SOCIETY OF CLINICAL SURGERY

177th Annual Scientific Meeting

NOVEMBER 4 - 6, 2021 | STANFORD UNIVERSITY

Stanford MEDICINE | Department of Cardiothoracic Surgery

Stanford MEDICINE | Department of Surgery

A WARM WELCOME

TO STANFORD UNIVERSITY

Dear Colleagues and Friends,

The Departments of Surgery and Cardiothoracic Surgery at Stanford University School of Medicine is thrilled to welcome you to the 177th Annual Meeting of the Society of Clinical Surgery, November 4-6, 2021!

We have an exciting program planned for our esteemed colleagues and friends, including opportunities to explore our campus, meet with surgeons and scientists from various specialties, share ideas on the latest work and advancement in surgery, observe live operations, and learn about the innovation happening at Stanford.

We have endured the COVID-19 pandemic as a community for over a year and a half, sheltering in place and having to postpone our gathering slated for last year. Because of the high vaccination rate and low COVID-19 prevalence in our community, we are confident we can provide a vibrant and safe in-person meeting. You will find our Stanford community stronger than ever during these times as we embrace new and innovative surgical practices and technologies to improve patient outcomes.

The Society of Clinical Surgery has a long-standing history of convening nationally recognized surgeons to a stimulating forum, integrated with clinic observations and discussions focused on delivering high-quality care to patients. Both the Departments of Surgery and Cardiothoracic Surgery embody the same spirit and are excited to share with you the state-of-the-art care our team provides to thousands of patients each year. Your engagement in the meeting and related activities will be a great source of inspiration and knowledge to Stanford faculty and trainees.

We are proud to host this year's main activities at the new Stanford Hospital building in the Assembly Hall, which opened to the public two years ago. This year's annual meeting will include a morning of OR observations and an afternoon of scientific presentations highlighting cutting-edge research and surgical advancements at Stanford. Several activities and social engagements have been scheduled through your stay in Palo Alto.

We look forward to sharing with you the wonderful ecosystem at Stanford and beyond.

Sincerely,

Joseph Woo, MD
Norman E. Shumway Professor and Chair
Department of Cardiothoracic Surgery
Professor, by courtesy, Department of Bioengineering
Stanford School of Medicine

Mary Hawn, MD, FACS
Emile Holman Professor of Surgery and Chair
Department of Surgery
Stanford School of Medicine

SOCIETY OF CLINICAL SURGERY - OPENING THE DOOR OF SCIENCE TO A NEW WORLD

Photo Credit: Emily Karakis/Unsplash

LEADERSHIP

Lloyd Minor, MD
The Carl and Elizabeth Naumann Dean
Professor of Otolaryngology - Head & Neck Surgery
Professor, by courtesy, of Neurobiology and
Bioengineering, Stanford School of Medicine

Lloyd B. Minor, MD, is a scientist, surgeon, and academic leader. He is the Carl and Elizabeth Naumann Dean of the Stanford University School of Medicine, a position he has held since December 2012. He also is a professor of Otolaryngology–Head and Neck Surgery and a professor of Bioengineering and of Neurobiology, by courtesy, at Stanford University.

As dean, Dr. Minor plays an integral role in setting strategy for the clinical enterprise of Stanford Medicine, an academic medical center that includes the Stanford University School of Medicine, Stanford Health Care, and Stanford Children's Health. With his leadership, Stanford Medicine leads the biomedical revolution in Precision Health. His book, "Discovering Precision Health," published in 2020, describes this shift to more preventive, personalized health care and highlights how biomedical advances are dramatically improving our ability to treat and cure complex diseases. In 2021, he articulated a bold vision to leverage Northern California's unique strengths to purposefully and equitably develop a world-class life sciences bio hub in the Bay Area.

Before Stanford, Dr. Minor was provost and senior vice president for academic affairs of Johns Hopkins University. Prior to this appointment in 2009, Dr. Minor served as the Andelot Professor and director (chair) of the Department of Otolaryngology-Head and Neck Surgery in the Johns Hopkins University School of Medicine and otolaryngologist-in-chief of The Johns Hopkins Hospital.

