



INTERNATIONAL STUDIES



The Innovation Equation

Transforming MedicineFrom Concept to Market

The Innovation Equation

A collaboration between UPMC and the University of Pittsburgh

"Our goal is always to develop collaborative relationships and work to better understand our partners—their challenges and their vision of the future. We are committed to helping continuously improve patient care in our partners' countries."

— Chuck Bogosta

As the world gets smaller, it seems the challenges loom larger.

The goal of today's Innovation Equation symposium is to provide insights and ideas about how best to work across a range of intellectual platforms, communication mediums and physical borders to meet those challenges.

Our focus is clear: transforming medicine from concept to market. To that end, we have invited some of the most forward thinkers from our industry and academia to share their ideas and approaches.

"At the University of Pittsburgh, global learning, research, partnerships and community engagement are at the center of our mission. We believe that by reaching across both disciplines and borders we can improve the quality of life for people around the world."

— Ariel C. Armony, Ph.D.

Of course, it's no accident that we find ourselves gathered here in Dublin. The city is rapidly becoming a medical and technological hub—a place where ideas take shape and are then set into motion.

We hope that you will not only enjoy today's discussion but will leave with a newly enhanced sense of the possibilities.

Sincerely,

Charles E. Bogosta President

CLE Bognt

UPMC International

UPMC
LIFE CHANGING MEDICINE

And C. Among

Ariel C. Armony, Ph.D.

Vice Provost for Global Affairs, Director of University Center for International Studies University of Pittsburgh



AGENDA

10:15 Registration

11:15 Opening Remarks: Janice Vance, Ph.D.

11:25 C. Talbot Heppenstall, Jr.

11:50 Gretchen Mendoza

12:30 Lunch

1:15 Ariel Armony, Ph.D.

1:40 Evan Facher, Ph.D., MBA

2:20 Closing Remarks: David Beirne

SPEAKERS



C. Talbot Heppenstall, Jr.Executive Vice President & Treasurer, UPMC President, UPMC Enterprises

As executive vice president, treasurer and president of UPMC Enterprises, Mr. Heppenstall leads UPMC's efforts to commercialise its managerial and health care expertise, particularly in the area of information technology.

Mr. Heppenstall has been treasurer of UPMC since 2003, executive vice president since 2013 and president of UPMC Enterprises since 2014.

As treasurer, he is responsible for overseeing the day-to-day cash needs of UPMC, along with the investment management of its \$7.5 billion of cash and investments, its pension portfolio and oversight of its outstanding municipal bonds and other debt.

As president of UPMC Enterprises, Mr. Heppenstall is leading a team dedicated to generating and enabling exceptional health care innovations by creating products and businesses that make life-changing medicine happen. UPMC invests its expertise, time and capital in two areas where science and technology will drive significant value in

Seeing the big picture

seeing the health care by improving quality and reducing costs: digital enterprises and translational science.

Previously, he served as managing director at RBC Dain Rauscher Inc., president of PriMuni LLC, senior vice president at PNC

Capital Markets and vice president at Butcher & Singer. He earned a bachelor's degree from the University of Virginia and a master's degree from Carnegie Mellon University.

Mr. Heppenstall currently serves on the boards of the St. Margaret Foundation, Tepper School Alumni and the Erie Innovation District. He is also a member of the finance committee of the Women's Shelter of Greater Pittsburgh.



Gretchen MendozaDirector of Product Management
UPMC Enterprises

As a director of product management at UPMC Enterprises, Gretchen Mendoza and her team aim to crystallise, develop and implement a vision for the future of hospital experiences enabled through next-gen technology.

Ms. Mendoza approaches problem solving in health care through the lens of human-centered design. Her portfolio spans physical spaces, digital products and service ecosystems. Common threads include distilling rich, complex content in accessible ways; developing systems that evolve as people change; and using participatory methods to break down the essence of "us and-them" in design.

Ms. Mendoza spent several years working in Boston's design community, specifically at Essential, Sasaki and the New England Aquarium. She received a Master of Design

Changing the formula

degree from Carnegie Mellon University and a Bachelor of Fine Arts from the University of Georgia and has taught design coursework at Carnegie Mellon and MassArt.

