PROGRAM REGISTRATION

81ST ANNUAL SURGICAL UPDATE

THE ART AND SCIENCE OF SURGERY REPAIR & REJUVENATE & RENEW



Nemacolin Woodlands Resort - Pennsylvania May 2-4, 2019

THE ART AND SCIENCE OF SURGERY REPAIR * REJUVENATE * RENEW

It is my sincere pleasure to invite you to the 81st Annual Surgical Update of the International College of Surgeons-United States Section. Our 2019 US Section annual meeting will be held from May 2 to May 4 at the Nemacolin Woodlands Resort in Pennsylvania, approximately 90 minutes from the Pittsburgh airport. I also extend a cordial invitation to the members of the American Academy of Neurological and Orthopaedic Surgeons who will once again be joining us for their 43rd Annual Scientific Meeting, which has been a very important part of our educational activity for 15 years.

Situated in the Laurel Highlands of Southwestern Pennsylvania, Nemacolin is an escape unlike any other. There are likely things you've always wanted to do, but just didn't have the access or time to do them. At Nemacolin, many of those experiences are waiting for you. Please review this brochure carefully to learn more about this amazing venue and visit the Nemacolin website for all the details.

The CME portion of our program has been titled, The Art and Science of Surgery: Repair, Rejuvenate, Renew with the planned sessions listed in this brochure. We will begin our program with what is now our annual global surgery update. In addition, featured lectures and specialty sessions will be included in a revised schedule to provide ample AMA Category 1 CME credit.

Of course a visit to a world class resort like Nemacolin would not be complete without some time to actually enjoy the property. If you can't come early or stay late, we have blocked out 4 hours on Friday afternoon for everyone to have some daylight time to experience Nemacolin.

Please watch your email inbox and check our website regularly for updates. Whether you know about the Nemacolin Woodlands Resort and have visited before or if you have never had a chance to visit, this is a perfect opportunity to discover everything there is to do in this remarkable part of the country. An abundance of activities, fine dining, entertainment as well as top notch education will all be part of the International College of Surgeons - United States Section, 81st Annual Surgical Update in Pennsylvania this May.

Andrew Her

I hope to see you there!

Andrew Klein, MD

President, United States Section International College of Surgeons

CME Accreditation Information

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.

Topics presented during the Annual Surgical Update have been designed to address and improve the attendee's knowledge and skills in the following competencies; patient care or patient-centered care, medical knowledge, practice-based learning & improvement, quality improvement and professionalism.

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 19 AMA PRA Category 1 Credits. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The following schedule and speaking commitments were accurate at time of printing; 1/07/19. For the most up to date information visit the website.

2019 Planning Committee

President Andrew Klein, MD*+

Transplantation Los Angeles, CA

Chair CME Committee Demetrius E.M. Litwin, MD*+

General Surgery Worcester, MA

Shabirhusain S. Abadin, MD

General Surgery, Darien, IL

Domingo T. Alvear, MD+

Pediatric Surgery, Harrisburg, PA

Harry Linne Anderson, III, MD*

General Surgery, Ann Arbor, MI

Alagappan Annamalai, MD+

Transplantation, Los Angeles, CA

Wallace P. Berkowitz, MD

Otolaryngology, St. Louis, MO

Frank P. Bongiorno, MD +

Trauma Surgery, Murfreesboro, TN

Steven E. Brooks, MD+

General Surgery, Lubbock, TX

Bryan N. Butler, MD

Colon & Rectal Surgery, Buffalo, NY

W. Craig Clark, MD +

Neurosurgery, Greenwood, MS

Maxime J.M. Coles, MD +

Orthopaedic Surgery, Boca Raton, FL

Anthony N. Dardano, Jr., DO

Plastic Surgery, Boca Raton, FL

Clara Raquel Epstein, MD

Neurological Surgery, Boulder, CO

Jacques-Pierre Fontaine, MD

Cardiothoracic Surgery, Tampa, FL

Zaki-Udin Hassan, MD

Anesthesiology, Lexington, KY

Michael J. Jacobs, MD +

Surgical Oncology, Birmingham, MI

Peter T. Kennealey, MD+

Transplantation, Aurora, CO

Tomasz Kozlowski, MD

Transplantation Surgery, Chapel Hill, NC

Chair Council of Specialty Groups Dixon Santana, MD *+

Vascular Surgery Lubbock, TX

Phillips Kirk Labor, MD

Ophthalmology, Grapevine, TX

Rifat Latifi, MD+

General Surgery, Hawthorne, NY

Sharique Nazir, MD+

General Surgery, Milltown, NJ

Marco A. Pelosi III, MD +

Obstetrics & Gynecology, Bayonne, NJ

Mark Perlmutter, MD*

Orthopaedic Surgery, Rocky Mount, NC

Francis J. Podbielski, MD*+

Thoracic Surgery, Riverside, IL

Vichin Puri, MD +

Transplantation Surgery, Dallas, TX

Arno A. Roscher, MD

Pathology, Los Angeles, CA

M. Hosein Shokouh-Amiri, MD

Transplantation Surgery, ,Shreveport, LA

Mamta Swaroop, MD+

Trauma Surgery, Chicago, IL

Thavam Thambi-Pillai, MD *

Transplantation Surgery, Sioux Falls, SD

Jacob Varon, MD

Plastic Surgery, Belaire, TX

Sivamainthan Vithiananthan, MD+

General Surgery, Providence, RI

Thomas D. Willson, MD+

Plastic Surgery, South Hero, VT

Lucia Zamorano, MD+

Neurological Surgery, Birmingham, MI

*Executive Committee Member + CME Committee Member

MEETING-AT-A-GLANCE

REMINDER

ICSUS Business Meetings will be conducted on Thursday, May 2nd beginning at 8am and concluding at 2:00pm.

