
<td>TN Grand Ballroom E</td>
</tr>
<tr>
<td>6:30 PM</td>
<td>United States Section Convocation &amp; Presidential Recognition Ceremony</td>
<td>TN Grand Ballroom B</td>
</tr>
<tr>
<td>7:30 PM</td>
<td>New Fellows Reception</td>
<td>TN Grand Ballroom C</td>
</tr>
<tr>
<td>8:30 PM</td>
<td>Gala Dinner</td>
<td>Southeast Ballroom</td>
</tr>
</tbody>
</table>

**Exhibit Show**

Representatives from several companies will be present in TN Grand Ballroom B.

- **Thursday** 7:00-3:30 PM
- **Friday** 7:00-6:00 PM
- **Saturday** 7:00-1:30 PM

Please take a moment to visit these individuals whose support enhances our meeting.