Seventh Annual Dean's Symposium on Innovation and Entrepreneurship





Weill Cornell Medicine Enterprise Innovation

November 7, 2023

Weill Cornell Medicine Enterprise Innovation

Integrating Weill Cornell Medicine's different teams and resources under a single, united organization, Enterprise Innovation encompasses the entire spectrum of an effective innovation ecosystem. We offer unique opportunities for faculty and trainees to transform their research into medical advances through collaborations including access to the Sanders Tri-Institutional Therapeutics Discovery Institute.

Our team of top-tier business development experts works collaboratively with a network of partners to commercialize technology across major pillars of biomedical innovation including therapeutics, devices, diagnostics and precision medicine. tangible properties, digital health and data assets. We proactively engage Weill Cornell faculty and trainees to nurture promising nascent biomedical technology and bring biotech innovations to market quickly and efficiently through connecting our innovators with the right tools, resources, funding opportunities, education and industry leaders.



Whether you are a researcher interested in disclosing an invention, a trainee considering launching a company or an industry leader searching for promising technologies, Weill Cornell Medicine Enterprise Innovation is here to help.



Agenda

In-Person

Griffis Faculty Club 521 E 68th Street, New York, NY

12:00 p.m. - 1:00 p.m. Pre-Symposium Panel

"Engaging and Working with Industry to Translate Research into Innovation"

Moderator: Louise Sarup, Ph.D., Associate Director, Business Development and Licensing, Center for Technology Licensing at Weill Cornell Medicine

- Virginia Pascual, M.D., Professor of Pediatrics, Weill Cornell Medicine
- and New England. GE HealthCare
- Fei Wang, Ph.D., Associate Professor of Population Health Sciences, Weill Cornell Medicine
- Simone Angela Schnaitter Winkler, Ph.D., Assistant Professor of Electrical Engineering in Radiology, Weill Cornell Medicine

1:00 p.m. - 3:00 p.m. Office Hours

1:1 Meetings with Enterprise Innovation Business Development Experts. Register ahead. Walk-ins are welcome.

3:15 p.m. - 5:30 p.m. Symposium

Wayne Rowe, Ph.D., Director of Scientific Relations and Initiatives. Sanofi • Nicole Wake, Ph.D., *Director of Research and Scientific Affairs for New York*

Schedule

3:15 p.m. Check-In

3:30 p.m. Opening Remarks

Robert A. Harrington, M.D. Stephen and Suzanne Weiss Dean, Weill Cornell Medicine

Krystyn J. Van Vliet, Ph.D. Vice President for Research and Innovation, Cornell University

3:50 p.m. Keynote Address

"Tiny Technologies: Big Impact - Startups at the Intersection of Miniaturization and Medicine"

Sangeeta Bhatia, M.D., Ph.D.

John J. and Dorothy Wilson Professor of Engineering Director, Laboratory for Multiscale Regenerative Technologies Massachusetts Institute of Technology

4:40 p.m. Fireside Chat

- Moderator: Lisa Placanica, Ph.D., CLP Senior Managing Director Center for Technology Licensing at Weill Cornell Medicine
- Ronald Crystal, M.D. Chair of Genetic Medicine. Weill Cornell Medicine
- Albert Gianchetti Chief Executive Officer, XyloCor Therapeutics

5:30 p.m. Update on Enterprise Innovation

John Leonard, M.D. Senior Associate Dean for Innovation and Initiatives Weill Cornell Medicine

5:30 p.m. - 6:30 p.m.

Networking Reception and Recognition of Selma and Lawrence Ruben Science to Industry Bridge Fund Recipients



Sangeeta Bhatia, M.D., Ph.D.

Dr. Sangeeta Bhatia is a biomedical researcher, MIT professor, and biotech entrepreneur who works to adapt technologies developed in the computer industry for medical innovation. Trained as both a physician and engineer at Harvard, MIT, and Brown University, Dr. Bhatia leverages 'tiny technologies' of miniaturization to yield inventions such as human microlivers that model human drug metabolism and liver disease, as well as responsive nanoparticles and nanoporous materials that can be engineered to diagnose, study, and treat a variety of diseases, including cancer. She and her trainees have launched multiple biotechnology companies to improve human health.

