SCIENTIFIC PROGRAM 81st ANNUAL SURGICAL UPDATE THE ART AND SCIENCE OF SURGERY REPAR & REJUVENATE & RENEW



Nemacolin Woodlands Resort - Pennsylvania May 2-4, 2019

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SCIENTIFIC PROGRAM

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WELCOME FROM THE GOVERNOR OF PENNSYLVANIA



COMMONWEALTH OF PENNSYLVANIA OFFICE OF THE GOVERNOR



GREETINGS:

It is my pleasure to join with the United States Section of the International College of Surgeons (ICS-US) to welcome all those gathered for the 81st Annual Surgical Update, The Art and Science of Surgery: Repair – Rejuvenate – Renew.

Since its inception in 1935, the ICS-US has provided continuing medical education of the highest quality to its members and served as a forum for the sharing of surgical knowledge and expertise. The Annual Surgical Update provides an opportunity for hundreds of surgeons and their guests to study the newest and most promising developments in the world of surgery, and we are honored that this year's event is taking place in Pennsylvania. It is my hope that this event's example of passion and innovation will inspire others, and I am certain that those in attendance will continue to make a difference for years to come.

As Governor, and on behalf of all citizens of the Commonwealth of Pennsylvania, I am delighted to welcome you all to the United States Section of the International College of Surgeons' 81st Annual Surgical Update. Please accept my best wishes for an enjoyable event.



Tan U

TOM WOLF Governor May 2-4, 2019

WELCOME FROM THE INTERNATIONAL COLLEGE OF SURGEONS WORLD PRESIDENT



Dear Friends:

As the International College of Surgeons World President, it is my pleasure and privilege to welcome you to the 81st Annual Surgical Update of the United States Section of the International College of Surgeons with the theme of The Art and Science of Surgery: Repair, Rejuvenate, Renew. This 81st Surgical Update is based on the excellent planning and organization of the US Section leadership and provides you with an excellent, interactive learning opportunity, in a beautiful part of the United States in Southwestern Pennsylvania in the Laurel Highlands.

The agenda includes lectures on global humanitarian surgery, the strategic thrust of the International College of Surgeons. Dr. Max Thorek founded the International College of Surgeons 84 years ago and his humanitarian philosophy is as relevant today as then. Dr. Thorek believed that the International College of Surgeons was to be a true College whose prime function would be to teach men and women, all thirsting for knowledge. His philosophy led to the humanitarian involvement of the College in the World Health Organization (WHO), in which the College has and continues to significantly benefit from the privilege of being a Non-Governmental Organization in Official Relations with the WHO. This is what makes us unique and what sets us apart from the many other surgical associations: we are a truly global surgical association with multiple, active missions all around the world, where our Fellows are leading the way.

This particular meeting is very exciting for me, as Professor Lloyd Ratner, MD, will be present and honored by the International College of Surgeons. Professor Ratner is Professor of Surgery and Director of Renal and Pancreatic Transplantation at Columbia University in New York. He is a true pioneer in the field of transplantation and his choice is a testament to the academic excellence that the US section and its members exemplify.

Most of all, this great academic event, will also serve as an opportunity for Fellows from all around the globe to come together and exchange views regarding both the science and the art of surgery. Even more, it is an opportunity to learn about each other, and realize that what keeps us together is stronger than any of our differences. I look forward to being with all of you and to learning about your updated experiences in surgery.

Sincerely,

Professor Georgios Tsoulfas World President International College of Surgeons

Welcome from the International College of Surgeons United States Section President



Dear Friends:

It is with great pleasure that I welcome you to the 81st Annual Surgical Update of the United States Section of the International College of Surgeons. We are gathered here at the fabulous Nemacolin Woodlands Resort located in the Laurel Highlands of Southwestern Pennsylvania to participate in this annual conference and also experience everything this renowned resort has to offer. The topics presented during our meeting, the theme of which is The Art and Science of Surgery: Repair, Rejuvenate, Renew, will provide insight into treatment options that change people's lives. This educational activity will provide unique continuing education for the general surgeon and surgical specialist alike, providing both multidisciplinary and speciality specific educational content.

As you can see on the following pages, we have developed a high quality program that includes a number of special sessions. In keeping with our theme of Repair, Rejuvenate, Renew, we have included sessions that focus on Transplantation and Trauma. You will hear from experienced educators from around the country as they share their research and experiences. Additionally, we are fortunate to have our ICS World President join us from Greece. Prof. Tsoulfas will speak on Friday morning and participate in various other aspects of the meeting. We are very pleased that he will be with us.

