

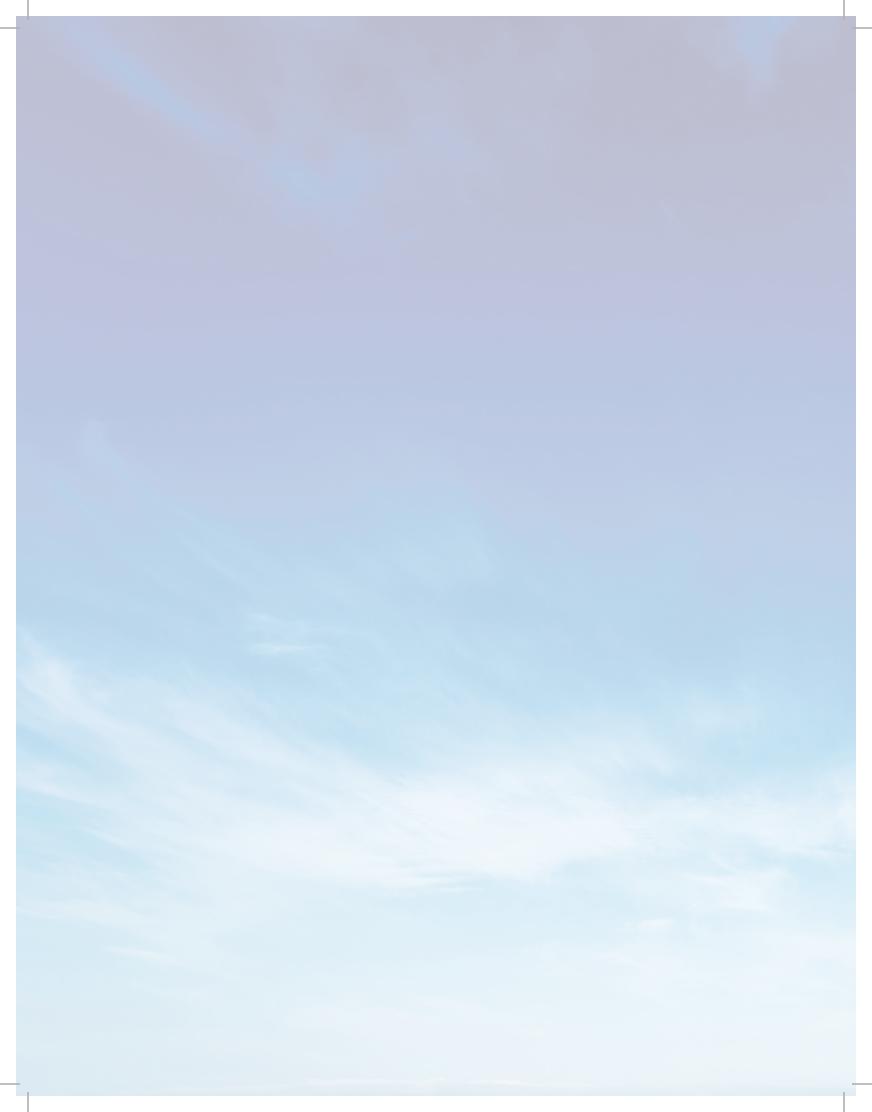
Global experts sharing cutting-edge information on innovations defining the future of healthcare. Blue Skies shares the best of advanced technology (AI, robotics, VR, OR of the future) with the best health and wellness-based practices (diet, mindfulness, sleep).













Saturday, February 3, 2024
University of California, Irvine
Sue Gross Auditorium, Susan Samueli Integrative Health Institute, College of Health Sciences

AGENDA

7:00 – 8:00AM **Registration & Breakfast**

8:00 - 8:25AM **Welcome and Remarks**

Dr. Jaime Landman, Chairman, UCI Department of Urology

Mr. Mike McKirdy, President, Royal College of Physicians and Surgeons of Glasgow

Dr. Shaista Malik, Susan Samueli Integrative Health Institute

Susan Samueli, PhD

8:25 – 9:50AM **Salutogenesis Part 1**

Mindful Eating, Mindful Living | Dr. Gary Deng

Sustainable Agriculture: Planetary and Human Health | Prof. Lindsay Jaacks

Late Effects: Environmental Influences on Neurological Disease | Dr. Patrick Kearns

Health Inequalities: Social Determinants and Beyond | Prof. Jason Leitch

9:50 – 10:10AM **Break**

10:10 – 11:45AM **Salutogenesis Part 2**

The True Purpose of Nutrition | Dr. Robert Lustig

Salutogenesis: Insights to a Longer, Healthier Life | Dr. Shaista Malik

Breast Cancer: The Way We Live Now | Mr. Mike McKirdy

Keynote Speaker: Asymmetric Organocatalysis and the Path to the Nobel Prize | Sir Dave MacMillan











Saturday, February 3, 2024 University of California, Irvine Sue Gross Auditorium, Susan Samueli Integrative Health Institute, College of Health Sciences

AGENDA CONTINUED

11:45AM – 12:15PM Panel Discussion

Moderators: Dr. Shaista Malik & Mr. Mike McKirdy

12:15 – 2:00PM **Diploma Awards & Lunch**

2:00 – 4:20PM Advanced Healthcare Technology

Kiss of the Muse: Creativity and Innovation | Dr. Ralph Clayman

Inspiration and Perspiration: Realizing Surgical Innovation | Mr. Derek Herrera

A Flexible Perspective on Surgical Robotics | Dr. Duke Herrell

Surgical Robotics: From Renaissance Master (DaVinci) to the Moon and Beyond | Dr. Fred Moll

Transforming the Operating Room into the Safest Space on Earth | Dr. Teodor Grantcharov