With more than 160 published articles and chapters, Dr. Minor is an expert in balance and inner ear disorders, perhaps best known for discovering superior canal dehiscence syndrome, a debilitating disorder characterized by sound- or pressure-induced dizziness. He subsequently developed a surgical procedure that corrects the problem and alleviates symptoms.

In 2012, Dr. Minor was elected to the National Academy of Medicine.

David Entwistle

President and Chief Executive Officer
Stanford Health Care

David Entwistle is President and CEO of Stanford Health Care (SHC), where he has served since 2016. Among other achievements, Entwistle has championed the development and implementation of an integrated strategic plan that aligns SHC, the Stanford School of Medicine, and Stanford Children's Health behind a common vision and key strategic initiatives through 2025. Under his leadership, SHC has also received a number of national accolades, including being named a top-10 U.S. academic medical center for care quality by Vizient. Most recently, Entwistle spearheaded the completion of the new Stanford Hospital, which opened to patients in November 2019, representing the culmination of more than a decade of planning, design, and construction.

Entwistle has extensive executive experience at leading academic medical centers. Previously, he served as CEO of the University of Utah Hospital & Clinics (UUHC) for nine years. UUHC is the only academic medical center in the Intermountain West region, with 1,100 board-certified physicians who staff four university hospitals, ten community clinics, and several specialty centers. While at UUHC, the organization earned a number of prestigious awards, including a No. 1 national ranking by Vizient in its annual Quality and Accountability Study of U.S. academic medical centers. For his administrative contributions to UUHC and for his long-standing track record in quality achievement, Entwistle received the Modern Healthcare "Up and Comers Award" in 2008.

Prior to UUHC, Entwistle served as Senior Vice President and Chief Operating Officer of the University of Wisconsin Hospital and Clinics in Madison, Wisconsin, from 2002-2007. He was also the former Vice President of Professional Services and Joint Venture Operations at City of Hope National Medical Center in Duarte, California.

Paul King
President and Chief Executive Officer
Stanford Children's Health/
Lucile Packard Children's Hospital

Paul A. King joined Stanford Children's Health in January 2019, bringing with him a distinguished career of more than 30 years as a health care executive, including leadership positions at several nationally recognized academic medical centers. Prior to joining Stanford Children's Health, King led the University of Michigan's C.S. Mott Children's Hospital and Von Voigtlander Women's Hospital as Executive Director. During his tenure, his strong leadership skills guided the strategic growth of the University of Michigan's children's and women's programs and services. Prior to joining C.S. Mott Children's Hospital, King served as president and CEO for the Pediatric Management Group, a 550-physician academic pediatric subspecialty group practice affiliated with Children's Hospital Los Angeles (CHLA). His strong leadership record also includes senior management roles at the Mayo Clinic and the Samaritan Physicians Center.

As Stanford Children's Health plans for continued growth and the expansion of innovation across the entire continuum of care, King's distinguished record of accomplishment and dedication to the critically important role of pediatric and obstetric care will undoubtedly help Stanford Medicine achieve its Precision Health vision.

King is currently on the Board of Trustees for the Children's Hospital Association and holds a bachelor's degree in Business Administration and Economics from the University of Nebraska, at Lincoln; and a master's degree in Healthcare Administration from the University of Iowa, Iowa City. King also is a Certified Medical Practice Executive.

MEMBER PROGRAM

THURSDAY, NOVEMBER 4, 2021	
10:30AM-10:45AM	Transportation Group A - Depart from Hotel to Stanford Golf Course
10:45AM-4:30PM	Golf at Stanford Golf Course (Boxed lunches will be provided)
2:30PM-2:45PM	Transportation Group B - Depart from Hotel to Stanford Dish
2:45PM-4:30PM	Hike at Stanford Dish (3.5 mile)
4:30PM-5:00PM	Transportation Group A - Depart from Golf Course to Hotel
4:40PM-5:00PM	Transportation Group B - Depart from Dish to Hotel
3:15PM-6:00PM	Registration, Hotel
6:00PM-6:15PM	Transportation to Munger Courtyard, Stanford
6:15PM-9:15PM	Welcome Dinner, Munger Courtyard, Stanford
9:15PM-9:30PM	Transportation to Hotel

