MIT Industrial Liaison Program Faculty Knowledgebase Report

2023 MIT Startup Showcase in Osaka

October 3, 2023 12:00 pm - 6:50 pm

12:00 PM Check-in and Registration

1:00 PM Welcome Remarks

Masatoshi Karashima

Head of Innovation of Pharmaceutical Sciences Sustainability and Technologies

Takeda Pharmaceuticals

MIT Innovation Ecosystem, ILP & Startup Exchange Program John Roberts

Executive Director (Interim), MIT Corporate Relations



John Roberts
Executive Director (Interim)
MIT Corporate Relations

John Roberts has been Executive Director of MIT Corporate Relations (Interim) since February 2022. He obtained his Ph.D. in organic chemistry at MIT and returned to the university after a 20-year career in the pharmaceutical industry, joining the MIT Industrial Liaison Program (ILP) in 2013. Prior to his return, John worked at small, medium, and large companies, holding positions that allowed him to exploit his passions in synthetic chemistry, project leadership, and alliance management while growing his responsibilities for managing others, ultimately as a department head. As a program director at MIT, John built a portfolio of ILP member companies, mostly in the pharmaceutical industry and headquartered in Japan, connecting them to engagement opportunities in the MIT community. Soon after returning to MIT, John began to lead a group of program directors with a combined portfolio of 60-80 global companies. In his current role, John oversees MIT Corporate Relations which houses ILP and MIT Startup Exchange.

Ryo N. Ishibashi Program Director, MIT Corporate Relations



Ryo N. Ishibashi Program Director MIT Corporate Relations

Ryo N. Ishibashi has nearly two decades of leadership experience in startups and multinationals, spanning multiple sectors such as automotive, software, and robotics. His most recent assignment was in Japan, leading a team of engineers to develop and deploy warehouse automation solutions that leverage artificial intelligence and machine learning.

In addition to Japan, he's also worked in Singapore -- and speaks English and Japanese fluently.

Ishibashi has a Master's degree from Columbia University and a Bachelor's degree from the University of Michigan.

Outside of work, he enjoys studying economics, finance, management, philosophy, and history -- while spending time with his two dogs.

Keynote Steve Weikal Industry Chair, MIT Real Estate Technology Initiative General Partner, The MET Frontier Fund



Steve Weikal Industry Chair, MIT Real Estate Technology Initiative General Partner, The MET Frontier Fund

Steve Weikal is a lecturer, researcher, and Industry Chair of the Real Estate Technology Initiative at the MIT Center for Real Estate, focused on innovative new technology and business models that are reinventing the traditional ways of developing, transacting and managing real estate. He is also a General Partner at the MET Frontier Fund, an early-stage investor in startups that have an MIT connection and focus on solutions for the built environment

Steve is a member of the Global Insights Panel for MIT Technology Review, a member of the CREtech Climate Leadership Board, and sits on the advisory boards of six real estate and technology companies. He was the Founder of MIT Real Disruption, a successful series of conferences discussing the impact of emerging technology on the real estate industry that is now part of the global CREtech media platform. Steve speaks extensively about real estate technology for corporate clients around the world and at conferences for AFIRE, ASRES, BOMA, CCIM, CoreNet, CREW, ICSC, IREM, NAIOP, PERE, SIOR, and ULI. He has been quoted by numerous media outlets, including BuzzFeed, Techlnsider, Medium, USA Today, CP Executive, Harvard Real Estate Review, the Boston Globe, GlobeSt. the Real Reporter, Travel Weekly, IPE Real Assets Europe and Anuario Inmobiliario LatinoAmerica.

Steve holds a Master's of Science in Real Estate Development (MSRED) and Master's in City Planning (MCP) from the Massachusetts Institute of Technology, and a law degree from Suffolk University Law School.

View full bio

According to a Sloan School of Management report, 30,000 companies founded by MIT alumni are operating today. They generate more than \$1.7 trillion in annual revenue and have a total value of \$7 trillion.

MIT is not alone; in an analysis of 13,000 startup founders, PitchBook found that while most VC-backed startups come from recognized US universities such as Stanford, MIT, and Harvard, other schools have also developed highly successful innovation ecosystems, including Tel Aviv University, KU Leuven in Belgium, and Imperial College London.

This session will discuss innovation ecosystems as networks of interconnected entities, including the important roles of industry, research institutions, startups, investors, and government agencies, all working together to foster and accelerate scientific discovery and the development of cutting-edge technologies. By facilitating the cross-disciplinary exchange of knowledge, resources, and expertise, innovation ecosystems enable rapid experimentation and iteration, leading to the emergence of breakthrough products and services, new ventures and entire industries, and solutions to society's most pressing challenges.