Elevating the Practice of Medicine with our Al Partner | Dr. Inderbir Gill

From Virtual Reality to Clinical Reality: How VR Shapes Our Future | Dr. Francesco Porpiglia

4:20 – 4:50PM **Panel Discussion**

Moderators: Prof. Abhay Rane, College Registrar and Associate Director (International), The Royal College of Physicians and Surgeons of Glasgow & Dr. Jaime Landman

4:50PM Closing Remarks

Prof. Hany Eteiba, President Elect of the Royal College of Physicians and Surgeons of Glasgow















SALUTOGENESIS



Robert Lustig MD

Lindsay Jaacks PhD



Lifestyle, Disease Prevention and Alternative Strategies to Optimizing Health Span



Shaista Malik MD, PhD, MPH, FRCP(Glasg)

Patrick Kearns MBChB, MRCP, MPH



Jason Leitch CBE FDS RCPS(Glasg)



Mike McKirdy PRCPSG



Sir Dave MacMillan

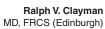














Teodor Grantcharov MD, PhD, FACS





Inderbir Gill MD, FRCS(Glasg)

Duke Herrell MD, FACS, FRCS(Glasg)

Fred Moll

MD, Hon FRCS(Glasg)



ADVANCED

Including Lasers and Photonics,
Robotics, Genetics, Virtual Reality, Etc. 100



Francesco Porpiglia MD, FRCS(Glasg)











Gary Deng, MD, PhD, FRCP(Glasg) Mindful Eating, Mindful Living



Dr. Deng is Medical Director of the Bendheim Integrative Medicine Center at Memorial Sloan Kettering Cancer Center (MSKCC) and Professor of Clinical Medicine at Weill Cornell Medical College of Cornell University in New York City. His professional expertise is in the use of an integrative medicine approach to help patients throughout the continuum of cancer prevention, treatment, and survivorship. This approach aims to build a patient's physical and mental resilience, reduce symptoms during treatment, speed up recovery after treatment, lower recurrence risks, prevent further illnesses, and achieve optimal wellness.

Dr. Deng has taken a leadership role in the emerging and evolving field of integrative oncology, where lifestyle changes and use of non-drug therapies are incorporated into patient-centered cancer care. Since 2003, he has built a robust integrative medicine physician practice that is trusted and valued by oncology colleagues and directs clinical services provided at the Bendheim Integrative Medicine Center at MSKCC. Dr. Deng is active in conducting research and developing innovations in the field. He is principal investigator of research projects on acupuncture, yoga, and botanical agents. Dr. Deng has developed education programs for physicians, nurses, acupuncturists, massage therapist and yoga instructors.

He is the lead author of several integrative oncology clinical practice guidelines and numerous publications of clinical trial data, reviews, and textbook chapters. Dr. Deng is frequently invited to give lectures internationally to both professional and lay audiences, and to review clinical trial protocols, grant applications to National Institute of Health, and professional manuscripts (including New England Journal of Medicine, Lancet, and Journal of Clinical Oncology). He is the author of "The Wellness Principles: Cooking for a Healthy Life," a cookbook with advice on healthy living and 100 recipes for healthy, tasty, and quick home cooking.

Dr. Deng received his medical degree from Peking University Health Science Center, China, and his Ph.D. degree in Microbiology and Immunology from University of Miami, Florida. He completed his clinical training at the University of Texas Medical School at Houston and research training at the University of Texas M.D. Anderson Cancer Center. Dr. Deng is a past president of the Society for Integrative Oncology.











Lindsay Jaacks, PhD Sustainable Agriculture: Planetary and Human Health



Lindsay Jaacks is a Professor of Global Health and Nutrition at The University of Edinburgh in the Global Academy of Agriculture and Food Systems. Prior to moving to Scotland, she was on the faculty at the Harvard School of Public Health. She has served as a consultant to the UN Food and Agriculture Organization on nutritious food environments. Formally trained in biology (Cornell), nutrition and epidemiology (UNC-Chapel Hill) her research aims to understand how to sustainably achieve food and nutrition security. This is important because the foods we eat account for nearly one-third of greenhouse gas emissions, and, reciprocally, climate change is already affecting our ability to produce food in the US and around the world.

To address these challenges, we need independent evaluations, policy coherence, success stories taken to scale, and a joined-up long-term approach. Underpinning all of these is the need for high-quality, high-resolution, high-frequency food systems data. Examples of her team's current data-driven projects include leading national diet assessments in Scotland, a cluster-randomized controlled trial of the health effects of organic farming in India, and an Analytics Hub to support the implementation of the Good Food Nation (Scotland) Act. Her work has been funded over the years by the National Institutes of Health, UK Research and Innovation, Wellcome Trust, The Bill and Melinda Gates Foundation, and The Royal Society of Edinburgh, among others.

Lindsay has published over 150 articles in leading health journals including The Lancet, JAMA and PLoS Medicine and has served as an expert advisor / commissioner on The Lancet Commission on Obesity, the National Diabetes Prevention Program Nutrition Convening by the CDC, and the UK Parliamentary Office of Science and Technology. She has also worked with the Scottish Government, the Ministry of Women and Child Development in India, and the Uttar Pradesh and Andhra Pradesh state governments in India.