The AANOS Board of Directors Meeting will be held Friday at 4:00pm.

SCIENTIFIC PROGRAM

Thursday, May 2, 2019

2pm-6pm

OPENING SESSION - FEATURED LECTURES & SURGICAL CONSORTIA:
A PRACTICAL RESOURCE BUILDING STRATEGY?

Friday May 3, 2019

8am-12pm

AANOS Annual Scientific Meeting Neurological and Orthopaedic Surgery Part 1

8am-10:00am Updates on HPB & Oncologic Surgery

10am-12pm Advances in Transplant Surgery

12pm- 4:00pm

FREE TIME TO EXPLORE RESORT ACTIVITIES

4pm-5:15pm

EMERGING SURGEONS FORUM

5:15pm-6:30pm ANNIAL RESEARCH SCHOLARSHIP COMPETITION

Saturday May 4, 2019

8am-12pm

AANOS Annual Scientific Meeting Neurological and Orthopaedic Surgery Part 2

8am-10am

GENERAL PLENARY SESSION OPEN FORUM

10am-12pm

Advances in Vascular & Thoracic Surgery

12pm-1:30pm Honors Lincheon

1:30pm-3:15pm

TRAUMA AND ACUTE CARE SURGERY FORUM

3:30pm-6pm
PAIN MANAGEMENT & ETHICS WORKSHOP

FEATURED SPEAKERS

THE DR. ANDRE CROTTI LECTURE



Dr. Lloyd E. Ratner, MD, MPH, FACS, will present the Dr. Andre Crotti Lecture. Dr. Ratner, is Professor of Surgery and Director of Renal and Pancreatic Transplantation at Columbia University. Prior to joining the faculty at Columbia, Dr. Ratner was on the faculty of Johns Hopkins Uni-

versity in Baltimore, and served as the Chief of Solid Organ Transplantation at Thomas Jefferson University in Philadelphia.

Access to organ transplantation has been Dr. Ratner's major academic interest. Dr. Ratner has been a leading innovator in transplantation for two decades. In 1993, he performed the world's first dual renal transplant. In 1995 (with Dr. Louis Kavoussi) he performed the first laparoscopic donor nephrectomy, and set the stage for its widespread adoption, which resulted in a profound increase in living donor kidney transplantation. Dr. Ratner has made significant contributions in overcoming immunologic incompatibilities prohibited transplantation. He plasmapheresis/IVIg protocol for alloantibody desensitization in 1998. In 2001, Dr. Ratner orchestrated the second paired-kidney exchange in the U.S. Subsequently, he arranged the first paired kidney exchanges in both Pennsylvania and New York. More recently Dr. Ratner has been a leading proponent of including compatible donor/recipient pairs in kidney exchanges. All of these strategies have increased organ availability and access to transplantation. Additionally, he has made important contributions to improve living donor safety. For his work, Dr. Ratner has received numerous awards and honors. And, he has been invited to speak and operate at various venues around the world.

Dr. Ratner has authored or co-authored over 180 peer-reviewed publications, and has been a federally funded investigator. His publications have been cited over 12,000 times. He served as the Chairman of the Board of Directors of the LiveOnNY (formerly the New York Organ Donor Network), and has served on numerous national committees including the Board of the United Network for Organ Sharing. He was elected Treasurer of the American Society of Transplant Surgeons, and presently serves as that Society's President-Elect.

Dr. Ratner originally hails from Brooklyn, NY. He received his undergraduate education at the State University of New York at Buffalo. He received his M.D. from Hahnemann University. His general surgery training was obtained at Long Island Jewish Medical Center. He completed a Fellowship in Transplantation Surgery and Immunology at Washington University. In 2011 Dr. Ratner completed a Master of Public Health with a focus on health care policy, administration and management.

THE DR. ARNO A. ROSCHER ENDOWED LECTURE



Dr. Ara G. Tilkian will present the Dr. Arne A. Roscher Endowed Lecture. Dr. Tilkian was born in the village of Kesab, Syria. He spent a formative year in Missoula, Montana as an American Field Service Exchange Student and graduated from Missoula County High School with mem-

bership in the Alpha Omega, Alpha Honor Society. He attended the American University of Beirut, Lebanon and was recognized as an outstanding freshman and graduated with a Bachelor of Science degree with Distinction. He received his MD degree with Honors at the University of Illinois in Chicago. Post graduate training included 5 years at Stanford University Medical Center where he completed his cardiology training.