FRIDAY, NOVEMBER 5, 2021	
6:30AM-6:45AM	Transportation from Hotel to Stanford Hospital
6:45AM-7:00AM	Group Photo, Hospital Lobby
7:00AM-7:30AM	Welcome Breakfast, Hospital Assembly Hall - 500P
7:30AM-8:15AM	Opening Remarks, Hospital Assembly Hall - 500P
7:30AM-7:35AM	Lloyd Minor, MD, Carl and Elizabeth Naumann Dean, Stanford School of Medicine
7:35AM-7:40AM	David Entwistle, President and Chief Executive Officer, Stanford Health Care
7:40AM-7:45AM	Paul King, President and Chief Executive Officer, Stanford Children's Health/Lucile Packard Children's Hospital
7:45AM-8:00AM	Mary Hawn, MD, FACS, Emile Holman Professor of Surgery and Chair, Department of Surgery, Stanford School of Medicine
8:00AM-8:15AM	Joseph Woo, MD, Norman E. Shumway Professor and Chair, Department of Cardiothoracic Surgery, Stanford School of Medicine
8:15AM-8:30AM	Change into Scrubs, Hospital VIP Suite - 500P
8:30AM-12:30PM	OR Observations, Hospital 500P and LPCH
12:30PM-12:45PM	Change out of Scrubs, Hospital VIP Suite - 500P

Photo courtesy of Stanford Health Care

FRIDAY, NOVEMBER 5, 2021 - *CONTINUED*	
12:45PM-1:15PM	Lunch, Younger Family Dining Room
1:15PM-4:00PM	Scientific Sessions,* Hospital Assembly Hall - 500P
4:00PM-4:45PM	Annual Business Meeting, Hospital Assembly Hall - 500P
4:45PM-5:00PM	Transportation from Hospital to Hotel
5:45PM-6:30PM	Transportation from Hotel to Thomas Fogarty Winery
6:30PM-10:00PM	Dinner, Thomas Fogarty Winery
10:00PM-10:45PM	Transportation from Thomas Fogarty Winery to Hotel

See pages 12-13 for Scientific Sessions.

SATURDAY, NOVEMBER 6, 2021	
8:15AM-9:15AM	Breakfast, Hotel
9:15AM-10:15AM	Lecture, Hotel - Speaker: Barbara Natterson-Horowitz, MD
11:30AM-12:15PM	Lunch, Hotel
12:15PM-12:45PM	Transportation to Filoli Historic House and Garden
12:45PM-3:45PM	Tour of Filoli Historic House and Garden
3:45PM-4:15PM	Transportation from Filoli to Hotel
5:45PM-6:00PM	Transportation from Hotel to Vina Enoteca
6:00PM-9:00PM	Farewell Dinner, Vina Enoteca
9:00PM-9:15PM	Transportation from Vina Enoteca to Hotel

Photo Credit: T. Watanbe/Pixabay

COMPANION PROGRAM

THURSDAY, NOVEMBER 4, 2021	
10:30AM-10:45AM	Transportation Group A - Depart from Hotel to Stanford Golf Course
10:45AM-4:30PM	Golf at Stanford Golf Course (Boxed lunches will be provided)
2:30PM-2:45PM	Transportation Group B - Depart from Hotel to Stanford Dish
2:45PM-4:30PM	Hike at Stanford Dish (3.5 mile)
4:30PM-5:00PM	Transportation Group A - Depart from Golf Course to Hotel
4:40PM-5:00PM	Transportation Group B - Depart from Dish to Hotel
6:00PM-6:15PM	Transportation to Munger Courtyard, Stanford
6:15PM-9:15PM	Welcome Dinner, Munger Courtyard, Stanford
9:15PM-9:30PM	Transportation to Hotel

Note: Guests should wear appropriate clothes and shoes for certain activities, including golfing, hiking, and general walking between venues on Thursday, Friday, and Saturday.