I am extremely delighted that Dr. Lloyd Ratner, Professor of Surgery and Director of Renal and Pancreatic Transplantation at Columbia University in NY, has agreed to participate. Dr. Ratner will present the Dr. Andre Crotti Lecture during the Opening Session on Thursday afternoon. We also welcome back Dr. Ara Tilkian from UCLA, who will present the Dr. Arno Roscher Endowed Lecture for the second time. Joining us this year are a number of distinguished faculty, including members from the University of Washington, who will provide updates on a wide range of topics. One highlighted area that defines the U.S. section of the ICS and distinguishes us from other professional surgical societies is our commitment to and expertise with Global Surgery. I think you will find the outreach experiences in this field that will be shared by our course faculty to be instructive and inspiring.

We are joined once again by the American Academy of Neurological and Orthopaedic Surgeons. They will conduct their 43rd Annual Scientific Meeting on Friday and Saturday. Dr. Greg Laurence will present the keynote lecture during their Friday session. On behalf of all International College of Surgeons Fellows I extend a warm welcome to our colleagues from the AANOS and wish them all the best for a successful gathering.

On a final note, I encourage everyone to attend the Honors Luncheon on Saturday. During this break from educational programming we will welcome our newest members and recognize those who have made significant contributions to our esteemed organization. I hope to see you there.

Welcome to Nemacolin and enjoy!

Andrew Clas

Andrew S. Klein, MD, MBA, FICS President, United States Section International College of Surgeons

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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.

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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. Addi-

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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; 3/25/19. For the most up to date information visit the website.

NEW FELLOWS

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In Memoriam

That these bodies should be lent to us as long as they can afford us pleasure, assist us in acquiring knowledge and doing good to our fellow man, is a kind act of a benevolent God.

In his time, a physician touches many lives. Those of us whose lives these physicians touched are left greatly saddened, for they are with us no longer.

Yet, in the scheme of the Almighty, they will be forever honored for their noble role on earth as healers of their fellow man.

MR. EARL E. BAKKEN WAIKOLOA, HI HONORARY MEMBER

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INTRODUCING

DEMETRIUS E.M. LITWIN, MD, MBA, FRCSC, FICS, FACS

PRESIDENT UNITED STATES SECTION - INTERNATIONAL COLLEGE OF SURGEONS

for the Term Commencing January 1, 2020

Demetrius E.M.Litwin, MD, Harry M. Haidak Distinguished Professor and Chairman, Department of Surgery at the University of Massachusetts Medical School, is an internationally recognized authority in the field of endoscopic, or minimally invasive surgery (MIS).

In 1997, Dr. Litwin joined the University of Massachusetts Medical School and UMass Memorial Medical Center as Associate Professor of Surgery, Director of Minimally Invasive Surgery Services, and as the first Director of the UMass EndoSurgery Center, a teaching and research resource in the field of minimally invasive surgery designed for developing new surgical devices and new procedures for minimally invasive techniques. Dr. Litwin was a key member of the UMass group that developed Handport[™] a hand assist device for MIS. He has performed a number of "firsts" including minimally invasive operative approaches to the stomach and hand-assisted approaches to the aorta. Dr. Litwin has published numerous articles and book chapters highlighting laparoscopic surgery and has been a speaker at more than 200 proceedings worldwide. In 2004, Dr. Litwin was appointed the Harry M. Haidak Professor and Chairman of the Department of Surgery at the University of Massachusetts Medical School. Since then, he has doubled the size of the Department of Surgery, expanded the general surgery residency training program, and established two fully integrated training programs in Vascular Surgery and Plastic Surgery.

Before joining the University of Massachusetts Medical School, Dr. Litwin was Assistant Professor of Surgery and Director of minimal access surgery at the University of Toronto, Toronto, Ontario, Canada. He received his medical degree from the University of Saskatchewan in 1979 and obtained his surgical training at both the University of Saskatchewan and the University of Toronto where he completed a fellowship in Hepatobiliary Surgery. He obtained his certification as a Fellow of the Royal College of Physicians and Surgeons of Canada in 1986.

An early innovator and leader in surgical education, Dr. Litwin trained surgeons in safe minimally invasive techniques, and was recognized for his outstanding achievements in quality improvement by the Saskatchewan Medical Association and the College of Physicians and Surgeons of Saskatchewan. In 1992, he established one of the first fellowship training programs for minimally invasive surgery which continues to this day.