University website: https://www.ed.ac.uk/profile/lindsay-jaacks

Google Scholar: https://scholar.google.com/citations?user=iEEgYBQAAAAJ&hl=en

X: @LindsayJaacks











Patrick Kearns, MBChB, MRCP, MPH Late Effects: Environmental Influences on Neurological Disease



Patrick Kearns is a Lecturer in Neurology, Epidemiology, and Molecular Genetics at The University of Edinburgh with appointments in the Centre for Clinical Brain Sciences, the Anne Rowling Regenerative Neurology Clinic, and the MRC Human Genetic Unit and holds an honorary appointment for clinical practice in the National Health Service (NHS). His clinical research includes involvement in randomized control trials in multiple sclerosis (MS) and motor neurone disease (MND/ALS) and he leads research in a large observational cohort study of newly diagnosed multiple sclerosis (FutureMS). His research has received funding from UKRI, the Wellcome Trust, Lifearc, the MRC (UK), Rowntree Foundation, the Rowling Trust, the

Frank Knox Trust, and the Scottish Chief Scientist Office.

Formally trained in molecular biology (PhD at the MRC Human Genetic Unit) and epidemiology (MPH as a Frank Knox Scholar at Harvard), in addition to clinical medicine, his translational research combines epidemiology and molecular biology approaches to address the mechanisms by which infections cause chronic autoimmune, neuroinflammatory and neurodegenerative diseases. His particular focus is on explaining how Epstein Barr Virus (EBV) causes MS and how SARS-CoV-2 causes acute and chronic immune dysfunction.

Scotland has the highest incidence of MS in the world, for reasons that are still unclear more than 100 years after this high incidence was first recognized. In the last 20 years compelling epidemiological evidence has accumulated showing that EBV infection is necessary for the disease but this explains little of the geographic distribution and the mechanism is only starting to be understood.

Neurological disorders are the leading cause of physical and cognitive disability across the globe and, with demographic changes, are the most ominous frontier in medical science. By combining advances in big data through well constructed epidemiological studies with "deep molecular phenotyping" made possible by an explosion of new methods in biology, it is becoming possible to explain why these diseases occur and new opportunities are becoming available to prevent and treat them.

University website: https://www.ed.ac.uk/profile/dr-patrick-kearns

Twitter/X: @Kearnsneuro











Jason Leitch, CBE, FDS, RCPS(Glasg)
Health Inequalities: Social Determinants and Beyond



Jason has worked for the Scottish Government since 2007 and in January 2015 was appointed as The National Clinical Director. He was appointed CBE in the 2019 Queen's Birthday Honors. The National Clinical Director is responsible for quality in the health and social care system, including patient safety and person-centered care, NHS planning, and implementing quality improvement methods across the government and the broader public sector. He is a Senior Fellow at the Institute for Healthcare Improvement (IHI). He was a 2005-06 Quality Improvement Fellow at IHI. He is an Honorary Professor at the University of Dundee and a Visiting Professor at the University of

Strathclyde. Jason is a non-executive Board member of the Medical and Dental Defense Union of Scotland, a Board member of The Nazareth Trust and a trustee of the Indian Rural Evangelical Fellowship (UK) which runs a children's' home and schools in southeast India. He qualified as a dentist in 1991 and was a Consultant Oral Surgeon in Glasgow. He has a doctorate from the University of Glasgow, a Master's in Public Health from Harvard and is a fellow of the three UK surgical Royal Colleges. Jason is an internationally recognized expert in healthcare quality. He speaks around the world and has advised Governments in the UK, Denmark, Sweden, Norway, The Republic of Ireland, Jordan, Canada, Brazil, and South Africa. In 2020 and 2021 he was awarded the Fletcher of Saltoun award from the Saltire Society, elected to the US National Academy of Medicine and awarded an Honorary Membership of the Faculty of Public Health all for his contribution to the UK and Scottish response to the global pandemic. Throughout the COVID-19 pandemic, he has played a key role in public health communication and engagement. He regularly featured at Scottish Government press conferences as well as public engagement on regional and national television and radio. He received praise for his ability to translate complex scientific information to the public, providing calm and clear advice.











Robert Lustig, MD The True Purpose of Nutrition



Robert H. Lustig, MD, MSL is Emeritus Professor of Pediatrics in the Division of Endocrinology, and Member of the Institute for Health Policy Studies at UCSF. Dr. Lustig is a pediatric neuroendocrinologist, with basic and clinical training relative to hypothalamic development, anatomy, and function. For the last twenty years, Dr. Lustig's research has focused on the regulation of energy balance by the central nervous system. He has investigated the contribution of biochemical, neural, hormonal, and genetic influences in the expression of the current obesity epidemic both in children and adults. He is interested in the hypothalamic signal transduction of insulin and leptin, how these two systems interact, and how they become dysfunctional in obesity. He is studying the cardiovascular morbidity associated with hyperinsulinemia and developing methods to evaluate and prevent this phenomenon

in children. He is also interested in the pathogenesis of hepatic insulin resistance, and the role of dietary fructose as a specific driver of glycation, de novo lipogenesis, and inflammation.

Dr. Lustig graduated from MIT in 1976 and received his M.D. from Cornell University Medical College in 1980. He completed his pediatric residency at St. Louis Children's Hospital in 1983, and his clinical fellowship at UCSF in 1984. From there, he spent six years as a post-doctoral fellow and research associate in neuroendocrinology at The Rockefeller University. He also received his Masters of Studies in Law (MSL) degree at University of California, Hastings College of the Law in 2013. He has been a faculty member at the University of Wisconsin-Madison, the University of Tennessee (where he was Associate Director of the GCRC) and at St. Jude Children's Research Hospital, prior to UCSF. Dr. Lustig retired clinically from UCSF Medical Center in 2017 to focus his efforts on research and policy.

Dr. Lustig has authored 130 peer-reviewed articles and 79 academic reviews. He has mentored 30 pediatric endocrine fellows and trained numerous other allied health professionals. He provides endocrinologic support to several protocols of the Children's Oncology Group. He provides consultation for several childhood obesity advocacy groups. He is the former Chairman of the *Ad hoc* Obesity Task Force of the Pediatric Endocrine Society and the Endocrine Society, and a member of the Pediatric Obesity Devices Committee of the U.S. Food and Drug Administration.