As a prolific inventor and passionate advocate for diversity in science and engineering, Dr. Bhatia has received many honors including the Lemelson-MIT Prize, known as the 'Oscar for inventors,' and the Heinz Medal for groundbreaking inventions and advocacy for women in STEM fields. She is a Howard Hughes Medical Institute Investigator, the director of the Marble Center for Cancer Nanomedicine at the Koch Institute for Integrative Cancer Research at MIT, and an elected member of the National Academy of Sciences, the National Academy of Engineering, the American Academy of Arts and Science, the National Academy of Inventors, the National Academy of Medicine, and Brown University's Board of Trustees.

Keynote Speaker

Remarks by Leaders



Robert A. Harrington, M.D.

Dr. Robert A. Harrington is a cardiologist and serves as the Stephen and Suzanne Weiss Dean of Weill Cornell Medicine and Provost for Medical Affairs of Cornell University. His research areas of focus include evaluating antithrombotic therapies to treat acute ischemic heart disease and to minimize the acute complications of percutaneous coronary procedures and trying to better understand and improve upon the methodology of clinical research, including the use of technologies to facilitate the conduct of clinical trials.

Dr. Harrington was the Arthur L. Bloomfield Professor and chair of the Department of Medicine at Stanford University

for more than 10 years. He previously served as the Richard Stack Distinguished Professor and the director of the Duke Clinical Research Institute at Duke University, where he completed his fellowship in general and interventional cardiology.

Dr. Harrington earned his medical degree from Tufts University School of Medicine in Boston and served as chief resident during his residency in internal medicine at the University of Massachusetts Medical Center in Worcester.

Passionate about sharing information about health and medicine, Dr. Harrington has written more than 760 peer-reviewed manuscripts, reviews, book chapters, and editorials. He served as senior editor for the 13th and 14th editions of Hurst's The Heart — one of the leading textbooks of cardiovascular medicine. He also hosts a podcast for practitioners called "The Bob Harrington Show."

A previous American Heart Association (AHA) president, Dr. Harrington remains a member of AHA's Board of Directors. He is also an elected member of the Association of American Physicians, the Association of University Cardiologists, and the National Academy of Medicine / Institute of Medicine. In addition, he has served as a chair and member of the US Food and Drug Administration Cardiovascular and Renal Drugs Advisory Committee.

Among his numerous awards and recognition, Dr. Harrington was named a Master of the American College of Cardiology in 2016, was awarded the AHA's Clinical Research Prize in 2017, and earned the AHA Council on Clinical Cardiology (CLCD) Distinguished Achievement Award in 2022. In 2022, he was awarded the Stokes Medal, and in 2023, Honorary Fellowship in the Irish Cardiac Society.

John P. Leonard, M.D.

Dr. John P. Leonard is senior associate dean for innovation and initiatives and the Richard T. Silver Distinguished Professor of Hematology and Medical Oncology at Weill Cornell Medicine. He is executive vice chair of the Weill Department of Medicine at Weill Cornell Medicine and NewYork-Presbyterian/ Weill Cornell Medical Center, where he also serves as attending physician. He received his medical degree from the University of Virginia School of Medicine and completed his residency in medicine at NewYork-Presbyterian/Weill Cornell Medical Center and Memorial Sloan Kettering Cancer Center.

Dr. Leonard completed a fellowship in hematology and oncology at Weill Cornell Medicine and served as chief medical resident at NewYork-Presbyterian/Weill Cornell Medical Center. Dr. Leonard's primary research interests are in the development of novel therapeutic strategies for the treatment of lymphoma and related hematologic malignancies. Much of his work has involved the development of novel therapies for lymphoma, including monoclonal antibodies, other immunebased treatments, targeted agents and other innovative approaches. Dr. Leonard's research has been published in numerous medical journals, and he has served as a member of the editorial boards of Blood and Journal of Clinical Oncology. He is chair of the Lymphoma Committee of the Alliance for Clinical Trials in Oncology, a multi-center cooperative group and key component of the National Cancer Institute's National Clinical Trials Network. Dr. Leonard has been a member of the American Board of Internal Medicine (ABIM) Subspecialty Board on Hematology and is elected to membership in the American Society of Clinical Investigation.

