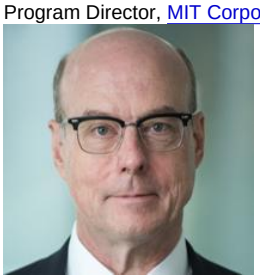
MIT Industrial Liaison Program Faculty Knowledgebase Report

Corporate Innovation

November 10, 2022 10:00 am - 11:30 am

10:00 AM	Welcome & Introduction Randall Wright Program Director, MIT Corporate Relations



Randall Wright
Program Director
MIT Corporate Relations

Randall S. Wright is a program director with MIT's Industrial Liaison Program. He manages the interface between the managements of companies, headquartered in the United States and Europe, and the senior administration and faculty of MIT.

As a program director for MIT, he convenes teams of researchers and faculty members to provide on-going emerging technology intelligence and strategic advice for the world's leading technology companies. He is a sought-after speaker, delivering keynote speeches focused on emerging technology opportunities and challenges, and counter-intuitive insights in executive panels and discussions. Randall draws on extensive experience advising executives on a range of emerging technology areas including digital transformation, big data, robotics, green buildings, water efficiency, energy storage, biofuels, advanced materials, and manufacturing. He provides navigation and recommendations on the emerging technologies and adoption landscapes critical to future business growth, as well as creation, development, and execution of programs of research between industry and MIT.

Randall has been bestowed by Federal President of Austria Dr. Heinz Fischer with the decoration Cross of Honor in Gold for Services to the Republic of Austria for his "outstanding contribution to the development of relations between Austria and MIT".

Prior to MIT, Randall was a marketing manager for Pfizer, Inc., a major U.S. pharmaceuticals company. He was also a strategic planning analyst for Pennzoil Company--a Fortune 500 oil and natural resources company. Randall is an invited lecturer at Northeastern University's Executive M.B.A. Program where he lectures on innovation and corporate strategy. His column Innovation Counterculture looks at ideas and perspectives on strategy, organization, and thinking to help executives connect to the world of innovation outside their organizations and he is published regularly in Research-Technology Management, the award-winning journal of the Industrial Research Institute.

10:05 AM

What's Going Wrong with Corporate Innovation?

Phil Budden
Senior Lecturer, Technological Innovation, Entrepreneurship, and Strategic Management,
MIT Sloan School of Management

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Phil Budden is a Senior Lecturer at MIT's Management School, in Sloan's TIES (Technological Innovation, Entrepreneurship and Strategic-management) Group, where he focuses on 'innovation-driven entrepreneurship' (IDE) and innovation ecosystems.

Phil co-teaches in the successful 'Regional Entrepreneurship Acceleration Program' (REAP), an Executive Education program for regional teams from around the globe interested in accelerating 'innovation-driven entrepreneurship'; in the related 15.364 class, known as the 'Regional Entrepreneurship Acceleration Lab' (REAL), aimed at MBAs and Sloan Fellows; and on similar topics in a variety of degree and Executive Education settings.

Prior to joining MIT, Phil has held these posts with the British government: British Cabinet Office, London (5/6/2001 - 6/30/2002); British Embassy, Washington DC (7/1/2002 - 8/5/2007); 1st Secretary (UK-US Technology, Science & Innovation) Washington DC; Adviser to the PM at No10 (European/institutional strategy) London, UK.

Phil holds a BA and MA in History from Lincoln College, the University of Oxford; an MA in History and Government from Cornell University; and a PhD (DPhil) in History and International Political Economy from the University of Oxford.

Innovation is hard, especially for Corporates, and yet it is often key to competitive advantage, i.e., getting and staying one step ahead! Among the most common challenges is a misreading of what “innovation” is and a misunderstanding of why Startup entrepreneurs seem to be better at it. As such, ‘corporate innovation’ is hard but strategically important, so we offer practical advice on what can be done about this – i.e., how best to take innovation forwards internally, how to look strategically to the external ecosystem (e.g., university researchers), and how to partner most effectively with Startups and entrepreneurs.