Dr. Lustig is the editor of the academic volume *Obesity Before Birth* (2010), and author of the popular books *Fat Chance* (2012), *The Fat Chance Cookbook* (2014), *The Hacking of the American Mind* (2017), and *Metabolical* (2021). Dr. Lustig is the Chief Science Officer of the non-profit Eat REAL <eatreal.org>, and on the Advisory Board of the Center for Humane Technology <humanetech.com>.











Shaista Malik, MD, PhD, MPH, FRCP(Glasg) Salutogenesis: Insights to a Longer, Healthier Life Panel Discussion – Salutogenesis



Founding Associate Vice Chancellor for Integrative Health, Susan & Henry Samueli College of Health Sciences

Founding Executive Director, Susan Samueli Integrative Health Institute

Professor of Medicine

Susan Samueli Endowed Chair in Integrative Medicine

Medical Director, Integrative Cardiology and Cardiac Rehab

Shaista Malik is a tenured professor in the UCI division of cardiology, department of medicine. Dr. Malik is the founding executive director or the Susan Samueli Integrative Health Institute and the founding associate vice chancellor, integrative health, of the Susan and Henry Samueli College of Health Sciences.

Her research interests include assessing both novel diagnostic and therapeutic modalities in cardiometabolic disease. In terms of assessing early heart disease, her research has utilized a systems view of risk factors, including hypertension and metabolic syndrome as well as subclinical atherosclerosis. She has received continuous NIH grant including as a PI for R01s on the use of genetic, proteomic, and metabolomic biomarkers with imaging markers as well as on the role of electroacupuncture in hypertension. Her recent NIH grant awards, including an R01 and U24 from NCCIH have been on identifying the mechanisms underlying the effects of music therapy. She has authored over 80 publications, co-edited two textbooks on preventive cardiology, and written over 20 book chapters. Her research efforts have had high impact with an h-index of 41 and garnered 35,599 citations. She has held leadership positions in the American College of Cardiology (ACC) in the Imaging Council and in the Core Cardiology Training Symposium (COCATS) and has co-authored national guidelines and position papers on cardiovascular imaging in those diabetes as well as imaging training in fellowship programs. She is currently serving on the oversight committee of the American Heart Association (AHA) Strategic Focused Research Network on Health Technology and Innovation. She is the co-chair of the BraveNet Practice Based Research Network (PBRN) – which includes twenty-six leading integrative medicine programs/clinics in the US, Canada, and Australia.

Her interests in preventive cardiology led to a whole person approach, include the use of lifestyle approaches as well as complementary therapies such as mindfulness in cardiovascular disease patients. As the Founding Executive Director of SSIHI, she has been involved in strategic placement of food is medicine programs, including planning and operationalizing two teaching kitchens at UCI, including one in a Federally Qualified Health Center. She is also launching a new fellowship in integrative medicine, which she will co-direct.

Dr. Malik received her BA and BS degrees from Stanford University. She received her MD degree from UC Irvine School of Medicine and graduated with AOA honors. She also completed a MPH degree with honors and a PhD degree both from UCLA Fielding School of Public Health. She was named Woman of the Year by CA Assemblywoman Petrie-Norris in 2023 for her work in integrating integrative medicine into a healthcare system and extending the whole person care model into the community.











Mike McKirdy, PRCPSG

Breast Cancer: The Way We Live Now Panel Discussion – Salutogenesis



Mike McKirdy graduated from the Glasgow University Medical School in 1985 and after surgical training in the west of Scotland, London and Manchester, was appointed a Consultant General Surgeon at the Royal Alexandra Hospital, Paisley in 1997. Since then he has led and developed breast cancer services in the Clyde area of the West of Scotland. Mike was Scottish Clinical lead for Breast services from 2019 to 2021 and became a Trustee of the Association of Breast Surgery of UK & Ireland in 2023. Mike chairs the ABS International Committee.

Mike has served on the Council of the Royal College of Physicians and Surgeons of Glasgow since 2005 and while Vice President, from 2013 to 2016, established the College's Global Health Programme, mainly focused on work in Malawi. He was appointed College Director of Global Health in 2016 and in that role, he helped publish a report on the value of volunteering for Global Health work, "Global Citizenship in the Scottish Health Service" (2017), which was accepted by Scottish Government that year, and the NHS Scotland Global Citizenship Programme established. In 2018 Mike was appointed to Scottish Government as Professional Adviser on Global Health and as a Trustee of THET, the Tropical Health Education Trust.

Mike continues as a Trustee of THET but stood down from both Scottish Government roles on taking up office as President of the Royal College of Physicians and Surgeons of Glasgow in December 2021. He was elected Vice Chair of the Academy of Medical Royal Colleges in July 2022.











Sir Dave MacMillan Keynote Speaker: Asymmetric Organocatalysis and the Path to the Nobel Prize



Dave MacMillan was born in Bellshill, Scotland, and received his undergraduate degree in chemistry at the University of Glasgow, where he worked with Dr. Ernie Colvin. In 1990, he began his doctoral studies under the direction of Professor Larry Overman at the University of California, Irvine, before undertaking a postdoctoral position with Professor Dave Evans at Harvard University (1996). He began his independent career at University of California, Berkeley, in July of 1998 before moving to Caltech in June of 2000 (Earle C. Anthony Chair of Organic Chemistry). In 2006, MacMillan moved to the East Coast of the US to take up the position of James S. McDonnell Distinguished University Professor at Princeton University and he served as Department Chair from 2010–2015.