Dr. Tilkian moved to Los Angeles in 1975 and has been an active member of Cardiovascular Consultants Medical Group since then. He has been the director of the Cardiology Program at Providence Holy Cross Medical Center in Mission Hills, California since 1989.

Dr. Tilkian has been on the clinical faculty of UCLA Medical Center and continues to participate in the teaching of cardiovascular fellows. He has published over 20 abstracts and articles in peer review journals, and has written two textbooks in cardiology.

He is board certified in internal medicine, cardiovascular disease and interventional cardiology.

Dr. Tilkian has a special interest in the History of Medicine. He is working on a book that explores what doctors have been doing for the past 4000 years and what their dress code was!

He is also interested in Human Longevity. How long did people live in the past? What is the current expectation and how is Science and Medicine trying to extend Human Longevity?

He will share with us the current efforts of slowing, stopping and reversing the aging process!

Thursday, May 2, 2019

2pm-6pm Friday May **3**, **2019**

8am-12pm

OPENING SESSION - FEATURED LECTURES & SURGICAL CONSORTIA: A Practical Resource Building Strategy?

The session will feature the Dr. Andre Crotti Lecture, where you will learn about a pivotal advance in transplantation, Laparoscopic Donor Nephrectomy; as well as the Dr. Arno Roscher Endowed Lecture during which the audience will learn about the aging process and how to slow, stop or reverse its effects. The audience will also learn about various initiatives related to Global Surgery and the humanitarian activities many ICS Fellows are undertaking. Included will be informative lectures about endeavors in Eastern Europe, Asia, Latin America, Africa and more. A presentation about the ongoing development and implementation of a registry to assist in the development of medical missions will also be included. Participants will gain a better understanding about how participation in humanitarian activities can not only benefit the underserved patients in low and middle income countries, but also how the unique cases experienced during these projects can positively impact a physician's practice back home in the United States.

World Surgical Foundation, What We Do and the Role of ICS Domingo Alvear, MD, Mechanicsburg, PA

Mission Medicine (International Surgery) Gene Bolles, MD, Denver, CO

Team Broken Earth: The Evolution of a Sustainable Medical Relief Charity Andrew Furey, MD, St. John's, NL, Canada

Telemedicine Programs Albania and Cabo Verde: The Tales from Two Continents?

Rifat Latifi, MD, Katonah, NY

Partners for World Health: Origins and Collaboration Options Elizabeth McLellan, RN, MSN, MPH, Portland, ME

 $\begin{tabular}{ll} \textbf{Matching Resources to Need: A Template for Collaboration} \\ \textbf{Mark N. Perlmutter, MD}, Rocky Mount, NC \\ \end{tabular}$

The Dr. Andre Crotti Lecture

 ${\bf 24\ Years\ of\ Laparoscopic\ Donor\ Nephrectomy:\ A\ Pivotal\ Advance\ in\ Transplantation}$

Lloyd E. Ratner, MD, MPH, New York, NY

The ACS Approach: Capacity Building in Sub-Saharan Africa Girma Tefera, MD, Madison, WI

The Dr. Arno Roscher Endowed Lecture

How to Slow, Stop or Reverse the Aging Process Ara Tilkian, MD, Mission Hills, CA

Update from the American Board of Surgery Joshua Mammen, MD, PhD, Kansas City, KS

AANOS Annual Scientific Meeting Neurological and Orthopaedic Surgery Part 1

Participants in this session will receive valuable updates on the diagnosis and most advanced treatment options for a variety of Neurosurgical and Orthopaedic maladies. Learners will be informed about: an effective, readily available and affordable model for laboratory surgical training; the symptoms and treatment options for Tarlov cysts; distal radius fractures and the various methods of treatment that have evolved over the years; the role of electrodiagnostic testing for compression neuropathies and the appropriate situations that indicate the use of endoscopic surgery on the lumbar spine. Upon completion of the session, learners will be prepared to make better diagnoses and recommendations for treatment of the various conditions discussed. Learner will obtain the appropriate information during this session to determine whether further more advanced educational initiatives are required in order to effectively implement the information into practice.

Laboratory Surgical Training Utilizing the Human Anatomy Under Life-like Conditions

Emad Aboud, MD, Little Rock, AR

From Cosmetic Surgery to Regenerative Medicine: An Awakening Gregory Lawrence, MD, Memphis, TN

Regenerative Medicine: Having Fun Again Gregory Lawrence, MD, Memphis, TN

Electrodiagnostic Testing for Compression Neuropathies: It's Role in Value-Based Healthcare

Mark Perlmutter, MD, Rocky Mount, NC

Evolution in the Treatment of Distal Radius Fractures Sudhir Rao, MD, Big Rapids, MI

Management of Tarlov Cysts William Welch, MD, Philadelphia, PA

Endoscopic Management of Lumbar Spine Lucia Zamorano, MD, Birmingham, MI



Friday May 3, 2019

8am-10:00am Friday May 3, 2019

4pm-5:15pm

UPDATES ON HPB & ONCOLOGIC SURGERY

Participants in this session will receive an update about the indications and patient selection criteria for the newest techniques in breast cancer surgery and a review of the technical aspects of these procedures. Learners will also be presented with video vignettes of laparoscopic pancreatic surgery to demonstrate anatomy, exposure, suturing methods, and technical pearls. New options regarding the management of pancreatic cystic neoplasms will be discussed. Upon completion of this session, the learner will have a more comprehensive understanding of the issues presented and be able to appropriately apply what has been taught into their patient care activities.