Since 2020, in his role as senior associate dean for innovation and initiatives, he leads Weill Cornell Medicine's efforts to foster a dynamic culture of entrepreneurship and innovation and promote commercialization opportunities for inventions developed by its investigators. He oversees Weill Cornell Medicine Enterprise Innovation, a robust innovation ecosystem that accelerates the transfer of technologies to industry partners and the health care marketplace in order to maximize their impact.



Panel Moderator



Krystyn J. Van Vliet, Ph.D.

Vice President for Research and Innovation, Cornell University

Dr. Krystyn J. Van Vliet serves as Cornell University's Vice President for Research and Innovation. Her team connects the collaborative research communities at Cornell University's Ithaca, Cornell Tech, and Weill Cornell Medicine campuses with external funding, partnerships, and translation of research outcomes to societal impact. Prior to joining Cornell in 2023, Dr. Van Vliet led MIT's Office for Strategic Alliances and Technology Transfer and research-related administration, as well as campus space planning. As faculty in materials science and biomedical engineering with expertise in the interplay between mechanical deformation and local chemistry, Dr. Van Vliet has led international research teams focused on interdisciplinary topics ranging from materials for energy storage to technologies for cell therapy manufacturing. She has also helped to catalyze national and regional manufacturing innovation and workforce development efforts, including public-private partnerships to strengthen biopharma manufacturing. Dr. Van Vliet has authored over 200 research articles and 10 patents, and is scientific founder of Artificial Axon Labs, a company developing 3D-printed platforms to discover medicines for neurodegenerative diseases. A recipient of the Bose Award for Excellence in Teaching, Dr. Van Vliet led co-development of the publicly available edX course, Making a Cell Therapy: Principles and Practices of Manufacturing.



Louise Sarup, Ph.D.

Dr. Louise Sarup is an associate director, business development and licensing at Weill Cornell Medicine. Prior to joining the Center for Technology Licensing, Dr. Sarup was based in Singapore where she was head of business development and licensing for D3 (now EDDC), a drug discovery and development group based at A*STAR. Some of her previous roles include corporate development manager at S*BIO Pte Ltd. (Singapore), an oncology-focused biotech, vice president of business development at Paramount Biosciences (London), where she was responsible for in-licensing drug development assets, and director (licensing) at Cytiva, a global life science company. Dr. Sarup has also worked for leading life science and health care communication agencies and UCL Business, the commercialization company of University College London.

Dr. Sarup earned her doctorate in Biochemical Engineering from University College London, MSc in Biotechnology from Nottingham Trent University, and B.Eng (Hons) in Chemical and Process Engineering from Newcastle University.

Panelists



Virginia Pascual, M.D.

Dr. Virginia Pascual is the inaugural director of the Drukier Institute for Children's Health and the Ronay Menschel Professor of Pediatrics at Weill Cornell Medicine. She obtained her medical degree at the Universidad Complutense in Madrid, Spain, and completed a residency in Pediatrics at the 12 of October Hospital also in Madrid before joining UT Southwestern Medical Center in Dallas, TX, where she completed postdoctoral training in the Department of Microbiology and Immunology followed by a fellowship in Pediatric Rheumatology at the same institution, eventually becoming division chief. She then moved to the Baylor Institute for Immunology Research, where she was appointed director of the Center for Inflammation and Genomics and institute co-director. Dr. Pascual is currently program director of an NIAID-funded Autoimmunity Center of Excellence (U19), a NIAMS-funded Center of Research Translation (P50) and a Lupus Research Alliance (LRA) Global Team Science Award focused on Pediatric Lupus. Her research interests span pediatric inflammatory and autoimmune diseases with the goals of translating laboratory findings into the identification of therapeutic targets and useful biomarkers. Her studies have contributed to the discovery that type I interferon (IFN) and interleukin 1 (IL-1) are important pathogenic players in Systemic Lupus Erythematosus (SLE) and systemic onset Juvenile Idiopathic Arthritis (sJIA), respectively. Using high throughput approaches, her group continues to identify novel pathways to target therapeutically as well as unique signatures to follow patients in the clinic and assess responses to therapy. Dr. Pascual and her colleagues have been at the forefront of clinical trials using IL-1 blockers in sJIA, which have shown remarkable clinical benefits in nearly 70% of patients. She is the recipient of the 2017 LRA Lupus Insight Prize, was elected to the Association of American Physicians in 2018 and was awarded the Distinguished Basic/Translational Investigator Award from the American College of Rheumatology in 2020.