MacMillan has received several awards, including: the Nobel Prize in Chemistry (2021), the Chirality Medal (2022), the Centenary Prize (Royal Society 2020), Nagoya Medal, Japan (2019), ACS Somorjai Catalysis Award (2018), Noyori Prize, Japan (2018), Janssen Pharmaceutica Prize, Belgium (2016), Max Tischler Prize, Harvard (2016), Ernst Schering Award in Biology, Chemistry and Medicine, Germany (2015), ACS Harrison Howe Award (2014), NJ ACS Molecular Design Award (2014), ACS Award for Creativity in Synthesis (2011), the Mitsui Catalysis Award, Japan (2011), ACS Cope Scholar Award (2007), ACS EJ Corey Award (2005), and the Corday-Morgan Medal (2005).

MacMillan was knighted by Queen Elizabeth in July 2022 and by King Charles at Buckingham Palace in February 2023. In 2018, MacMillan was elected to the National Academy of Sciences, and in 2012, he became a Fellow of the Royal Society (FRS) and a Fellow of the American Academy of Arts and Sciences. MacMillan also helped launch and was Editor-in-Chief of Chemical Sciences (2009–2014) and was Chair of the NIH Study Section SBCA (2014-2017).

MacMillan is a scientific consultant with Pfizer (worldwide), Merck (worldwide), Amgen (worldwide), Biogen Biopharma, Abbvie Research Laboratories, Johnson & Johnson Pharmaceuticals, Takeda Pharmaceuticals, and Gilead Research Laboratories. Dave is also a member of the Scientific Advisory Boards of Firmenich (Switzerland) and Kadmon Pharmaceuticals (US), and a permanent member of the RSRC board at Merck Research Laboratories.

Based on a gift from Princeton University, Eric Schmidt (Google), Tony Evnin (Venrock), MacMillan was asked to launch the Princeton Catalysis Initiative (PCI), of which he is now Director. This Initiative has now signed agreements with several societal impact companies to conduct collaborative research (Merck, Pfizer, BMS, Janssen, GenMab) and has brought more than \$70 million in external research funding to Princeton University.

MacMillan is a co-founder of Chiromics LLC, Penn Ph.D LLC, Dexterity Pharma LLC and Antenna Bio, LLC. These companies are focused on new strategies and screening techniques for the identification of drug-like molecules.

Research Activities: Across both the areas of organocatalysis and visible light photoredox catalysis, MacMillan's studies have been cited >44,000 times as of 2021. A number of reactions and catalysts developed in MacMillan's labs have been employed throughout the pharmaceutical, agrichemical and the flavor and fragrance industries.











Ralph V. Clayman, MD, FRCS (Edinburgh) Kiss of the Muse: Creativity and Innovation



Dr. Clayman is world renowned for his expertise in minimally invasive surgery for kidney stone disease, kidney cancer and strictures of the ureter, and is listed among the Best Doctors in America® for Urology. He is a graduate of Grinnell College and the University of California, San Diego School of Medicine. Following general surgery and Urology training at the University of Minnesota, he spent two years at Southwestern Medical School in Dallas pursuing his interests in renal cancer research, kidney stone disease and minimally invasive Urology. Subsequently, Dr. Clayman spent 17 years at Washington University School of Medicine in St. Louis, rising to the rank of Professor of Urology and Radiology, Director of the Midwest Stone Institute

and the inaugural Co-director of the Division of Minimally Invasive Surgery.

In 1990, Clayman and his associates performed the world's first laparoscopic removal of a kidney for a tumor, as well as the first laparoscopic removal of a kidney and ureter to treat cancer. They also developed a cutting balloon catheter to treat obstruction of the ureter and performed pioneering work on percutaneous and endoscopic therapy for ureteral and kidney stones. He established the nation's first fellowship program in minimally invasive urology in 1984; trainees of his program now occupy academic positions at universities throughout the United States, Brazil, Spain, Italy, Canada and Israel. Clayman is the author of textbooks on laparoscopic and percutaneous urologic surgery and has published more than 400 peer-reviewed papers and book chapters. He is co-founder and co-editor of the Journal of Endourology and has 14 minimally invasive surgical instrumentation patents to his name. He has received numerous national and international awards.

In January 2002, he joined UC Irvine's School of Medicine as Chair and Professor of the newly formed Department of Urology. During his seven years as Chair, the UC Irvine Medical Center's Urology Program came to be ranked among the top 20 programs in the country by US News and World Report. In 2009, Dr. Clayman stepped down as Chair of Urology to become Dean of the School of Medicine. After a successful 5-year term as Dean, he elected to return to the Department of Urology as a Professor. He currently is fully immersed in his clinical and research work in kidney stones, ureteral and renal obstruction, and renal cancer, while enjoying the opportunity to work closely with residents, fellows, and students.











Derek Herrera, Bright Uro Inspiration and Perspiration: Realizing Surgical Innovation



Derek Herrera is the Founder and CEO of Bright Uro, a venture-backed medical device company developing the most advanced Diagnostic Sensors and Data Science for Urology. Prior to this, Derek served as the Founder and CTO of UroDev Medical, a venture-backed medical device company that designed the first fully-internal, wirelessly controlled bladder management system for men with chronic Urinary Retention.

Before entering the Medical Device Industry, Derek served as a Marine Raider in the Special Operations community. He led Marines and Sailors across the globe until he was shot and paralyzed from the chest down in 2012 while

leading his team in Afghanistan.

Derek is a graduate of the US Naval Academy, where he majored in Systems Engineering and played JV Lacrosse, Boxing, and started the (unofficial) Brazilian Jiu-Jitsu Club. Prior to becoming an entrepreneur in the Medical Device Industry, Derek graduated from the Executive MBA program at the UCLA Anderson School of Management.