Laparoscopic Whipple Barish Edil, MD, Oklahoma City, OK

Technical Tips to Consider During Laparoscopic Pancreas Surgery Michael Jacobs, MD, Birmingham, MI

Updates on the Surgical Management of Breast Cancer Colleen Murphy, MD, Lone Tree, CO

Neoadjuvant Chemotherapy Associated with Retrieval of Less than Twelve **Lymph Nodes Colon Cancer Surgery** Yana Puckett, MD, MBA, MPH, MSc, Lubbock, TX

A New Conception of Oral Potentially Malignant Disorders (PMDs) and Surgical Management of PMDs Joji Sekine, DDS, PhD, Nagasaki, Japan

Management Algorithm for Pancreatic Cystic Neoplasms Thav Thambi-Pillai, MD, Sioux Falls, SD

The Role of 3D Printing in Hepatic Surgery George Tsoulfas, MD, PhD, Thessaloniki, Greece

Friday May 3, 2019

10am-12pm

ADVANCES IN TRANSPLANT SURGERY

Participants will gain intensive instruction on many essential elements in transplant surgery such as; living donor liver transplant, uterus transplant, and access to transplantation among others.

Also included will be a second lecture by this year's recipient of the Dr. Andre Crotti Award for Distinguished Service to the Profession of Surgery. Upon completion of the course, surgeons of all specialties will have a better more comprehensive understanding of the various topics related to transplant surgery presented during the symposium.

Living Donor Liver Transplant: Changing the Paradigm Abhinav Humar, MD, Gibsonia, PA

Uterus Transplantation -- Progress to a Viable Reality Greg McKenna, MD, Dallas, TX

Access to Transplantation: Who Shall Live and Who Shall Die? Lloyd E. Ratner, MD, MPH, New York, NY

Transplant Surgery Considerations in the 21st Century Amit Tevar, MD, Pittsburgh, PA

EMERGING SURGEONS FORUM

Providing the future surgeons of the world an opportunity to share their unique experiences with senior colleagues is a noteworthy goal of the International College of Surgeons. Case reports from surgical residents and medical students with an interest in surgery will be presented during this lead-in to the Annual Scholarship Competition.

Traumatic Abdominal Wall Injuries: A Case Series Beatrice Caballero, MS, Lubbock, TX

Unique Constellation of Thoracoabdominal Injuries in a High-speed Motor **Vehicle Collision**

Caroline Chung, BS, BA, Lubbock, TX

Transpopliteal GSW Causing an Acute Popliteal Venous Thrombosis and Associated Major Pulmonary Embolus Grace Shim,, Lubbock, TX

A Unique Presentation of Traumatic Diaphragmatic Hernia Rupture in a 37-Year-Old Man Natalie Tully, BS, Austin, TX

Friday May 3, 2019 5:15pm-6:30pm

ANNUAL RESEARCH SCHOLARSHIP COMPETITION

Surgical residents and medical students who have submitted research manuscripts will participate in this annual contest and present their research in an oral format. Manuscripts as well as the oral presentations of the competitors will be judged by a panel to determine the winners of various cash prizes. Attendees will be presented with fascinating information by some of the brightest minds in medicine – support the future of surgery by attending this session.

Treatment of Cardiac Arrhythmia Associated with Subarachnoid Hemorrhage: A Literature and Protocol Review.

Caitlin Clark, MD, Cleveland Heights, OH

Treatment of Appendicitis: Do Medicaid and Non-Medicaid Enrolled Patients Receive the Same Care?

Amanda Fazzalari, MD, Waterbury, CT

Endobronchial Ultrasound With Transbronchial Needle Aspiration in The Diagnosis of Thoracic Diseases; A Single Center Experience Dwight Harris II, BS, Manchester, KY

Laparoscopic Colectomies Associated with Decreased Retrieval of Twelve or More Lymph Nodes Compared to Open in Elective Colon Cancer Surgery Yana Puckett, MD, MBA, MPH, MSc, Lubbock, TX

Saturday May 4, 2019

8am-12pm Saturday May 4, 2019

8am-10am

AANOS Annual Scientific Meeting Neurological and Orthopaedic Surgery Part 2

A continuation of the Friday session, participants in this session will receive valuable updates on the diagnosis and most advanced treatment options for a variety of Neurosurgical and Orthopaedic maladies. Learners will receive information about the latest technology in Orthopaedics; post-operative cognitive dysfunction; hip fracture protocols; intracerebral hemorrhage; practice related email use by surgeons; MIS lumbar fusion; infection related to spinal instrumentation; as well as current trends in hand and wrist surgery. Learners will have a more comprehensive understanding of these topics and if appropriate be able to utilize what they have learned into their practice.