FRIDAY, NOVEMBER 5, 2021	
8:45AM-9:00AM	Transportation from Hotel to Stanford
9:00AM-10:30AM	Stanford Tree Tour
10:30AM-11:00AM	Hoover Tower/Memorial Church
11:00AM-12:30PM	The Anderson Collection and the Cantor Museum
12:30PM-12:40PM	Transportation to Lunch
12:45PM-1:30PM	Lunch
1:30PM-2:00PM	Transportation from Stanford to Apple/Google
2:00PM-2:30PM	Apple Visitor Center/Pass by Google campus
2:30PM-3:00PM	Transportation from Google to Facebook
3:00PM-3:15PM	Group Photo at Facebook (Meta)
3:15PM-3:45PM	Transportation from Facebook to Stanford
5:45PM-6:30PM	Transportation from Hotel to Thomas Fogarty Winery
6:30PM-10:00PM	Dinner, Thomas Fogarty Winery
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9:00PM-9:15PM	Transportation from Vina Enoteca to Hotel

SCIENTIFIC SESSIONS

1:15-1:30 PM
Amanda Kirane, MD, FACS
Assistant Professor, Surgery (General Surgery)
Biomarker Analysis of Intralesional Immunotherapy in High Risk Melanoma

1:30-1:45 PM
Anson Lee, MD
Assistant Professor, Cardiothoracic Surgery (Adult Cardiac Surgery)
Electrical Engineering Design, Translation, and Clinical Investigation of Minimally Invasive Surgical Arrhythmia Devices

1:45-2:00 PM
William Hiesinger, MD
Assistant Professor, Cardiothoracic Surgery (Adult Cardiac Surgery)
Supercomputing Artificial Intelligence Radiomic Prediction of LVAD Outcomes

2:00-2:15 PM
Natalie Lui, MD, MAS
Assistant Professor, Cardiothoracic Surgery (Thoracic Surgery)
Immuno-Optical Intraoperative Tumor Imaging

2:15-2:30 PM
Michael Ma, MD
Assistant Professor, Cardiothoracic Surgery (Pediatric Cardiac Surgery)
Mechanical Engineering Modeling of Novel Congenital Heart Disease Operations

Note: A break will be provided between 2:30-2:45 PM during the Scientific Sessions.

2:45-3:00 PM
Carolyn Dacey Seib, MD, MAS
Assistant Professor, Surgery (General Surgery)
Improving Decision-Making for Older Adults with Primary Hyperparathyroidism

3:00-3:15 PM
Jeong S. Hyun, MD
Assistant Professor, Surgery (Pediatric Surgery)
Characterization of Fibrosis in Crohn's Disease through Mesenteric Adipose Tissue

3:15-3:30 PM
Lisa Marie Knowlton, MD, MPH, FACS
Assistant Professor, Surgery (General Surgery)
Acquisition of Medicaid at the Time of Hospitalization: An Opportunity for Sustainable Insurance Coverage

3:30-3:45 PM
Derrick C. Wan, MD
Professor, Surgery (Plastic & Reconstructive Surgery)
Promoting Skin Regeneration for Radiation-Induced Fibrosis using Topical Deferoxamine

3:45-4:00 PM
Shipra Arya, MD
Associate Professor, Surgery (Vascular Surgery)
Improving Outcomes for Frail Surgical Patients: From Bench to Bedside

SESSION SPEAKERS

Shipra Arya, MD

Associate Professor, Surgery (Vascular Surgery)

Dr. Shipra Arya is an Associate Professor of Surgery (Vascular Surgery) at Stanford University and the Chief of Vascular Section at the Palo Alto Veterans Affairs Healthcare System. She has a Master's degree in Epidemiology from Harvard School of Medicine with emphasis on research methodology and cardiovascular epidemiology. She completed her General Surgery Residency at Creighton University Medical Center, followed by a Vascular Surgery Fellowship at the University of Michigan.

She has been funded by American Heart Association (AHA), NIH/NIA GEMSSTAR grant, VA Palo Alto Center for Innovation and Implementation (Ci2i) and is currently funded by VA HSR&D Merit Award. She is the site Principal Investigator for multiple national trials, including the CREST-2 (Carotid Revascularization and Medical Management for Asymptomatic Carotid Stenosis), CSP 599 TOP (Transfusions after operations in high cardiac risk patients), and the PROVE-AAA (PReferences for Open Versus Endovascular Repair of Abdominal Aortic Aneurysm) trials. Dr. Arya is the president of the Surgical Outcomes Club, a national organization for promoting surgical health services research. She is the Chair of the VA surgeons committee for the Society for Vascular Surgery, Chair of the Diversity and Inclusion committee for the Association of VA Surgeons, and the Associate Medical Director for the NorCal Vascular Quality Initiative regional quality improvement group.