Derek has served on the boards of multiple non-profit organizations including the Marine Raider Foundation, American Technion Society, and MedTechVets.

Derek lives in San Clemente, CA with his wife, Maura, his twin boys, Hudson and Hunter, and his dog Donut.











Duke Herrell, MD, FACS, FRCS(Glasg) A Flexible Perspective on Surgical Robotics



Dr. S. Duke Herrell is CEO of Virtuoso Surgical Inc. and CMO of Endotheia Inc. which are both medical device startups developing revolutionary technologies.

He also serves as Professor of Urology at Vanderbilt University School of Medicine (VUMC), as well as Professor of Biomedical Engineering and Mechanical Engineering within Vanderbilt's School of Engineering in Nashville, Tennessee. Dr. Herrell led development of the surgical robotics program and minimally invasive fellowship at Vanderbilt and has had an active clinical

practice in endourology including robotic surgery for prostate and kidney cancer.

Dr. Herrell has been a funded PI investigator on multiple NIH grants developing advanced robotic surgery platforms and tools. He is a founder and steering committee member of the Vanderbilt Institute for Surgery and Engineering (VISE), which encompasses over 20 engineering labs and 40+ clinical collaborators with more than \$20m in NIH funding over the past several years. Dr. Herrell is a founder and officer in two medical device startups that have emerged from VUMC and holds multiple patents.











Fred Moll, MD, Hon FRCS(Glasg) Surgical Robotics: From Renaissance Master (DaVinci) to the Moon and Beyond



Dr. Moll has served as a member of Procept BioRobotics board of directors since August 2011 and has served as Chair since March 2021. From April 2019 to March 2023, Dr. Moll served as Chief Development Officer for Johnson & Johnson Medical Devices Companies. Dr. Moll was also a co-founder, and, from September 2012 to 2019, was the Chairman and Chief Executive Officer of Auris Health, Inc., a robotics medical device company, that was acquired by Johnson and Johnson in 2019. Dr. Moll is also the Founding Partner of Sonder Capital Management, LLC, a healthcare venture capital investment firm. He serves on the boards of Shockwave Medical, Inc., since March 2011, where he is a member of the nominating and corporate governance committee, and

INSIGHTEC Ltd., since June 2020, where he is a member of the audit committee. Dr. Moll previously served as member and as Chairman of the board of Restoration Robotics, Inc., from November 2002 until its merger with Venus Concept in November 2019. Dr. Moll previously served on the board of directors at Intersect ENT, Inc. from March 2010 to February 2021, where he was a member of the nominating and corporate governance committee. Dr. Moll received a B.A. in economics from the University of California at Berkeley, an M.S. in management from Stanford University and an M.D. from the University of Washington.











Teodor Grantcharov, MD, PhD, FACS Transforming the Operating Room into the Safest Space on Earth



Dr. Teodor Grantcharov completed his surgical training at the University of Copenhagen, and a doctoral degree in Medical Sciences at the University of Aarhus in Denmark. Dr. Grantcharov is a Professor of Surgery at Stanford University and Associate Chief Quality Officer for Innovation and Safety at Stanford Healthcare.

Prior to joining Stanford, Dr. Grantcharov was a Professor of Surgery at the University of Toronto and Keenan Chair in Surgery at St. Michael's Hospital in Toronto. He was the Founder of the International Centre for Surgical Safety –

a multidisciplinary group of visionary scientists with expertise in design, human factors, computer- and data science, and healthcare research. He previously held Canada Research Chair in Simulation and Surgical Safety and was awarded the Queen Elizabeth II diamond jubilee medal for his contributions to clinical research and patient safety in Canada. Dr. Grantcharov was awarded the honorary fellowship of the Imperial College in London, the honorary fellowships of the Bulgarian, Danish and Brazilian surgical societies, the Spinoza Chair in Surgery from the University of Amsterdam and multiple national and international awards for his contributions to surgical education and surgical safety.

Dr. Grantcharov's clinical interest is the area of minimally invasive surgery, while his academic focus is in the field of surgical innovation and patient safety. He has become internationally recognized as a leader in this area with his work on curriculum design, assessment of competence and impact of surgical performance on clinical outcomes. Dr. Grantcharov developed the surgical Black Box concept, which aims to transform the safety culture in medicine and introduce modern safety management systems in the high-risk operating room environment.

Dr. Grantcharov has more than 220 peer-reviewed publications and more than 200 invited presentations in Europe, South- and North America. He holds several patents and is the Founder of Surgical Safety Technologies Inc – an academic startup that commercializes the OR Black Box platform. He sits on numerous committees with Surgical Professional Societies in North America and Europe.











Inderbir Gill, MD, FRCS(Glasg) Elevating the Practice of Medicine with our Al Partner



Inderbir S. Gill, MD, is distinguished professor and chairman, Catherine & Joseph Aresty Department of Urology; executive director, USC Institute of Urology; and the Shirley & Donald Skinner Chair in Urologic Cancer Surgery at the Keck School of Medicine, University of Southern California, Los Angeles. Prior to this, he was chairman & professor, department of urology at the Cleveland Clinic, Cleveland, OH, where he was on faculty for 12 years (1997-2009).

During his 13 years in Los Angeles since 2009, USC Urology has grown in scientific stature, clinical volumes, financial productivity & philanthropy. As a result, USC Urology has progressed in U.S. News & World Report national rankings from being outside the 'Top 50' until 2011, to #4 in 2019, and has ranked in the 'Top 10' for 5 years in a row (2018-2022). In NIH Blue Ridge

national rankings, USC Urology elevated from #26 in 2017 to #2 nationally (2022, 2023).