MIT Startup Exchange Lightning Talks - Part 1

Co-Founder & CEO 3D Architech

Andrew Magyar Co-Founder & CTO Capra Bioscience

Willie T. Reaves Jr. Chief of Staff Cellino

Jonas Mueller Chief Scientist Cleanlab

Dhrupad Karwa Product Lead **Common Sense Machines**

Yibiao Zhao Co-Founder & CEO iSee

Benjamin Rocci Lead - Strategy & Business Development Lamarr.Al

Faye Wu Co-Founder & CTO Manus Robotics

Lun Yu

Co-Founder & CTO Metanovas Biotech

3:20 PM Networking Break

3:50 PM MIT Startup Exchange Lightning Talks - Part 2

> Andrew Radin Co-Founder & CEO Numb Corp.

Clark Yuan Founder & CEO Stitch3D

Sam Yoon

Head of Business Development

Themis Al

Rony Kubat Co-Founder & CTO Tulip Interfaces

Sebastian Bauer Co-Founder & CEO **Ubicept**

Sjoerd De Clerck Vice President, Sales Venti Technologies

Special Feature: Presentation from Local Startup

Masatoshi Karashima Head of Innovation of Pharmaceutical Sciences Sustainability and Technologies Takeda Pharmaceuticals

Isao Matsugaya VP and Head of Al Division Findability Sciences

4:45 PM

Keynote Aude Oliva

Director of Strategic Industry Engagement, MIT Schwarzman College of Computing, MIT Director, MIT-IBM Watson AI Lab, Co-lead, MIT AI Hardware Program, Senior Research Scientist, CSAIL



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Director of Strategic Industry Engagement, MIT Schwarzman College of Computing, MIT Director, MIT-IBM Watson AI Lab, Co-lead, MIT AI Hardware Program, Senior Research Scientist, CSAIL

Aude Oliva, PhD is the MIT director in the MIT-IBM Watson AI Lab and director of strategic industry engagement in the MIT Schwarzman College of Computing, leading collaborations with industry to translate natural and artificial intelligence research into tools for the wider world. She is also a senior research scientist at the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL), where she heads the Computational Perception and Cognition group.

Oliva has received an NSF Career Award in computational neuroscience, a Guggenheim fellowship in computer science and a Vannevar Bush Faculty Fellowship in cognitive neuroscience. She has served as an expert to the NSF Directorate of Computer and Information Science and Engineering on the topic of human and artificial intelligence. She is currently a member of the scientific advisory board for the Allen Institute for Artificial Intelligence. Her research is cross-disciplinary, spanning human perception and cognition, computer vision and cognitive neuroscience, and focuses on research questions at the intersection of all three domains. She earned a MS and PhD in cognitive science from the Institut National Polytechnique de Grenoble, France.

Generative artificial intelligence presents practical and societal challenges that are growing as the technology scales and it's increasingly used. Generative models — some with abilities that mimic human capabilities such as talking and story-telling — can be used alongside people to enhance project outcomes in domains ranging from scientific discovery and education to industrial cases (i.e., material discovery, energy-efficient models, responsible AI, synthetic data, dispelling/creating misinformation, applications to climate and sustainability, healthcare, and more). In this presentation, I will discuss the conditions that make a generative model suitable for various applications, as well as present use-inspired research projects representing the state-of-the-art generative approaches developed at MIT and their translational impact.

Building AGI that Benefits Humanity

Teddy Lee Product Manager OpenAl

Technologies like ChatGPT and DALL-E serve as significant markers in the journey towards Artificial General Intelligence (AGI), or AI systems that are generally smarter than humans. Organizations worldwide, including the Tokyo Metropolitan Government, are actively integrating generative AI into their operations to create value. Generative AI could add trillions of dollars to the global economy, according to McKinsey, and OpenAI estimates that Large Language Models like GPT-4 could impact 80% of the workforce in the US in some way. Given these projections, it's crucial for key stakeholders to collaborate in ensuring these technologies benefit society broadly rather than a select few. In this talk, I'll discuss OpenAI's approach to developing AGI, examine some impactful use cases for generative AI, and discuss the considerations for ensuring that we as a society deploy AGI in a way that truly benefits humanity.

5:30 PM Roundtable Discussion Aude Oliva

Director of Strategic Industry Engagement, MIT Schwarzman College of Computing, MIT Director, MIT-IBM Watson AI Lab, Co-lead, MIT AI Hardware Program, Senior Research Scientist, CSAIL



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Lun Yu Co-Founder MetaNovas Biotech

Elaleh Ahmadi Co-Founder & CEO Themis Al

Rony Kubat Co-Founder & CTO Tulip Interfaces