William Hiesinger, MD

Assistant Professor, Cardiothoracic Surgery (Adult Cardiac Surgery)

William Hiesinger, Assistant Professor in the Department of Cardiothoracic Surgery at Stanford, serves as the surgical director of the mechanical circulatory support (MCS) program at Stanford University. His clinical focus is on the surgical treatment of patients with end-stage heart failure and cutting-edge utilization of durable, implantable biomedical devices. He has endeavored to link his laboratory investigations to his clinical activities and leverage state-of-the-art computational modalities and artificial intelligence to develop interventions to reduce the burden of heart failure. These range from cytokine-based biologic deliverables to optimization of human/device interface and improved diagnostics with the capability for early disease detection and outcome prediction. During his postdoctoral training at the University of Pennsylvania (where he also completed his general and cardiothoracic surgical residencies), he utilized computational protein design to reengineer a native endothelial progenitor cell chemokine (SDF-1α), and synthesized a minimized, efficient analog to provide translational advantages, including enhanced stability and function, ease of synthesis, lower cost, and the potential for modulated delivery via engineered biomaterials.

This work laid the foundation for the development of novel drug delivery mechanisms for heart failure therapeutics and served as the backbone of multiple high-impact publications and grants both at the University of Pennsylvania and Stanford. At Stanford, he has worked to further expand the application of computing to biology and clinical medicine. Most recently, his lab created a novel 'radiomics' approach to an echocardiography artificial intelligence system that enables the extraction of hundreds of thousands of motion parameters per ECHO. This AI system can now be employed for prediction of post-operative right ventricular failure in LVAD patients using pre-operative ECHOs alone. It has the vast potential to serve as a generalizable platform for clinical outcomes prediction for a huge range of disease states and surgical interventions. This work was awarded a highly competitive Stanford Center for Artificial Intelligence in Medicine and Imaging seed grant as well as a Google Cloud Credit Award and has resulted in publications in journals such as Nature Machine Intelligence, Nature Communications, and Circulation Heart Failure. Dr. Hiesinger is a member of the Society of Thoracic Surgeons and serves on the Workforce on Surgical Treatment of End-Stage Cardiopulmonary Disease national committee. He is also a member of the American Heart Association Council for Cardiothoracic and Vascular Surgery.

Jeong S. Hyun, MD

Assistant Professor, Surgery (Pediatric Surgery)

Dr. Jeong S. Hyun went to medical school at the University of Minnesota. He completed his General Surgery Residency at Stanford University. He received a Post-Doctoral Fellowship under Dr. Michael Longaker at the Hagey Pediatric Research Building at Stanford during his residency, where he specialized in stem cell niche biology and apoptosis pathways. He has received additional training as a Pediatric Surgeon and Critical Care Surgery at the Children's Mercy Hospital in Kansas City. He was hired at Stanford as an Assistant Professor in 2020 as the Surgical Director of the NICU and PICU at Lucille Packard Children's Hospital Stanford. In addition, he is a Principal Investigator at the Hagey Pediatric Research Building, studying bowel pathology in the context of fibrosis and Inflammatory Bowel Disease.

Amanda Kirane, MD, FACS

Assistant Professor, Surgery (General Surgery)

Dr. Amanda Kirane is an Assistant Professor in the Section of Surgical Oncology with a specialty focus in melanoma and cutaneous malignancies. Dr. Kirane completed her medical school and General Surgery training at the University of Texas Southwestern Medical Center, where she also completed a post-doctoral fellowship in Cancer Biology at the Hamon Center for Therapeutic Oncology. Dr. Kirane is board certified in Complex General Surgical Oncology after completing her fellowship at Memorial Sloan Kettering Cancer Center. She has most recently advanced to candidacy for her PhD in Immunology at the University of California at Davis. Her research efforts focus upon mechanisms of resistance to immunotherapy,

SESSION SPEAKERS CONT'D

translational biomarkers of response to neoadjuvant therapy, preclinical modeling of melanoma, and tumor-associated macrophage biology. She holds the American Society of Clinical Oncology Women Who Conquer Cancer Award in support of her Phase II clinical trial of intralesional therapy in high-risk melanoma.

