



Sixteenth Annual

# **Richard L. Simmons Lecture in Surgical Science and Department of Surgery Research Day**

**Wednesday, May 2, 2018  
University Club  
Ballrooms A and B**



**Pitt**Medicine

Department of Surgery



## SCHEDULE

7:30–8 a.m.

Poster Viewing  
Ballrooms A and B

8–9 a.m.

**Richard L. Simmons Lecture  
in Surgical Science**

Ballroom A

***“Considerations on the Creative Process  
in Clinical Problem Solving”***

**Elliot L. Chaikof, MD, PhD**

Surgeon-in-Chief,  
Beth Israel Deaconess Medical Center  
Chair, Roberta and Stephen R. Weiner  
Department of Surgery  
Johnson and Johnson Professor of Surgery  
Harvard Medical School

9–9:30 a.m.

Poster Viewing/Break  
Ballrooms A and B

9:30–10:45 a.m.

Oral Presentations  
Session 1  
Ballroom A

10:45–11:15 a.m.

Poster Viewing/Break  
Ballrooms A and B

11:15 a.m.–12:30 p.m.

Oral Presentations  
Session 2  
Ballroom A

12:30–2 p.m.

Buffet Luncheon  
Ballroom B



## SESSION 1

- 9:30–9:45 a.m.** **Nandan Nath, MD**, Author/**Edith Tzeng, MD**, PI  
“Novel Graft Topography: A Potential Solution for Platelet Aggregation”
- 9:45–10 a.m.** **Chenxuan Yang**, Author/**Melanie Scott, MD, PhD**, PI  
“Gasdermin D is Hepatoprotective in Models of Non-infectious Injury”
- 10–10:15 a.m.** **Pranav Murthy**, Author/**Herbert Zeh, MD**, PI  
“Chloroquine Ameliorates Pancreatitis through Inhibition of Neutrophil Extracellular Traps”
- 10:15–10:30 a.m.** **Shaun Siow, MD**, Author/**Kevin Mollen, MD**, PI  
“cGas is Critical in Modulating Intestinal Inflammation and Proliferation”
- 10:30–10:45 a.m.** **Andrew Yeh, MD**, Author/**Michael Morowitz, MD**, PI  
“Plant-based Enteral Nutrition Prevents Gut Dysbiosis and Improves Outcomes in a Mouse Colitis Model”

## SESSION 2

- 11:15–11:30 a.m.** **Kristina Nicholson, MD**, Author/**Linwah Yip, MD**, PI  
“Preoperative Molecular Testing Can Safely Reduce Diagnostic Surgery for Cytologically Indeterminate Thyroid Nodules”
- 11:30–11:45 a.m.** **Amr Al Abbas, MD**, Author/**Melissa Hogg, MD**, PI  
“SERUM CA19-9 Response to Neoadjuvant Therapy is Predictive of Tumor Size Decrease and Survival in Pancreatic Adenocarcinoma”
- 11:45 a.m.–Noon** **Francesco M. Egro, MD**, Author/**J. Peter Rubin, MD**, PI  
“Development of Injectable Allograft Adipose Matrix for Soft Tissue Filling: from Conception to Clinical Trial”
- Noon–12:15 p.m.** **Wendy Chen, MD**, Author/**Jeffrey A. Gusenoff, MD**, PI  
“Perforating Fat Injections for Plantar Fasciosis: A Regenerative Solution”
- 12:15–12:30 p.m.** **Shreyus Kulkarni, MD**, Author/**Deepika Mohan, MD, MPH**, PI  
“Representativeness of Severe Injury Increases the Likelihood of Appropriate Transfer to Trauma Centers”



**Richard L. Simmons, MD**  
**Chair Emeritus, Department of Surgery**  
**Distinguished Service Professor of Surgery**

Dr. Richard Simmons graduated magna cum laude in biochemical sciences from Harvard University and was elected to Phi Beta Kappa. He earned his MD at Boston University, graduating summa cum laude, and was elected to AOA. He completed his surgical residency at New York Presbyterian Hospital in New York, where he was a National Institutes of Health (NIH) postdoctoral fellow, a visiting fellow in surgery at Columbia University, and an American Cancer Society (ACS) clinical fellow. Also during this time, he won the Mead Johnson Award of ACS and was a clinical and research fellow in surgery at Massachusetts General Hospital and a research fellow at Harvard Medical School. He became principal investigator of an RO1 grant as a resident and was NIH funded for more than 40 consecutive years thereafter.