Dr Gill has published ~870 scientific papers with ~41 000 citations. His H-index is 112, amongst the highest in the entire field of urology. He is principal investigator of a funded R-01 grant from NCI, and co-PI on other NIH grants. He is published in prestigious journals including N. Engl. J. Med., Nature, Nature Medicine, Lancet, Lancet Oncology, JAMA Surgery, etc. He has edited/co-edited 10 textbooks and has been on the editorial boards of 9 urologic journals. He has been invited for over 450 visiting professorships, invited lectures and live surgery demonstrations world-wide. He is elected to the prestigious American Association of Genito-Urinary Surgeons (2003) and the Clinical Society of AAGUS (2009).

His various honors include: the Dr. B. C. Roy National Award for Eminent Medical Person awarded by the President of India (2005); St. Paul's Medal by the British Urological Association (2006); honorary Fellow of the Royal College of Surgeons of England; President, 24th World Congress of Endourology & SWL (2006); USC Presidential Medallion (2013); listed in Thomson Reuters "The World's Most Influential Scientific Minds" (2014); AUA Ramon Guiteras Lecturer (2015); AUA Chair, Global Initiatives (2015-2017); AAGUS Membership Committee (2021-2025); AUA Presidential Citation for Outstanding Contributions to Robotic Urologic Oncologic Surgery (2022); and SIU Distinguished Career Award by the Societe' Internationale D' Urologie (2022).

His primary academic focus is advanced robotic urologic oncologic surgery for cancers of the kidney, bladder, and prostate. His aggregate team has amongst the world's pre-eminent robotic/laparoscopic case volumes for urologic oncologic surgery, with over 15,000 cases in the USA. More recently, his interest has expanded to focal targeted therapy for prostate cancer. He and his team are now exploring artificial intelligence (AI) applications in urology. In 2021, under his leadership, USC Urology established the first, foundation-funded, dedicated Urology AI Center in a urology department in the nation.

Dr Gill has had the enormous privilege to train numerous urology residents and over 120 post-graduate fellows in robotic & minimally invasive urologic oncologic surgery. His fellows and faculty members are also making innovative contributions to the field, and notably, at this writing, 12 of them are current Chairs of highly prestigious urology departments nationally and internationally.











Francesco Porpiglia, MD, FRCS(Glasg) From Virtual Reality to Clinical Reality: How VR Shapes Our Future

Prof. Porpiglia earned his medical degree and completed postgraduate training in Urology at the University of Turin. Currently Professor Porpiglia is a Full Professor of Urology at the University of Turin, Department of Oncology - School of Medicine; Chief of the Division of Urology and director of Department of Surgery at S. Luigi "University" Hospital Orbassano (Turin); Director of European Training Center of Robotic Surgery – San Luigi Hospital, Orbassano (Turin); Editor in Chief of Minerva Urologica e Nefrologica (MUN).

Prof. Porpiglia is member of several scientific societies, including the Italian Society of Urology (S.I.U), The Italian Association of Urologic Oncology (S.I.Ur.O), Italian Endourologists Association (I.E.A.), European Association of Urology (E.A.U.) and European Section of Uro-technology (E.SU.T.). He is Chief of "Guidelines" Committee of S.I.U. and chief of E.S.U.T. - Research Group. He is also chair E.A.U. – I.C.U.D. (International Consultation of Urological Diseases) – Reconstructive surgery. He is member of Royal College of Surgeons. He is author or co-author of more than 1000 publications, more than 540 in peer -reviewed journals.

His main research interests are: Minimally invasive surgery including laparoscopic and robotic surgery Oncology.











Professor Abhay Rane

College Registrar and Associate Director (International), The Royal College of Physicians and Surgeons of Glasgow

Panel Discussion – Advanced Healthcare Technology

Abhay Rane is currently Registrar of the Royal College of Physicians and Surgeons (RCPSG), having previously held the position of Surgical Vice President from 2019-2022; he is the first urologist elected to these posts.

Abhay is a graduate of Poona University in India; he completed his urology training on the South Thames Training Programme in London and was appointed to his current post as Consultant Urological Surgeon at Surrey and Sussex NHS Trust, UK in 1999.

He is Visiting Professor at Canterbury Christ Church University and holds Adjunct Chairs at the Keck School of Medicine at the University of Southern California (2012-) and the Icahn School of Medicine at Mount Sinai, New York (2017). Abhay was a member of British Association of Urological Surgeons (BAUS) Council from 2009-2015, represented BAUS on NICE Interventional Procedures Advisory Committee from 2012-2015 and was the BAUS representative to the American Urological Association from 2010-2019. Abhay hosted the World Congress of Endourology in 2015 in London, with the entire half million-dollar surplus donated to fund fellowships for trainees and surgeons in Lower Middle-Income Countries. He was awarded the BAUS Gold Medal in 2023 for services to British urology.

Abhay has several international credits to his portfolio. He is Director of the Endourological Society representing the United Kingdom, was Chair of the Awards Committee and is an Assistant Editor of the Journal of Endourology. Abhay has delivered several educational initiatives on behalf of RCPSG in India and Sri Lanka, and he has been recognized in both countries for his efforts.

Abhay was honored as Officer of the Order of the British Empire by the Queen in 2014 for services to laparoscopic surgery. However, he considers that his career's most important contribution has been promoting camaraderie with fellow physicians and surgeons worldwide.











Jaime Landman, MD, FRCS Panel Discussion – Advanced Healthcare Technology



Dr. Jaime Landman has served as the Chair of UCI Urology since January 2010. He is internationally respected and recognized as an expert in the management of kidney cancer and kidney stones.