Wayne Rowe, Ph.D.

Dr. Wayne Rowe is the director of scientific relations and initiatives (SRI) at Sanofi, heading up the Innovations Awards (iAwards) Program. He received his doctorate degree from McGill University, Canada in the Department of Neurology and Neurosurgery where he studied the neuroendocrine component of the stress response system. Dr. Rowe's postdoctoral studies were at Bristol Myers Squibb, examining behavioral pharmacology and learning and memory. Following the postdoctoral studies, he joined Memory Pharmaceuticals (founded by Eric Kandel) where he continued to examine the molecular and pharmacological underpinnings of learning and memory. Dr. Rowe joined Sanofi 15 years ago first in the Psychopharmacology lab and after that moved to External Innovations and then on to SRI.



Nicole Wake, Ph.D.

Dr. Nicole Wake is the director of research and scientific affairs for New York and New England at GE HealthCare. Dr. Wake is also an adjunct instructor of radiology at NYU Langone Health. Dr. Wake's research is focused on creating 3D images from radiological imaging data. Specifically, she has coupled MRI data with a range of 3D printing, augmented reality, and virtual reality technologies to create individualized anatomic models for pre-operative planning. She is using these advanced imaging methods to guide clinical care and is investigating the impact that these models can make in clinical care. Dr. Wake is currently the chair of the RSNA 3D Printing Special Interest Group. She is the author of numerous highimpact publications evaluating 3D printing in medicine, an associate editor for the 3D Printing in Medicine journal, and the editor of a book titled "3D Printing for the Radiologist".



Fei Wang, Ph.D.

Dr. Fei Wang is an associate professor in Division of Health Informatics, Department of Population Health Sciences, Weill Cornell Medicine. He is also the founding director of the Weill Cornell Medicine Institute of AI for Digital Health (AIDH). His major research interest is AI and digital health. He has published more than 300 papers on the top venues of related areas such as ICML, KDD, NIPS, CVPR, AAAI, IJCAI, Nature Medicine, JAMA Internal Medicine, Annals of Internal Medicine, Lancet Digital Health, etc. His papers have received over 27,000 citations so far with an H-index 79. His (or his students') papers have won 8 best paper (or nomination) awards at top international conferences on data mining and medical informatics. His team won the championship of the AACC PTHrP result prediction challenge in 2022, NIPS/Kaggle Challenge on Classification of Clinically Actionable Genetic Mutations in 2017 and Parkinson's Progression Markers' Initiative data challenge organized by Michael J. Fox Foundation in 2016. Dr. Wang is the recipient of the NSF CAREER Award in 2018, as well as the inaugural research leadership award in IEEE International Conference on Health Informatics (ICHI) 2019. Dr. Wang also received prestigious industry awards such as the Sanofi iDEA Award (2021, 2023), Google Faculty Research Award (2020) and Amazon AWS Machine Learning for Research Award (2017, 2019 and 2022). Dr. Wang's research has been supported by a diverse set of agencies including NSF, NIH, ONR, PCORI, MJFF, AHA, etc. Dr. Wang is the past chair of the Knowledge Discovery and Data Mining working group in American Medical Informatics Association (AMIA). Dr. Wang is a fellow of AMIA, a fellow of IAHSI, a fellow of ACMI and a distinguished member of ACM.

Fireside Chat Moderator



Simone Angela Schnaitter Winkler, Ph.D.

Dr. Simone Angela Schnaitter Winkler is an assistant professor of electrical engineering in radiology at Weill Cornell Medicine and a leading expert in the Ultra High-Field (UHF) MRI community. Her research centers primarily on the development of technology for the detection of subtle brain features for the diagnostics and monitoring of neurodegenerative and neuropsychiatric diseases, which ultimately provides a pathway to therapy through MR guidance.