After heading the surgical research team of the U.S. Army in Vietnam in 1967, Simmons joined the surgical faculty of the University of Minnesota, where he was a Markle scholar in academic medicine and held professorships in both surgery and microbiology. Between 1987 and 1998, Dr. Simmons served as chair of the Department of Surgery at the University of Pittsburgh School of Medicine, and in 1996, he became the medical director of UPMC—a position he held until 2015.

During his tenure at Pitt, Dr. Simmons has received many honors. Locally, he was given the annual award from the Southwestern Pennsylvania Chapter of ACS and the Gift of Life Award from the National Kidney Foundation of Western Pennsylvania and was named Man of the Year (1998) in Science by Vectors of Pittsburgh. He was selected by Archives of Surgery as one of two dozen 20th-century surgeons who have made significant contributions to surgery, and in 2001, ACS dedicated the Surgical Forum to Dr. Simmons. In 2004, Dr. Simmons received the Medawar Prize for his work in transplantation immunology and infectious disease. He was awarded the Starzl Prize in Transplantation and Immunology in 2005 and the Lifetime Achievement Award from the Society of University Surgeons in 2010. The Allegheny County Medical Society Foundation honored Dr. Simmons with the Ralph C. Wilde Leadership Award in March 2014. Most recently, Dr. Simmons was awarded the pioneer award of the American Society of Transplant Surgeons. Dr. Simmons is past chair of the Surgical Forum and past president of the Society of University Surgeons, American Society of Transplant Surgeons, and Surgical Infection Society. Dr. Simmons also has served as a member of the Board of Directors of the American Board of Surgery. He has authored or edited 15 books and more than 1,300 articles. In 1994, he was elected to the Institute of Medicine of the National Academies.

Dr. Simmons continues to serve the Department of Surgery as chair emeritus and as an advisor and mentor.



**Elliot L. Chaikof, MD, PhD**  
**Surgeon-in-Chief,**  
**Beth Israel Deaconess Medical Center**  
**Chair, Roberta and Stephen R. Weiner**  
**Department of Surgery**  
**Johnson and Johnson Professor of Surgery**  
**Harvard Medical School**

Elliot L. Chaikof, MD, PhD, is Chairman of the Roberta and Stephen R. Weiner Department of Surgery and Surgeon-in-Chief at the Beth Israel Deaconess Medical Center. He holds the Johnson and Johnson Professorship of Surgery at Harvard Medical School. Dr. Chaikof is a member of the Wyss Institute of Biologically Inspired Engineering of Harvard University, the Harvard Stem Cell Institute, and holds a faculty appointment at the Massachusetts Institute of Technology in the Harvard–MIT Division of Health Sciences and Technology.

Dr. Chaikof received his B.A. and M.D. from Johns Hopkins University in Baltimore and his Ph.D. in Chemical Engineering from the Massachusetts Institute of Technology, where he focused on the design of artificial organs. He completed his training in General Surgery at the Massachusetts General Hospital and in Vascular Surgery at Emory University School of Medicine in Atlanta.

Dr. Chaikof's clinical interests focus on the treatment of vascular diseases of the aorta, carotid, and peripheral arteries. In 1994, he initiated one of the first programs for endovascular aortic aneurysm repair in the United States and was among the core group of principal investigators that conducted the first FDA approved clinical trials of stent-grafts for repair of abdominal and thoracic aortic aneurysms. He has been responsible for the formulation of national best practice guidelines for the treatment of aortic aneurysms. Dr. Chaikof is Editor of the *Atlas of Vascular Surgery and Endovascular Therapy*, published by Elsevier in 2014, with translations in Portuguese, as well as in Chinese by Elsevier China in 2017.

Dr. Chaikof's basic research interests lie at the interface of medicine and engineering with a focus on drug discovery and tissue engineering for the treatment of cardiovascular disease. He has published more than 300 articles and more than a dozen patents that have been licensed to pharmaceutical and biotechnology companies. He is a Scientific Co-Founder of Silicon Therapeutics, whose mission is the integration of computational drug discovery and medicinal chemistry to address targets implicated in human disease. He was the recipient of the 2013 Clemson Award for Applied Research from the Society for Biomaterials and was elected to the Institute of Medicine (National Academy of Medicine) of the National Academies in 2014. He currently serves as Vice Chair for Section 1 (Engineering, Physical Sciences, and Mathematics) of the National Academy of Medicine.