10:20 AM

Inside Real Innovation: How Corporations Can Adopt the Right Approach to Move Ideas from R&D to Market : Video starts at time stamp 18:51

Eugene A. Fitzgerald

Merton C. Flemings SMA Professor of Materials Science and Engineering, MIT Department of Materials Science and Engineering

Eugene A. Fitzgerald
Merton C. Flemings SMA Professor of Materials Science and Engineering
MIT Department of Materials Science and Engineering

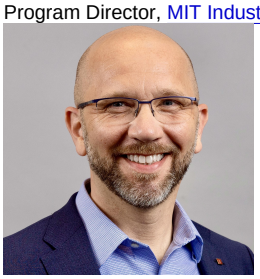
Eugene A. Fitzgerald is the Merton C. Flemings SMA Professor of Materials Engineering at the Massachusetts Institute of Technology. Building upon his early experience at AT&T Bell Labs which included the invention of high mobility strained silicon, he has created fundamental innovations in stages from early technology to final implementation in the market. His research interests include novel thin film materials and devices. He is the founder, co-founder, or founding team member of AmberWave Systems Corporation, Contour Semiconductor, 4Power LLC (high-efficiency III-V solar on silicon), Paradigm Research LLC, and The Water Initiative. He is co-author of “Inside Real Innovation”, published internationally in January 2011. He is the recipient of the IEEE 2011 Andrew S. Grove Award, the IEEE 2004 EDS George Smith Award, and the TMS 1994 Robert Lansing Hardy Medal Award. He received a BS degree in Materials Science and Engineering in 1985 from MIT and his Ph.D. in the same discipline from Cornell University in 1989.

View full bio

Innovation—the process of putting ideas together into a useful form and bringing them to market—is the true engine of economic growth. And yet, despite the fact, the human process of innovation is the most powerful driver of growth, and humans are the ones doing it, the workings of this process are still not widely understood. Innovation is not a straight-line process as most people believe it to be, but a highly iterative process that typically includes juggling and re-considering many technical and business factors, with an ever-changing view on how the idea might be implemented and the markets that are likely to be interested. Professor Gene Fitzgerald will present an end-to-end process for innovation, based upon time-tested principles, and a vision for corporate innovation that addresses the deficiencies of open innovation.

10:35 AM

The Three Key Challenges to Corporate Innovation : Video starts at time stamp 33:54
Olivier J Cadet
Program Director, MIT Industrial Liaison Program



Olivier J Cadet
Program Director
MIT Industrial Liaison Program

Prior to joining MIT in September 2022, Olivier Cadet was Senior Vice President Global Operations, Americas, and President of Kongsberg Maritime Inc. located in Houston, TX and responsible for Kongsberg Maritime operations in the Americas region. Prior to assuming his role in July 2018, Olivier was Executive Vice President of Products & Services, based in Norway. In that role, Olivier was overseeing the teams managing Kongsberg Maritime's products portfolio aligned with market demands and future trends, such as autonomous operations and digital performance. Olivier was also accountable for Kongsberg Maritime's strategic initiative around Information Management System and Smart Data.

Olivier started his international career in the offshore drilling industry in 1998, working for Schlumberger/Transocean as a Controls Engineer where he was involved in the installation, commissioning and support of Dynamic Positioning and Automation systems on offshore drilling rigs. In 2004 Olivier joined Air Liquide, the world leader in industrial gases, where he served for 9 years in a variety of innovation management roles, including R&D Group Manager and Program Director, driving Air Liquide's research efforts in the field of Advanced Process Control and Operations Research to support the company's efficiency program.

A dual citizen (U.S./France), Olivier graduated from the Grenoble Institute of Technology (INP Grenoble) in France in 1998 with a Master of Engineering (Diplôme d'Ingénieur) in Electrical Engineering. He completed the Advanced Management Program with MIT Sloan Executive Education in June 2022.