Dr. Winkler graduated majoring in mechatronics with distinction from the J. Kepler University of Linz, Austria. She then pursued her graduate studies in electrical engineering at the École Polytechnique Montréal, Canada, where she specialized in RF/microwave engineering. For her research work during her MSc and doctorate degrees, she received numerous scientific awards and scholarships. During her postdoctoral work at McGill University, Canada, she developed a microwave nearfield imaging system for breast cancer detection. She committed to a postdoctoral fellow position at Stanford University in Ultra High-Field MRI engineering (funded by a Canadian NSERC research fellowship from 2012-2014) and was promoted to staff position in 2015. Dr. Winkler became Weill Cornell Medicine faculty in 2019. Her research has appeared in over 50 journal, conference, and patent submissions.

Drawing on her extensive research and experience in the field, Dr. Winkler founded inGenuyX LLC, a consulting firm that uses advanced computational analysis and multiphysics simulation to answer biomedical engineering questions and guide product to strategic and measurable improvements.



Lisa Placanica, Ph.D., CLP

Dr. Lisa Placanica is senior managing director, Center for Technology Licensing at Weill Cornell Medicine. In this role, she is responsible for overseeing activities in technology management, marketing, licensing and outreach to support Cornell's goals in commercializing technologies, promoting startups and building alliances. As part of Weill Cornell Medicine's research leadership, she provides strategic guidance and advice to senior leadership on matters relating to intellectual property, innovation and entrepreneurship and the formation, launch and operation of Weill Cornell Medicine Enterprise Innovation.

Prior to joining Weill Cornell Medicine in 2020, Dr. Placanica held the position of managing director, business development and licensing at Mount Sinai Innovation Partners. In this role, she was responsible for managing a team of business development professionals focused on identifying, advancing, and partnering therapeutic technologies developed at the Mount Sinai Health System and acted as deal team lead for closing complex intellectual property transactions.

Dr. Placanica received her doctorate in Pharmacology from Weill Cornell Graduate School of Medical Sciences where she studied the biochemical composition of gamma secretase and its role in Alzheimer's Disease in the laboratory of Dr. Yueming Li at Memorial Sloan Kettering Cancer Center. She holds a bachelor's degree in Biology from Cornell University. In 2013, Dr. Placanica became a Certified Licensing Professional.

Fireside Chat



Ronald G. Crystal, M.D.

Dr. Ronald Crystal is chair of the Department of Genetic Medicine, the Bruce Webster Professor of Internal Medicine and director of the Belfer Gene Therapy Core Facility at Weill Cornell Medicine.

After earning a bachelor's degree in physics from Tufts University, a master's in physics and medical degree from the University of Pennsylvania, Dr. Crystal served as chief of the pulmonary branch of the National Heart, Lung and Blood Institute. In 1993, he joined the faculty at Weill Cornell Medicine, initially focusing his research on the pathogenesis and therapy of inflammatory diseases of the lung. The work of his laboratory formed the basis of the current understanding of the pathogenesis of lung fibrosis and the hereditary form of emphysema associated with alpha 1-antitrypsin deficiency, a disease for which he developed the FDA-approved therapy now used to treat thousands of patients worldwide.

In the late 1980s, Dr. Crystal shifted his focus to gene therapy. He was the first to use a recombinant virus as a vehicle for in vivo gene therapy and has carried out human trials of gene therapy for cystic fibrosis, cardiac ischemia, cancer and central nervous system disorders. Recent studies from his laboratory have focused on using viral gene transfer vectors as platform strategies for Friedreich's ataxia, Alzheimer's disease and vaccines against addiction.

Dr. Crystal has received numerous professional honors. He is a fellow of the National Academy of Inventors and has served on a number of advisory boards to government and industry. He has published over 900 scientific articles, and his work has been cited over 77,000 times in the scientific literature. He is responsible for numerous biomedical patents and has founded several biotechnology companies focused on developing gene therapy therapeutics.



Albert Gianchetti is the chief executive officer of XyloCor Therapeutics. Mr. Gianchetti has more than 25 years of drug development and commercialization experience, including over 10 years in the cardiovascular/metabolic therapeutic area. He has held executive level roles at GSK and additional leadership roles with small biotech and specialty pharma companies including Vanda Pharmaceutics. Mr. Gianchetti has extensive experience in both commercial strategy/operations and R&D including seven Phase III programs, over 10 Phase I/II programs and several product launches.

Albert Gianchetti





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