# PAST LECTURERS

**2003**

## **"Hyperosmolar Solutions for Fluid Resuscitation during Critical Illness"**

Ori D. Rotstein, MD  
*Professor of Surgery, Department of Surgery  
University of Toronto*

**2004**

## **"The Inflammatory Reflex"**

Kevin J. Tracey, MD  
*Professor and Director, Center for Patient-Oriented  
Research  
Program Director, General Clinical Research Center  
North Shore-LIJ Research Institute*

**2005**

## **"Why Are You Killing My Patient?"**

Michael B. Yaffe, MD, PhD  
*Associate Professor of Biology  
Massachusetts Institute of Technology*

**2006**

## **"Reparative and Regenerative Medicine: A Surgeon's Perspective"**

Michael T. Longaker, MD, MBA, FACS  
*Deane P. and Louise Mitchell Professor  
Director, Children's Surgical Research Program  
Deputy Director, Institute of Stem Cell Biology and  
Regenerative Medicine  
Director, Program in Regenerative Medicine  
Stanford University School of Medicine*

**2007**

## **"How Microbial Pathogens Sense Host Stress and Respond Accordingly"**

John C. Alverdy, MD, FACS  
*Professor of Surgery  
Director, Minimally Invasive/Bariatric Surgery  
University of Chicago*

**2008**

## **"VEGF and VEGF Receptors in CRC: Beyond Angiogenesis"**

Lee M. Ellis, MD, FACS  
*Professor of Surgery and Cancer Biology  
William C. Liedtke Jr. Chair in Cancer Research  
Chair, Ad Interim, Department of Cancer Biology  
University of Texas MD Anderson Cancer Center*

**2009**

## **"Liver Translational Research: The Bench Work Does Matter"**

David A. Geller, MD  
*Professor of Surgery  
Codirector, UPMC Liver Cancer Center  
University of Pittsburgh*

**2010**

## **"Enhancing Vein Graft Patency: From the Molecular to the Obvious"**

Colleen M. Brophy, MD  
*Professor of Surgery  
Division of Vascular Surgery  
Vanderbilt University*

**2011**

## **"Memory, Surgery, and Surgical Research"**

Daniel R. Meldrum, MD, FACS, FAHA  
*Professor of Surgery and Physiology  
Section of Cardiothoracic Surgery  
Indiana University School of Medicine*

**2012**

## **"Advancing Translational Research in Pancreatic Cancer"**

Diane M. Simeone, MD  
*Lazar J. Greenfield Professor of Surgery and  
Molecular and Integrative Physiology  
Chief, Division of HPB and Advanced  
Gastrointestinal Surgery  
University of Michigan Health System*

**2013**

## **"Regenerative Medicine: Current Concepts and Changing Trends"**

Anthony Atala, MD  
*Director, Wake Forest Institute for Regenerative  
Medicine  
W. H. Boyce Professor and Chair, Department of  
Urology-Wake Forest School of Medicine*

**2014**

## **"Small Molecules for Small Patients: A Surgical Journey into the Pathogenesis and Treatment of Necrotizing Enterocolitis"**

David J. Hackam, MD, PhD, FACS  
*Watson Family Professor of Surgery  
Associate Dean for Medical Student Research  
Professor of Surgery and Cell Biology and  
Physiology, University of Pittsburgh School  
of Medicine  
Codirector, Fetal Diagnosis and Treatment Center,  
Children's Hospital of Pittsburgh of UPMC*

**2015**

## **"The Challenges and Rewards of Translational Research—One Surgeon's Journey"**

Melina R. Kibbe, MD, FACS, FAHA  
*Professor and Vice Chair of Research  
Edward G. Elcock Professor of Surgical Research  
Department of Surgery, Northwestern University*

**2016**

## **"Trauma Care: A Case Study in Translating Research into Policy"**

Avery B. Nathens, MD, PhD, FRCS(C)  
*Surgeon-in-Chief, Sunnybrook Health Sciences  
Centre  
Professor of Surgery, University of Toronto  
DeSouza Chair in Trauma Research*

**2017**

## **"Gut Integrity in Sepsis"**

Craig M. Cooper-Smith, MD, FACS, FCCM  
*Professor and Vice Chair, Surgery  
Emory University School of Medicine  
Director, 5E Surgical ICU  
Associate Director, Emory Critical Care Center*



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