Lisa Marie Knowlton, MD, MPH, FACS
Assistant Professor, Surgery (General Surgery)
Dr. Lisa Knowlton is a trauma and critical care surgeon and public health researcher who focuses on improving access to and quality of care for trauma and surgical patients. She obtained her medical degree at McGill University and completed her general surgery residency at the University of British Columbia in Vancouver, Canada. Her desire to understand varied healthcare systems and develop solutions for vulnerable surgical populations led her to obtain a Master of Public Health at the Harvard T.H. Chan School of Public Health and complete a research fellowship at the Harvard Humanitarian Initiative. She trained as a Surgical Critical Care fellow at Stanford University Medical Center before joining the faculty as an Assistant Professor of Surgery in early 2018. Dr. Knowlton's research focuses on addressing barriers in access to care and reducing disparities among vulnerable surgical populations, including underinsured trauma patients. She was recently awarded the 17th C. James Carrico Faculty Research Fellowship by the American College of Surgeons to better understand the link between socioeconomic status, insurance coverage, and quality of patient outcomes for trauma patients receiving care within U.S. hospitals. Dr. Knowlton is board certified by the American Board of Surgery and The Royal College of Physicians and Surgeons of Canada. Most recently, she was elected as the inaugural Chair of the Associate Member Council of the American Association for the Surgery of Trauma.

Anson Lee, MD
Assistant Professor, Cardiothoracic Surgery (Adult Cardiac Surgery)
Dr. Anson Lee joined the faculty at Stanford in 2015. He moved there from Washington University in St. Louis, where he completed his advanced training, specializing in complex cardiac arrhythmia surgery, transplants/VADs, and TAVR. Dr. Lee is a native of Southern California. He attended the University of California, San Diego as an undergraduate and Washington University for medical school, where he also conducted all of his residency training. Dr. Lee also completed a basic science postdoctoral research fellowship studying mechanisms of and therapies for cardiac arrhythmias in the world-renowned Washington University arrhythmia laboratory in which the original Cox Maze operation was invented.

Dr. Lee leads the Surgical Arrhythmia Program at Stanford, working closely with the Stanford Electrophysiology Section. Dr. Lee also runs a basic and translational research laboratory studying mechanisms underlying arrhythmia ablation with collaborations in the Cardiovascular Institute and Stanford Electrical Engineering.

Natalie Lui, MD, MAS

Assistant Professor, Cardiothoracic Surgery (Thoracic Surgery)

Natalie Lui, MD, MAS, is an Assistant Professor of Cardiothoracic Surgery in the Division of Thoracic Surgery at Stanford University. She completed general surgery residency at the University of California San Francisco, which included two years of research in the UCSF Thoracic Oncology Laboratory and a Master in Advanced Studies in clinical research. She then completed a thoracic surgery fellowship at Massachusetts General Hospital, which included visiting rotations at Memorial Sloan Kettering and the Mayo Clinic. Dr. Lui's surgical practice consists of general thoracic surgery focusing on thoracic oncology and robotic thoracic surgery. Her research interests include intraoperative molecular imaging for lung cancer localization, increasing rates of lung cancer screening, and using artificial intelligence to predict lung cancer recurrence.

Michael Ma, MD

Assistant Professor, Cardiothoracic Surgery (Pediatric Cardiac Surgery)

Michael Ma, MD, is an Assistant Professor of Cardiothoracic Surgery at Stanford. His clinical care encompasses all aspects of congenital heart disease, with an emphasis on complex reconstructive procedures to achieve biventricular circulation, neonatal and infant operations, and device therapies and transplantation for progressive cardiopulmonary failure. He is the Surgical Director of the Complex Biventricular Reconstruction and Pediatric Advanced Cardiac Therapies (i.e., mechanical circulatory support, heart, lung, and heart-lung transplantation) programs.

Dr. Ma's translational research utilizes biomechanical engineering principles to optimize existing treatments and develop new procedures and therapies to improve outcomes for children with complex heart conditions through collaborative efforts between the Schools of Medicine and Engineering. The lab focuses on understanding the systemic atrioventricular valve in single and complex biventricular circulations.

Dr. Ma has given and published more than 50 peer-reviewed presentations, articles, and book chapters, and serves on the Congenital Quality Council for the American Association of Thoracic Surgery, with active membership in the American Heart Association and Society of Thoracic Surgeons.