Post-Operative Cognitive Dysfunction (POCD) Gene Bolles, MD, Denver, CO

Robotic Technology in Orthopedics Naga Suresh Cheppalli, MD, Albuquerque, NM

Imaging Alternatives in Pedicle Screw Placement. Adapting Machine Vision to Spinal Navigation

W Craig Clark, MD, PhD, Carrollton, MS

Hospital Hip Fracture Protocol Leads to Improved Outcomes Kristy Fisher, MBA, MSc, Bellmore, NY

Pediatric Glioblastomas: Study of a Tunisian Surgical Series Ghassen Gader, MD, Ben Arous, Tunisia

Update in Total Hip Replacement Advancements and Painful Osteoarthritis of the Hip

Robert Mathews, MD, PhD, Millersville, PA

Current Trends in Hand and Wrist Surgery Mark Perlmutter, MD, Rocky Mount, NC

Non-traumatic Intracerebral Hemorrhage: Surgical Indications and Technical Considerations

Asem Salma, MD, Lima, OH

Infection with Spinal Instrumentation: The Current Management Strategies Asem Salma, MD, Lima, OH

Climate Change and Nutritional Perturbations in Children with Hydrocephalus Francis Gregory Samonte, MD, San Diego, CA

A 1-year Prospective Time Study of Email Use William Welch, MD, Philadelphia, PA

Minimally Invasive Spine Lumbar Fusion with Expandable Inter Body: Optimization of Sagittal Alignment Lucia Zamorano, MD, Birmingham, MI

GENERAL PLENARY SESSION OPEN FORUM

Representing 18 surgically related specialties, ICSUS CME programs are rich in diversity. The multidisciplinary educational sessions presented in this activity seek to provide content that improves the learner's competence, performance or patient outcomes through interaction with peers. Due to the scope of our global organization, ICSUS encourages participants from all specialties to interact and learn from one another, thereby building a broad base of knowledge. In this session, topics will cover issues related to management of cleft lip in developing nations; issues and options for use of mesh in hernia repair, abdominal wall reconstruction, bariatric surgery, rural surgery and plastic surgery. Participants in this session will become more well-rounded physicians by having a better understanding of not only their own specialties, but also other specialties for which they may encounter during their treatment of patients.

Cleft Lip Prevalence and Management in a Developing Nation Saman Ahmad, BDS, New Delhi, India

Do Absorbable Mesh Get Integrated in Fascia in Real Life? Samim Chalabi, MD, Towanda, PA

Inguinal Hernia Repair with Mesh-How I do It Michael Jacobs, MD, Birmingham, MI

Complex Abdominal Wall Reconstruction: Practical Approaches Rifat Latifi, MD, Katonah, NY

The Role of Bariatric Surgery in the Treatment of Diabetes Sharique Nazir, MD, Staten Island, NY

Up The Creek Without a Paddle: Adventures in Rural Surgery During My First Year

Tracy Sambo, MD, Edenton, NC

Contour Mapping of Human Surface Anatomy: Defining Focal Fat Pad Loci and Improving Surgical Outcomes with Anatomically-Guided Adipose Reconfiguration

David Teplica, MD, MFA, Chicago, IL



PRELIMINARY SCHEDULE

Saturday May 4, 2019

10am-12pm Saturday May **4**, **2019**

1:30pm-3:15pm

ADVANCES IN VASCULAR & THORACIC SURGERY

Representing two of the most active specialties in the United States Section of ICS, this session will provide updates on strategies and management options for the treatment of a variety of vascular and thoracic surgery topics as identified below. Some of the best in the field will inform the audience about Nutcracker Syndrome, Short Neck Infra-Renal AAA, Non-small Cell Lung and Esophageal GIST Cancers, Repair of Blunt Traumatic Aortic Injury, Complex Hemodialysis Access and more. Participants who practice Vascular or Thoracic surgery will have a comprehensive understanding of these topics and be able to utilize what they have learned into their practice if applicable.

Noncardiac Massive Thoracic Bleeding Raymond A. Dieter Jr., MD, Glenn Ellyn, IL

Management of Short Neck Infra-Renal Abdominal Aortic Aneurysms With Fenestrated ZFEN Stents: Single Institution Experience Faisal Jehan, MD, Valhalla, NY

TAVR- a Multi-Disciplinary Model for the Future Structural Heart Tessa London, MD, MPH, Lexington, KY

Strategies and Management of Concurrent Non-small Cell Lung and Esophageal GIST Cancers

Francis Podbielski, MS, MD, Riverside, IL

Nutcracker Syndrome: A New Paradigm in the Diagnosis and Management? Thomas Pshak, MD, Denver, CO

Delayed Endovascular Repair of Blunt Traumatic Aortic Injury Aditya Safaya, MD, Ossining, NY

Changing Paradigm in the Treatment of Carotid Artery Disease Ehab Sorial, MD, Los Gatos, CA

Thinking Outside the Box. Complex Hemodialysis Access, Advanced Approaches and Creative Techniques
Ehab Sorial, MD, Los Gatos, CA

Saturday May 4, 2019 12pm-1:30pm

HONORS LUNCHEON / SPECIAL PRESENTATION

This special lecture will provide attendees with valuable information about how to improve their surgical practice and manage costs. Avoiding unnecessary costs in a healthcare practice should be a top priority of every surgeon and attendees will learn how this can be accomplished.