SPEAKERS



Ariel C. Armony, Ph.D.Vice Provost for Global Affairs
Director, University Center for International Studies
University of Pittsburgh

As the University of Pittsburgh's vice provost for Global Affairs and director of the University Center for International Studies, Dr. Armony is advancing the development and implementation of

global education, research, partnerships and community engagement programmes. He is responsible for advancing the university's global strategy.

Exploring the world

Prior to arriving in
Pittsburgh, Dr. Armony
served as the director of the
University of Miami's Center
for Latin American Studies.
Among other appointments,
he was a Fulbright Scholar at

Nankai University in China and a residential fellow at the Woodrow Wilson International Center for Scholars in Washington, D.C.

Dr. Armony has published about globalisation, democratisation and the relationship between China and Latin America. He has authored three books and edited five. His book *The Dubious Link: Civic Engagement and Democratization* was a University Press Bestseller.

He completed his undergraduate studies at the Universidad de Buenos Aires, Argentina, and earned a Ph.D. from the University of Pittsburgh's Department of Political Science. In addition to his leadership roles, he is a professor in the Graduate School of Public and International Affairs.



Evan Facher, Ph.D., MBAVice Chancellor of Innovation & Entrepreneurship
Director, Innovation Institute
University of Pittsburgh

As vice chancellor of innovation and entrepreneurship and director of the Innovation Institute at the University of Pittsburgh, Dr. Facher uses his leadership, strategic, technical, fundraising and business development skills

to build brand value and sustainable, profitable growth in highly competitive business markets.

Under Dr. Facher's leadership as the interim director for the past year, the Institute has produced a record-breaking high of 23 startups and Pitt is now ranked 21st among all top universities worldwide to be granted U.S. utility patents for a new or improved product, process or machine.

Dr. Facher began his career at the Innovation Institute in January of 2014. Before joining Pitt, he was president/CEO of SironRX Therapeutics, a biotechnology company developing novel drug therapies.

Finding new answers

Prior to that, Dr. Facher worked in Bayer Healthcare's medical device division as general manager of Pittsburgh Interventional and served as senior manager of business development for the biotechnology firm Athersys where he established partnerships with global pharmaceutical companies such as Pfizer, Bristol-Myers Squibb and Johnson & Johnson. Throughout his career, he has taken an active role in corporate fundraising as well as product acquisitions.

Dr. Facher earned a Ph.D. in human genetics from the University of Pittsburgh, an MBA with a concentration in entrepreneurship from Case Western Reserve University and a Bachelor's of Science degree in biology from the University of Miami.

THE COMMON DENOMINATOR=



UPMC in Ireland

UPMC is committed to investing in communities and developing long-term collaborations with our partners, such as the University of Pittsburgh, to further health care innovation in Ireland.

UPMC Whitfield

In May 2018, UPMC acquired the Whitfield Clinic in Waterford, Ireland. The 70-bed Whitfield Clinic, which has been renamed UPMC Whitfield, is the largest private hospital in south east Ireland. UPMC, along with Pitt, will continue working together to deliver the highest quality health care.

UPMC Whitfield offers a wide range of services, including orthopaedics, ophthalmology, oncology, endoscopy and other surgical specialties provided by more than 50 consultants and 180 employees to deliver high quality health care.

UPMC Hillman Cancer Centre at Whitfield

Since 2006, UPMC has been a joint owner of the UPMC Whitfield Cancer Centre to provide radiotherapy services, in partnership with the HSE (Health Service Executive), to all patients in the south east. With the Whitfield Clinic acquisition, UPMC now has full ownership of the cancer centre and it has been renamed as UPMC Hillman Cancer Centre at Whitfield. Based on its high quality standards and patient safety, the centre has been accredited three times by the Joint Commission International. Under the UPMC Whitfield hospital network, the facility will continue to develop oncology service lines to serve all cancer patients based on their clinical needs.

Bon Secours Radiotherapy Cork in partnership with UPMC Hillman Cancer Centre

The new radiotherapy centre joint venture with Bon Secours Health System in Cork is currently under construction and progressing on schedule for opening in May 2019. The new cancer centre will be the only stereotactic radiosurgery (SRS) provider in the south and south east regions in Ireland.