Dr. Litwin has been a member of the International College of Surgeons since 1986, transferring to the US Section in 1999. He served as Canadian Chapter President of the ICS in 1997. As an ICS member, Dr. Litwin has served in a variety of rolls including Vice President, Chair Board of Regents, Secretary and Treasurer.

Dr. Litwin continues to have an active practice in minimally invasive surgery, and he has developed a major interest in global surgery. He regularly participates in the University of Massachusetts Medical School Global Surgery initiatives in both Haiti and Honduras.

FEATURED PRESENTERS



LLOYD E. RATNER, MD, MPH, FACS MD

RECIPIENT OF

THE DR. ANDRE CROTTI AWARD

FOR

DISTINGUISHED SERVICE TO THE PROFESSION OF SURGERY

AND

INTERNATIONAL COLLEGE OF SURGEONS HONORARY FELLOWSHIP

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 University 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 that prohibited transplantation. He devised the 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.

FEATURED PRESENTERS

ARA G. TILKIAN, MD

Selected to Deliver

THE DR. ARNO A. ROSCHER ENDOWED LECTURE

FOR THE PRESENTATION

How to Slow, Stop or Reverse the Aging Process

Dr. Ara G. Tilkian will present the Dr. Arno 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 membership 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, 20192pm-6pmFriday May 3, 20198am-12pmMarquis Salon 3Marquis Salon 1

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.

Moderators: Andrew Klein, MD; Demetrius Litwin, MD; Joshua Mammen, MD

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

The Dr. Andre Crotti Lecture 24 Years of Laparoscopic Donor Nephrectomy: A Pivotal Advance in Transplantation Lloyd E. Ratner, MD, MPH, New York, NY

The Dr. Arno Roscher Endowed Lecture How to Slow, Stop or Reverse the Aging Process Ara Tilkian, MD, Mission Hills, CA

Telemedicine Programs Albania and Cabo Verde: The Tales from Two Continents? Rifat Latifi, MD, FICS, Katonah, NY

Matching Resources to Need: A Template for Collaboration Mark N. Perlmutter, MD, FICS, Rocky Mount, NC

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

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

The ACS Approach: Capacity Building in Sub-Saharan Africa Demetrius E.M. Litwin, MD, FICS, Worcester, MA

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

Making A Difference in Our World: Local Effect, Global Impact Elizabeth McLellan, RN, MSN, MPH, Portland, ME

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.

Moderators: Mark Perlmutter, MD; William Welch, MD; Charles Xeller, MD

Electrodiagnostic Testing for Compression Neuropathies: It's Role in Value-Based Healthcare Mark Perlmutter, MD, FICS, FAANOS, Rocky Mount, NC

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

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

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

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

Should We Wait for the Syringomyelia to Occur Before Treating Chiari Malformations? Shankar Gopinath, MD, FICS, Houston, TX

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

Medical-Legal Additions to Your Practice: IMEs, AMEs, RMEs, DDs Charles Xeller, MD, FICS, FAANOS, Seabrook, TX



THE ART AND SCIENCE OF SURGERY REPAIR + REJUVENATE + RENEW

Friday May 3, 2019 8am-10:00am Friday May 3, 2019 4pm-5:15pm Marquis Salon 3 Marquis Salon 3

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.

Moderators: Peter Kennealey, MD; Tsuyoshi Todo, MD

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

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

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

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

Laparoscopic Whipple Barish Edil, MD, Oklahoma City, OK

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

Friday May 3, 2019 Marquis Salon 3 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. 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.

Moderators: Todd Brennan, MD; Irene Kim, MD

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

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

First Successful Uterus Transplantation in the United States Greg McKenna, MD, Dallas, TX

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

Livers in a "Growing" Population Kenneth D. Chavin, MD, PhD FACS, Cleveland, OH

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.

Moderators: Tessa London, MD; Tracy Sambo, MD

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 Beatrice Caballero, MS, 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 Marquis Salon 3

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.

Moderators: Tessa London, MD; Tracy Sambo, MD

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

THE ART AND SCIENCE OF SURGERY **REPAIR + REJUVENATE + RENEW**

Saturday May 4, 2019 Marquis Salon 1 8am-12pm Saturday May 4, 2019 Marquis Salon 3

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.