Cost Management in Healthcare Sibu Saha, MD, MBA, Lexington, KY

TRAUMA AND ACUTE CARE SURGERY FORUM

Unique cases and how they were handled will be presented in this annual forum. The audience will be made aware of what can be encountered in the emergency room and will know what to do if they come across similar cases. Featured will be several presentations by medical students from Texas Tech who have a wide range of experience in this area.

Fulminant Myonecrosis from a Minor Puncture Wound. A Rare Case of Clostridial Septicum Gas Gangrene Saptarshi Biswas, MD, Pittsburgh, PA

Dog Bites - Dogmas and Evidences Saptarshi Biswas, MD, Pittsburgh, PA

Damage Control Surgery in Trauma Akella Chendrasekhar, MD, Lake Hopatcong, NJ

Clostridial Sepsis in the Trauma Patient Anthony Kopatsis, MD, New York, NY

Trauma Patients in the Rural Setting Sharique Nazir, MD, Staten Island, NY

Saturday May 4, 2019

3:30pm-6pm

PAIN MANAGEMENT & ETHICS WORKSHOP

The audience will learn about the history of pain as it relates to patient care and how the use of opioids to treat pain has developed into an addiction epidemic. The differences between acute and chronic pain will also be discussed to provide the audience with the most recent research and recommendations on how prescribing should be handled. This interactive session will provide ample time for discussion and debate that will include significant audience participation and feedback. Upon completion of this session, learners will have a better understanding of how to appropriately prescribe pain medications and when the use of certain specific medications such as opioids are indicated based on current guidelines.

Opium and Opioid History: Moving Beyond Opioids Frank P. Bongiorno, MD, Murfreesboro, TN

Current State of Acute and Chronic Pain Management: Identifying the Non-Opioid Alternatives!

Vinita Singh, MD, Atlanta, GA

Nemacolin Woodlands Resort

When the College looks for a meeting for a meeting destination, one aspect that is given a lot of thought is finding something unique. Our host property definitely answers that need. Following is just the beginning of what guests can explore while on property. To make sure that everyone has the time to Repair, Rejuvenate and Renew will take a break from regular CME programming from Noon-4pm on Friday. Please be sure to make advance reservations by calling the hotel: 1-866-344-6957. For more details and pricing information visit www.nemacolin.com/activities.

MYSTIC ROCK

Voted #1 in Golfweek's "Best Courses in Pennsylvania," the Pete Dye designed Mystic Rock respects the natural environment and has a course rating of 77 and slope of 149 from the championship tees.

As former home to the 84 Lumber Classic, a PGA Tour event, Mystic Rock has played host to top professional players in the world including Phil Mickelson and Vijay Singh.

SHEPHERD'S ROCK

Voted #5 in Golfweek's "Best Courses in Pennsylvania," the 7,151-yard Shepherd's Rock offers extraordinary golf in a spectacular setting. The rolling bucolic terrain is ideal to fully utilize Dye's brilliant imagination in fashioning an outing that is both fun and challenging for all golfers. The layout is a perfect companion to Nemacolin's PGA Tour-tested Mystic Rock.

GOLF ACADEMY

The Nemacolin Golf Academy offers a unique blend of exceptional golf instruction, club fitting and technology designed exclusively to help elevate your game. Our professional instructors use state-of-the-art diagnostic tools to analyze your swing, putter stroke and ball flight to create tailored instruction.

PRIDE & JOY AIRPLANE HANGAR

Located at the end of Nemacolin's airstrip, the Pride and Joy Vintage Airplane Hangar is open for the public and includes a private collection of vintage planes, including a 1931 Pitcarin PA-8. This rare and classic plane, fully restored and airworthy was once in the collection of the late movie star and Hollywood icon Steve McQueen.

WOODLANDS SPA

Founded on the principles of Feng Shui, this soothing sanctuary for the mind, body and soul features rejuvenating treatments with massages, body scrubs and wraps, facials, manicures and pedicures. Signature services include a Water Path treatment, the Hot Stone Shirodhara, and the Dream Catcher, a blend of Native American and Lomi Lomi healing techniques.

HOLISTIC HEALING CENTER

The Holistic Healing Center focuses on integrative methods designed to achieve life balance and wellness. From acupuncture and healing meditation to infrared therapies and metabolic counseling, the center is committed to individual wellness.

FITNESS CENTER

A total body workout awaits with strength equipment, elliptical cross trainers, treadmills, rowing machines, stationary bikes and free weights. Exercise enthusiasts will love the array of yoga, Pilates, TRX sessions, aqua aerobics and personal training sessions with our certified trainers.

ADVENTURE CENTER

Nemacolin Woodlands Resort's Adventure Center, located at the Sundial Lodge, is the hub of outdoor activity, adventure and recreation. From weekend

warriors to accomplished athletes, be sure to carve out time to enjoy all the activities we have to offer.