SESSION SPEAKERS CONT'D

Carolyn Dacey Seib, MD, MAS

Assistant Professor, Surgery (General Surgery)

Carolyn Dacey Seib, MD, MAS, is an Assistant Professor of Surgery at the Stanford University School of Medicine, endocrine surgeon, and health services researcher with advanced training in biostatistics and clinical research. Dr. Seib completed her undergraduate education at Princeton University, graduating summa cum laude in 2004, and received her M.D. at the New York University School of Medicine. She completed her residency in General Surgery and fellowship in Endocrine Surgery at UCSF. During her training, Dr. Seib received a Masters of Advanced Study (MAS) in Clinical Research from UCSF, which provided formal training in epidemiology and biostatistics. In April 2019, Dr. Seib joined the faculty at Stanford University as an Assistant Professor in the Department of Surgery. Dr. Seib's independent research program focuses on the management of endocrine disorders in older adults. She has been funded by a National Institute on Aging (NIA) GEMSSTAR R03 award, the American Thyroid Association, and the Veterans Administration, and currently holds an NIA K76 Beeson Career Development Award for Emerging Leaders in Aging focused on the development of decision support interventions for older adults with primary hyperparathyroidism and other endocrine conditions.

Derrick C. Wan, MD

Professor, Surgery (Plastic & Reconstructive Surgery)

Derrick Wan, MD, is a Professor of Surgery at the Stanford University School of Medicine. He serves as the Director of Maxillofacial Surgery at Lucile Packard Children's Hospital and is a Hagey Family Faculty Scholar in Stem Cell Research and Regenerative Medicine. He earned his Bachelor's degree from Stanford University and is a graduate of Columbia University's Vagelos College of Physicians and Surgeons. He trained in general surgery at the University of California San Francisco and in plastic surgery at the University of California Los Angeles. He then completed additional fellowship training in both craniofacial surgery at the University of California Los Angeles and microsurgery at Chang Gung Memorial Hospital in Taiwan. During his training, he also completed a post-doctoral research fellowship in the laboratory of Michael Longaker at Stanford University. Since joining the faculty at Stanford in 2011, Derrick Wan has been the recipient of multiple NIH grants and the American College of Surgeon's Franklin Martin, MD, FACS Faculty Research Fellowship. He is currently an associate editor of Annals of Plastic Surgery and has published over 200 manuscripts in the fields of wound healing, radiation fibrosis, and bone regeneration. His laboratory group currently investigates the regulation of stem cell pluripotency and repair of soft tissue scarring following radiation therapy.

KEYNOTE SPEAKER

SATURDAY, NOVEMBER 6, 2021

Barbara Natterson-Horowitz, MD
Professor of Medicine/Cardiology, UCLA
Lecturer, Harvard Department of Human Evolutionary Biology and Harvard Medical School

"3.6 Billion Years of Biomedical Innovation: Insights from Evolved Adaptations Across the Tree of Life"

About Dr. Natterson-Horowitz: B. Natterson-Horowitz, MD, is a cardiologist and evolutionary biologist on the faculty of Harvard Medical School, Harvard University's Department of Human Evolutionary Biology and the Division of Cardiology at UCLA. Her research focuses on evolved adaptations in a phylogenetically wide range of species as a source of insights into human pathologies, including heart failure, sudden death, gestational hypertension, and infertility.

Natterson-Horowitz received her undergraduate and masters degrees at Harvard followed by medical school at UCSF, and (at UCLA) residency and chief residencies in internal medicine and fellowship in cardiovascular medicine, followed by advanced training in heart failure and cardiac imaging at UCLA. She joined the faculty of the UCLA Division of Cardiology in 1993 and the Department of Ecology and Evolutionary Biology in 2010. She now divides her time between UCLA and Harvard, where she teaches at the medical school and department of Human Evolutionary Biology.

Her New York Times bestseller, *Zoobiquity*, co-authored with Kathryn Bowers, was a Finalist in the American Association for the Advancement of Science Excellence in Science Books Award, a Smithsonian Top Book of 2012 and a Discover Magazine Best Book of the Year. It has been translated into over ten languages and has been the Common Read selection at universities across the country.

In 2019 BioInspired Medicine was selected by the Nobel Assembly as the theme of its Nobel Conference. Natterson-Horowitz delivered the opening keynote address.

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