Olivier Cadet, Program Director with MIT Corporate Relations, recently joined MIT after a 24-year international career in industry in a variety of technology management positions in the energy and maritime sectors. From engineering to R&D and product development, Cadet has contributed to different facets of innovation in market segments that traditionally have a high barrier to entry such as offshore drilling, industrial gases product, and distribution or maritime transportation. Cadet brings executive perspective to three key challenges he sees to corporate innovation: prioritizing projects, working across silos, and engaging with ecosystems.

10:50 AM

Hidden Factories and Innovation : Video starts at time stamp 48:34
John Carrier
Senior Lecturer, System Dynamics, MIT Sloan School of Management

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MIT Sloan School of Management

John Carrier is a senior lecturer in the System Dynamics Group at the MIT Sloan School of Management and Managing Director of 532 Partners. His expertise is in shaping the dynamics of operating environments to improve productivity, quality, safety, and morale simultaneously. He has helped companies save hundreds of millions of dollars by helping them find and eradicate the hidden systems lurking inside every operation. His current focus is to help prepare companies to compete in the new environment of Industry 4.0.

He has educated over five hundred top-level leaders in the MIT Sloan Executive Education program in Oil & Gas, petrochemicals, mining, and healthcare. When not teaching, he spends most of his time in the operating environment, working directly with the front line to deliver measurable results in less than sixty days.

Dr. Carrier holds a B.S. in Chemical Engineering from the University of Michigan, a Ph.D. in Control Systems from MIT, and an MBA from the Harvard Business School.

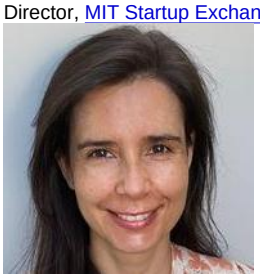
View full bio

Do you suspect there is lost capacity in your current system? And are you stymied by the problem that when you ask what can be done, your staff asks for even more resources? You are not alone.

This phenomenon – first identified as *hidden factories* by MIT Sloan Alum Armand Feigenbaum – is common to all systems and driven by short-term fixes that ultimately result in 20 – 30% loss in human activity.

11:05 AM

MIT Startup Exchange : Video starts at time stamp 1:05:03
Catarina Madeira
Director, MIT Startup Exchange



Catarina Madeira
Director
MIT Startup Exchange

Catarina has been working with the Cambridge/Boston startup ecosystem for over 10 years and joined Corporate Relations with a solid network in the innovation and entrepreneurial community. Prior to MIT, she was part of the team that designed and launched the startup accelerator IUL MIT Portugal, which was later rebranded as Building Global Innovators. She was based in Lisbon and worked in direct relation with the Cambridge team. She held positions including Operations Coordinator, Program Manager, and Business Developer. The accelerator soon achieved steady growth in large part due to the partnerships that Catarina led with regional and global startup ecosystems. After that, she worked at NECEC, leading a program that connects cleantech startups and industry. In this role, she developed and built a pipeline of startups and forged strong relationships with both domestic and European companies. She has also held positions in Portugal and France, including at Saboaria e Perfumaria Confiança and L'Oréal as Technical Director and Pharmacist. Catarina earned her bachelor's in chemistry and pharmaceutical sciences in Portugal. She went on to earn her Master of Engineering for Health and Medicines in France.

11:10 AM

Panel Discussion: MIT Startup Exchange Case Study - Colgate and LiquiGlide : Video starts at time stamp 1:09:22
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Phil holds a BA and MA in History from Lincoln College, the University of Oxford; an MA in History and Government from Cornell University; and a PhD (DPhil) in History and International Political Economy from the University of Oxford.

Thomas Boyd
Director, Oral Care Product Development & Scientific Capabilities
Colgate-Palmolive, Co.

Dan Rippy
CEO
LiquiGlide

11:30 AM

Adjournment