- 20' Ropes Course
- 3,000' Fatbird Superflyer Dueling Zip Line
- 40' Fatbird Canopy Tour
- 50' Climbing Wall
- Biking & Hiking
- Bowling & Arcade Games
- Disc Golf
- Fallingbrook Miniature Golf
- Off-Road Driving Academy
- Little Tykes Ropes Course
- Target & Combat Paintball
- Tennis

WILDLIFE ACADEMY

Educational programs that help guests learn about and appreciate the wild world. Bears, bison, lions and tigers are just some of the animals guests can see up close. Tours of the Wildlife Nursery are also available.

CHILDREN'S PROGRAMS

Nemacolin offers fun activities for children

- 3' Kids pool
- Grove Kids Spa
- Arcade
- Hardy Girls Gymnasium
- Kidz Klub
- Kidz Night Out
- Babysitting Services

LITTLE TYKES

Paradise Pool

Qualified associates will provide children ages 6 weeks through 4 years with top-rated care and education.

POOLS

Nemacolin offers five swimming pools for our guests' enjoyment. Spa Lap Pool Adult Pool Falling Rock Infinity Pool

THE NEMACOLIN FIELD CLUB

Woven through 140 acres of woodlands, valleys and pastures in the Allegheny Mountains, the Nemacolin Field Club complex houses one of the nation's top sporting clays facilities and is the gateway to some of the finest fishing streams and creeks in the eastern United States.

THE SHOOTING ACADEMY

Featuring 35 sporting clay stations that can be tailored to challenge everyone from the most seasoned wing shooter to the novice. National Sporting Clays Association (NSCA) certified instructors offer lessons for both beginners and advanced shooters.

ORVIS® FLY FISHING

For anglers of any skill level, the Orvis® Endorsed Fly Fishing Lodge at the Nemacolin Field Club is in a class by itself. Anglers can choose from many Pennsylvania waters, including the Youghiogheny River.

CULTURAL

Nemacolin is steeped in history, art and culture. From painting classes to sculpture tours, and an impressive art collection, guests can flex their artistic side.

The resort's tasting program invites guests to experience world class wines. The Wine Cellar is one of the most extensive in the country featuring upwards of 21,000 bottles of wine.

Tastings

Wine Cellar Tour

HERITAGE COURT SHOPPES

Offering a selection of men's, women's and children's fashions, logo clothing, unique gift items, children's toys and much more.

LADY LUCK CASINO NEMACOLIN

Place a bet. Listen to great live music. Bite into a juicy burger. Win! Lady Luck Casino Nemacolin includes approximately 600 slot machines, 29 table games and Otis & Henry's Bar and Grill, a casual dining restaurant that combines the comfort of a neighborhood bar with delicious favorites you'd cook at home. The Lone Wolf Bar features delicious food, live entertainment and great drinks.

*Advanced registration is **STRONGLY** encouraged, additional fees may apply.

Nemacolin Woodlands Resort Reservations

Alliance Board of Directors & General Membership Meeting

Thursday May 2

Please join us to discuss Alliance plans for the Annual Meeting and beyond. If you have ever wondered what the Alliance is or does, then this meeting shouldn't be missed.

Welcome Reception Thursday May 2

Join us as we mark the opening of the 81st Annual Surgical Update. This is a moment to come together and meet new friends & catch up with long-time colleagues. This event, held in the resort's Reflection gallery will provide attendees with a personal viewing of specially curated contemporary artwork and scenic views of the property and beyond.

Nemacolin Art Tour Friday May 3,

Meet in the Chateau Lobby for a special private tour of the Nemacolin Art collection . **\$20/PERSON TICKETS MUST BE ORDERED IN ADVANCE.** (Event may be cancelled if there is not enough interest.)

Honors Luncheon Saturday May 4

Please join us as we induct our Section's new Fellows into the College and honor those who have contributed to the success of our meeting and our Section.

Closing Dinner Saturday May 4

Join us as we come together for one last event before we bid farewell until next year. Andrew Klein, MD and Mark Perlmutter, MD invite you to attend the combined closing dinner of ICS-US and the AANOS. The blacktie optional event will feature complimentary wine at your table, award presentations and live entertainment.

PRICE: \$150/PERSON, TICKETS MUST BE OR-

PRICE: \$150/PERSON, TICKETS MUST BE ORDERED IN ADVANCE.

Chateau Rooms: \$219/night Single/Double Lodge Rooms: \$189/night Single/Double

Resort Fee The nightly rate is subject to a \$20.00 Resort Fee. The Resort Fee includes valet parking, self-parking, on-property shuttle service, Fitness Center access including Wet Areas, wireless internet, local and toll free calls, outdoor pool access, in-room coffee or designated complimentary coffee areas, daily newspaper, Fallingbrook Mini Golf and hiking trails access.

All Reservations will be charged a one-night deposit of room and tax. You may cancel without penalty up to 72 hours prior to arrival. Cancellations made less than 72 hours prior to arrival will forfeit the one-night deposit.

Booking Online

Visit www.nemacolin.com
Use group code 10D675

If you would like to arrive early or stay late, have special requests regarding your room, making activity reservations or booking private transportation you will need to call the resort.