Dr. Landman has pioneered technologies and techniques for minimally invasive management of kidney disease, from re-defining diagnosis of kidney cancer with development of a novel biopsy technique, developing and refining kidney ablation technique as well as the combined antegrade and retrograde approach for treatment of complex kidney stones. Most recently, he was the first surgeon the world to perform successful robotic kidney stone surgery.

As an investigator, he has published over 350 peer-reviewed manuscripts in academic journals, is the editor of two high impact books and he currently serves as co-editor of the Journal of Endourology. Working in partnership with Dr. Ralph Clayman, their laboratory has over 40 active projects including novel tumor markers for urologic cancers, trying to identify the relationship between the cancer and surrounding tissues and combined novel 3D technologies with imaging technologies helping to improve kidney surgery outcomes.

Dr. Landman is a dedicated teacher and educator having lectured and performed surgery globally and has launched high-impact innovative education programs including the UCI Summer Surgery Program which for over a decade has helped over 400 students actively develop skills in surgical innovation and the UCI LIFT (Leadership Innovation Fellowship Training) program. The LIFT program is a one-year fellowship for medical students interested in an academic career in surgical innovation and has trained over 20 fellows from around the country and around the world. He also serves as the co-director of the UCI Endourology fellowship. His mentorship efforts resulted in global recognition in 2023 when he was awarded the Mentor of the Year award by the Endourological Society.











Prof. Hany Eteiba President Elect of the Royal College of Physicians and Surgeons of Glasgow Closing Remarks



Professor Eteiba established strong collaboration between Cardiology in Scotland and numerous professional organizations worldwide. He is one of the founding members and is currently Director of the College's International Development Committee. Professor Eteiba has served a full term as Vice President (medical), College Councillor and is an active member of the Audit and Remuneration and Fellowship Committees. He is also program director for the highly successful joint College and British Cardiac Society Interactive Cardiovascular Symposium. He is recent past president of the Scottish Cardiac Society.

Professor Eteiba graduated with honours and obtained MSc in Cardiovascular Medicine with distinction in Cairo in 1983. Subsequently, he studied for his MD degree, under the supervision of Professor TDV Lawrie, Glasgow University, Founder of Medical Cardiology Department at Glasgow Royal Infirmary. In 1989 he successfully defended his MD thesis in a public forum and received the Jury's unanimous commendation.

In 1991 he was awarded an MD degree and graduated from the home university, Al-Azhar, Cairo. Professor Eteiba was appointed consultant interventional cardiologist, Glasgow Royal Infirmary and Honorary senior lecturer, Glasgow University in 1996.

He has played a leading role in developing, teaching, training, and conducting clinical research in Interventional Cardiology, gaining internationally recognized clinical expertise and a respected profile in education and training.

In November 2018 he was granted the status of honorary professor in the Institute of Cardiovascular and Medical Sciences, University of Glasgow.

Professor Eteiba recognizes the responsibility to speak out on health and workforce issues to ensure the highest possible standards of healthcare and appropriate remuneration scheme for hard working medical professionals.









Department of Urology





The UCI Department of Urology is home to a distinguished group of fellowship-trained surgeons who combine up-to-date comprehensive training and state-of-the-art technologies in the treatment of complex urologic diseases and disorders. In 2018 and 2020, U.S. News & World Report recognized our urology program as one of the top 50 specialty providers in the country. Our Urologists rank in the top 10 percent of physicians with regards to surgical outcomes, according to the American College of Surgeons' National Surgical Quality Improvement Program.



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About the Royal College

The Royal College of Physicians and Surgeons of Glasgow is a global community of inspiring health professionals. We work together to develop the skills, knowledge and leadership to advance our profession and improve patient care.

Founded in 1599 in Scotland, we have more than 15,000 members in 97 countries: physicians, surgeons, dental professionals and those working in podiatry and travel medicine.

Our mission is to enable our members to achieve their full potential as healthcare professionals, and to amplify their voices on issues that affect them and their patients.

Our education, training and assessment offering enables our members to develop the skills, knowledge and influence to improve professional healthcare standards worldwide.

Through a forward-looking, progressive approach, we inspire and nurture our members to deliver the highest possible standards of care.

Together, we're a force for good; determined to deliver positive progress for patients and our profession.

We are multidisciplinary: the only Royal College in the UK and Ireland that represents healthcare professionals working across medicine, surgery and dentistry, and our College plays an integral role in setting standards in all of these disciplines. We play an active leadership role in influencing and shaping medical, surgical and dental curricula, training and assessment.

We are inclusive in our outlook and believe there is great strength in working with others to deliver the best outcomes, whether that is in influencing policy changes, delivering education and examinations, or supporting colleagues around the world. Our established network of strategic partnerships is always growing.

Join our community today, add your voice and help us speak up for the profession.

We are proud to be a worldwide community of healthcare professionals – and we look forward to welcoming you.

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UCI Health

Susan Samueli Integrative Health Institute



ABOUT US

The UCI Susan Samueli Integrative Health Institute is reimagining healthcare, complementing conventional treatments with integrative services that are informed by science and incorporated into the training of future health professionals to advance a model of team-based, whole-person care that helps patients achieve their best health.



As the only academic integrative health center in Orange County, the UCI Susan Samueli Integrative Health Institute offers advanced assessments and highly individualized treatment plans. The Samueli Institute leads the way in making whole-person care accessible to all through groundbreaking integrative studies that inform innovative training for healthcare professionals and team-based, patient-centered care.

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- Massage Therapy
- Medical Group Visits
- Mindfulness
- · Naturopathic Medicine
- Nutrition
- Pain
- Physical Therapy
- · Weight Management
- · Women's Health

HIGHLIGHTS FY23



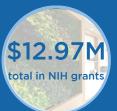






















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