UPMC Concussion Network

UPMC recently announced a partnership with Bon Secours, Affidea and ImPACT to create the first country-wide network for the diagnosis and treatment of concussion for people of all ages. The UPMC Concussion Network includes clinicians specially trained in the model of targeted, individualised concussion care practiced at the world-renowned UPMC Sports Medicine Concussion Programme. The intent is to implement a research and clinical fellowship programme at UPMC Sports Medicine/University of Pittsburgh.

Pitt in Ireland

The University of Pittsburgh is committed to fostering innovative, interdisciplinary and global health partnerships and creating the next generation of global health leaders and scholars. To that end, the School of Health and Rehabilitation Sciences (SHRS) remains dedicated to working with its international partners to be a catalyst for a world free of barriers and disparities that allows all people, regardless of health or physical condition, to have opportunities to participate in life to the fullest.

Pitt's School of Health and Rehabilitation Sciences (SHRS) Study Abroad Program

In 2006, SHRS introduced a comprehensive study abroad opportunity for its students. This four-week, six-credit summer course, along with a related two-credit spring course, offers students from different academic programmes an opportunity to explore and experience health care, social service and education in professional settings beyond the U.S.

Over the past 12 years, more than 300 Pitt undergraduates anticipating careers in occupational therapy, physical therapy, speech language pathology, audiology, physician assistant studies, medicine and public health, as well as clinical dietetics and athletic training, have participated in this inter-professional learning experience.

Of course, none of this would be possible without Pitt's partners, including DeafHear, Headway and St. James's Hospital in Dublin; and in Belfast, the University of Ulster Dietetics and Nutrition programmes, Oakwood Autism Advisory Center, and special schools including Fleming Fulton, Jordanstown, Thornfield House, Harberton and Parkview.

Pitt's Department of Rehabilitation Science and Technology (RST)

Focusing on continuing education and strategies for clinical service delivery in the field of wheelchair seating and mobility and associated assistive technologies, the school's RST Department and Dublin's Central Remedial Clinic (CRC) are collaborating on a number of initiatives.

Together, RST and CRC launched the European Seating Symposium (ESS) and have developed programmatic strategies for integrating outcome measures into assistive technology services.

In addition, discussions are currently underway between the two organizations to formalise an online certificate training programme in assistive technology within Ireland. Future plans are calling for the development of an online master's degree programme in rehabilitation technology.

Pitt's Department of Sports Medicine and Nutrition (SMN)

To date, more than 30 students from the Dublin City University's athletic training and therapy programme have come to Pittsburgh to participate in SMN's clinically-intensive athletic training programme that enables these visiting students to work directly with Pitt's sports teams.

REMARKS (OPENING/CLOSING)



Janice Vance, Ph.D.

Director, Undergraduate Education in Communication Science and Disorders University of Pittsburgh

As the director of undergraduate education in communication science and disorders at the University of Pittsburgh, Dr. Vance helps prepare students for meaningful careers in health and rehabilitation. Dr. Vance is also a native of Belfast, Northern Ireland, and has held clinical and faculty positions in Ireland, England and South Africa.





David Beirne

Vice President, UPMC International Managing Director, UPMC Ireland

As the vice president of UPMC International and managing director for Ireland, Mr. Beirne oversees the development of new and ongoing joint venture and partnership opportunities in Ireland.

ABOUT

UPMC

UPMC strives to deliver the right care to the right patient, at the right time — every time. This focus extends beyond the walls of UPMC's western Pennsylvania network of hospitals, community-based services, physicians and outpatient care. It is a vision that permeates all that UPMC does. To that end, UPMC



shares its clinical, technological and managerial knowledge and expertise with partners across the globe customising solutions so that patients and regions can benefit and thrive.

The goal is to advance UPMC's mission of positively transforming the way health care is provided. UPMC is building a global health care brand that will continue to attract the best and brightest physicians, nurses, researchers and staff for the benefit of all of its patients and partners.

University of Pittsburgh

Pitt convenes bright minds to explore and address global issues that improve life in the world's local communities. By engaging in research, policies, partnerships and the study of languages and cultures, it opens the door to global citizenship.

Pitt aims to help mobilise and highlight the efforts of the university's schools, centres, institutes and programmes to integrate local and international perspectives that advance new knowledge and ground-breaking innovation while fostering cultural awareness, worldwide partnerships and life-changing research.