Booking By Phone

Call 1-866-344-6957 Select Option 3

Inform hotel staff know that you are part of the International College of Surgeons Annual Surgical Update OR provide the group code: 10D675.

REGISTRATION INFORMATION

Meeting Registration

The Meeting Registration form is on the next pages. Everyone attending or participating in educational sessions, including faculty, is expected to complete the registration form and return it with payment. Registrations received without payment will not be processed.

Supplemental Registration

This category is not appropriate for physicians who will attend educational sessions. All other individuals who are present at meeting events must register in this category. Including: Spouses, Domestic Partners and Relatives. Included in this registration are: Breakfasts, Coffee Breaks, Lunches, non-ticketed Alliance Activities, and one ticket to the Opening Reception.

Cancellation Policy

The cancellation deadline is April 2, 2019. Refunds will be issued, minus a \$75 processing fee, upon receipt of written notification via fax or mail. Verbal or written cancellations after April 2, will not be honored. Please allow four to six weeks after the meeting for your refund.

Becoming a Fellow/Member

Surgeons, residents or medical students, or other allied health professional who has submitted a complete application for membership with their meeting registration will be allowed to attend the meeting at the Fellow/Member rate.

Fees

Meeting-related fees must be paid in US funds. Checks as well as Visa, Master Card, and American Express are acceptable forms of payment. Unless noted, all prices within this brochure are in US dollars.

Attire

Business casual attire is recommended in educational sessions and on-site social activities. Casual attire is appropriate for most off-site social events. The Closing Dinner is a Black-Tie Optional Event.

Registration Types ICS or AANOS Fellow

Any member in good-standing of either the ICS or the AANOS.

Junior ICS Fellow

Any surgical resident or medical student who has received or applied for ICS Junior Fellow status

ICS Allied Member

Any Physician Assistant or Nurse Practitioner who is or has applied for ICS Allied Member status.

Non-member

Any Surgeon attending the meeting who is not an ICS or AANOS Fellow.

Medical Students

Anyone currently enrolled in a medical school and has not begun residency training who is not an ICS Junior Fellow.

Resident

Asurgical resident who is not an ICS Junior Fellow.

Allied Health Professional

Anyone working in allied fields such as PA's, NP's RN's etc. who is not an ICS Allied Member.

Language

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

Registration Discount

As a reward for those who do book in our conference hotel we are providing a \$100 discount on the meeting registration fee. To access this discount reserve your hotel room at the Nemacolin Woodlands Resort prior to registering for the meeting then enter the confirmation number on the registration form online. You must book your hotel room first, the discount will not be refunded to you if you book your room after registering.

If you have questions please contact ICSUS Headquarters call 312-787-1662 or email mkearney@ficsonline.org for assistance.

81st Annual Surgical Update # International College of Surgeons United States Section Attendee/Speaker Registration Information

43^{rd} Annual Scientific Meeting lpha American Academy of Neurological and Orthopaedic Surgeons

Check here if you are an ☐ IO	CS Fellow AANOS Member	□ MD □DO □RN □ PA □ NP	☐ Other:
Name			
Address			
City	State	Zip	
Country			
Phone	Fax	<u> </u>	
E-mail	Spe	ecialty	
	Select a registration option below, every	EGISTRATION participant must register for the meeting. atically receive one lunch ticket per day.	
	Until 4/2/19 After 4/2/19	Un	ril 4/2/19 After 4/2/19
ICS or AANOS Fellow	\$750 🗅 \$850 🗅	Non-member	\$875 □ \$975 □
Junior ICS Fellow	\$375 🗆 \$475 🖸	Non-Member Medical Students	\$425 \(\Delta\) \$525 \(\Delta\)
ICS Allied Member Member Medical Students	\$375 \$475 \$475 \$475 \$	Non-Member Resident Non-Member Allied Health Professional	\$425 \(\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\}}}}}}}}}} \exittinm{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\}}}}}}}}}}}}}}
Suppleme	NTAL REGISTRATION	Exter your Nemacolin Woodlands Resor	t Confirmation Number
~	ate for physicians who will attend ed- dividuals who are present at meeting	// to deduct \$1	00 from the registration fee
events must register in this category. Including: Spouses, Domestic		Total Due	
Partners and Relatives. Includ	ed in this registration are: Breakfasts,	General Registration Fee	\$
Coffee Breaks, Lunches, non-ticketed Alliance Activities, and the		Supplemental Registration Fee	\$
Opening Reception.		Social Event Tickets	\$
		Nemacolin Woodlands Reservation Discount	\$
Name		Amount Paid	\$
		O Check O Master Card O Visa Make checks payable to t	•
Name		Card Number	
Spouse/Partner/Guest	Quantity x \$250= \$		
Social Event Tickets		Expiration. Date, 20	
Art Tour (Friday)	Quantity x \$20= \$	Cardholder Name	
Closing Dinner	Quantity x \$150= \$	Signature	
Social Event Tickets	Total \$		
SOCIAL EVENT TICKETS	I VIAL Φ		

MAIL OR FAX THIS FORM WITH PAYMENT TO:



PROGRAM REGISTRATION



81st Annual Surgical Update