Moderators: Naga Suresh Cheppalli, MD; Asem Salma, MD and Lucia Zamorano, MD

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

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

Imaging Alternatives in Pedicle Screw Placement. Adapting Machine Vision to Spinal Navigation W Craig Clark, MD, PhD, FICS, FAANOS, Carrollton, MS

Non-traumatic Intracerebral Hemorrhage: Surgical Indications and Technical Considerations Asem Salma, MD, Lima, OH

Treatment of Cardiac Arrhythmia Associated with Subarachnoid Hemorrhage: A Literature and Protocol Review. Caitlin Clark, MD, Cleveland Heights, OH

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

Newer Technology in Orthopedics Naga Suresh Cheppalli, MD, FICS, Albuquerque, NM

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

Update in Total Hip Replacement Advancements and Painful Osteoarthritis of the Hip Robert Mathews, MD, PhD, FICS, Millersville, PA

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, FICS, Philadelphia, PA

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

GENERAL PLENARY SESSION OPEN FORUM

8am-10am

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.

Moderators: Harry Anderson, MD; Rifat Latifi, MD

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

Contour Mapping of Human Surface Anatomy: Defining Focal Fat Pad Loci and Improving Surgical Outcomes with Anatomically-Guided Adipose Reconfiguration David Teplica, MD, MFA, FICS, Chicago, IL

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

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

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

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

Creation of a Vaginal Canal for De Novo Vaginoplasty and Salvage Vaginal Replacement For Transgender and Cisgender Women: A Proposed Novel Technique Maurice Garcia, MD, Los Angeles, CA

Up The Creek Without a Paddle: Adventures in Rural Surgery During My First Year The gr Samba MD EICS Edenter NC

Tracy Sambo, MD, FICS, Edenton, NC



THE ART AND SCIENCE OF SURGERY **REPAIR + REJUVENATE + RENEW**

Saturday May 4, 2019 10am-12p Marquis Salon 3

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.

Moderators: Dixon Santana, MD; Ehab Sorial, MD

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

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

Strategies and Management of Concurrent Non-small Cell Lung and Esophageal GIST Cancers Francis Podbielski, MS, MD, FICS, Riverside, IL

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

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

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

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

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

Saturday May 4, 2019 12pm-1:30pm Marquis Salon 2

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.

Moderator: Andrew Klein, MD

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

10am-12pm Saturday May 4, 2019 1:30pm-3:15pm Marquis Salon 3

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.

Moderator: Sharique Nazir, MD

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

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

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

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

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

Saturday May 4, 2019 3:30pm-6pm Marquis Salon 3

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.

Moderator: Thavam Thambi Pillai, MD

Opium and Opioid History: Moving Beyond Opioids Frank P. Bongiorno, MD, FICS, 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; we 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 PROCRAMS

- 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

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 Paradise 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.

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.

Joseph G. Abdo Ahmed Abdullah Elie D. Aboulafia G. Kendrix Adcock Marcel Admoni Jalal Afnan Vincent E. Ajanwachuku Mohammed M. Akbar Jihad Alammar Ludwig A. Allegra Louis M. Alpern Domingo T. Alvear* Harry Linne Anderson, III* Danilo K. Asase Thuc T. Bach Brian C. Bacot Mahmud Bangash Willie J. Banks, Jr. Alfonso L. Barragan Michael E. Bearb Michael E. Beatty Ronald S. Bergman Byron W. Biscoe, Jr. Philmore A. Blake **Ekkehard Bonatz** Frank P. Bongiorno Robert Boran, Jr. Bryan N. Butler* Pradip Chakrabarti Samim Chalabi Yeon-Jeen Jenny Chang Steve T. Charles Michael S. Chin John Chiu Kevin Ciresi W. Craig Clark James M. Clayton Stephen F. Coccaro Brian M. Cohen Stephen D. Conrad **Charles Cornell** Garnet R. Craddock Jr. Robert L. Cucin, Jr. Hongyi Cui Joseph D'angelo Anthony N. Dardano, Jr. Marc R. Dean James John Dehen Jr. Fernando G. Diaz Raymond Andrew Dieter III

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* indicates donation totals over\$500 for the year.

SOCIAL EVENTS

Alliance Board of Directors & General Membership Meeting

Thursday May 2 Marquis Salon 4 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 Reflection 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 longtime 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 Chateau Lobby 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 Marquis Salon 2 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 Grand Ballroom 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: \$200/PERSON, TICKETS MUST BE OR-DERED IN ADVANCE.**

Meeting Registration

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

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, nonticketed Alliance Activities, and one ticket to the Opening Reception.

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

Cancellation Policy

The cancellation deadline was 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.

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.

Language

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

Attire

Business casual attire is recommended in educational sessions and on-site social activities. Casual attire is appropriate for most off-site social events.

Social Event Tickets

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

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.

Speaker Prep Area

A laptop computer has been setup 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/review their files.

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 session 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

The deadline for submission of all CME Program Evaluation forms is Tuesday, June 4, 2019.

Transcripts

You must return your CME evaluation booklet to receive CME credit for this meeting. Transcripts will be made available to attendees 30 days after the conclusion of this meeting following completion of a postmeeting survey which will be emailed to you individually.

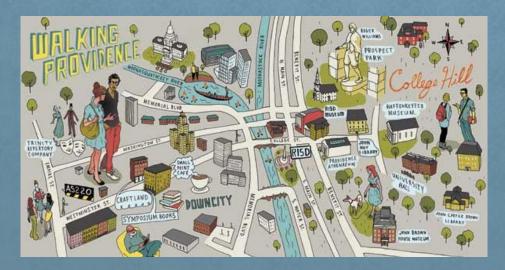
SAVE THE DATE! 82ND ANNUAL SURGICAL UPDATE

Our 2020 Annual Meeting sits in the heart of history and education. The Providence Renaissance Hotel began life as a Masonic Temple that was never completed. After standing empty for 75 years, it finally found a purpose and was opened in 2006 as a hotel and will provide the perfect location for our meeting in Providence, RI - The Creative Capital Welcome to Providence, Rhode Island! Providence combines the accessibility and friendliness of a small town with the culture and sophistication of a big city. With a thriving arts community, vibrant and diverse neighborhoods, outstanding hotels, a renowned restaurant scene and so many things to do, Providence is the perfect place to visit.

Save the Date: April 30-May 2, 2020









SCHEDULE AT A GLANCE

Thursday, May 2

Marquis Salon Foyer

REGISTRATION **7:30 AM-5:00 PM**

Marquis Salon 1

OFFICER BREAKFAST 7:30 AM-9:00 AM

Marquis Salon 1

ALL-DAY COFFEE BREAK 9:00 AM-3:00 PM

Marquis Salon 1

ICS-US Business Meetings Endowment Executive Committee Standing Committees CME Regents Executive Council House of Delegates 8:00 AM-1:30 PM

Marquis Salon 4

Alliance Board Meeting Noon-1:00 PM

Marquis Salon 3

Opening Session Featured Lectures & Surgical Consortia: A Practical Resource Building Stratecy? **2 PM-6 PM**

Reflection

(building Y on Resort Map) OPENING RECEPTION 6:00 PM-7:00 PM

Friday, May 3

Marquis Salon Foyer Registration 7:30 AM-12:30 PM

Marquis Salon 4 Continental Breakfast 7:30 AM-9:00 AM

Marquis Salon 4 All-Day Coffee Break 9:00 AM- Noon & 4:00 PM-5:30 PM

Marquis Salon 1 AANOS ANNUAL SCIENTIFIC MEETING NEUROLOGICAL AND ORTHOPAEDIC SURGERY PART 1 8:00 AM-Noon

Marquis Salon 3 UPDATES ON HPB & ONCOLOGIC SURGERY 8:00 AM-10:00 AM

Gather in Chateau Lobby Nemacolin Art Tour 10:00 AM-11:00 AM

Marquis Salon 3 Advances in Transplant Surgery 10:00 AM-Noon

Marquis Salon 2 AANOS Board of Directors Meeting 4:30 PM-6:30 PM

> Marquis Salon 3 Emerging Surgeons Forum 4:00 PM-5:15 PM

Marquis Salon 3 Annual Research Scholarship Competition 5:15 PM-6:30 PM

Saturday, May 4

Marquis Salon Foyer Registration 7:30 AM-2:00 PM

Marquis Salon 4 Continental Breakfast 7:30 AM-9:00 AM

Marquis Salon 4 All-Day Coffee Break 9:00 AM- 5:30 PM

Marquis Salon 1

AANOS Annual Scientific Meeting Neurological and Orthopaedic Surgery Part 2 **8 AM-Noon**

Marquis Salon 3

GENERAL PLENARY SESSION Open Forum 8 AM-10:00 AM

Marquis Salon 3

Advances in Vascular & Thoracic Surgery **10:00 AM-Noon**

Marquis Salon 2

HONORS LUNCHEON & Special Presentation Noon-1:30 PM

Marquis Salon 3

TRAUMA AND ACUTE CARE SURGERY Forum 1:30 PM-3:15 PM

> Marquis Salon 3 Pain Management & Ethics Workshop 3:30 PM-6 PM

> Grand Ballroom

GALA CLOSING DINNER **7:30 PM-10:30 PM**