

pandemic response catalyst conversations: Masks Innovations for Virus Transmission Control

Speaker Bios



David T. Beattie, Ph.D., MBA, is a scientist, biopharmaceutical professional, father and avid sportsman with 28 years of industry experience in vaccine discovery, biologics process innovation, drug manufacturing and life science product development. Currently, he is the Vice President of R&D for the BioProcessing business of MilliporeSigma, the Life Science business of Merck KGaA, Darmstadt, Germany. Previously he was Global Director of Biotech Process Sciences for EMD Serono, based in Switzerland, and held various roles at Boston area biotech firms Ipsen Biotech, Avant Immunotherapeutics and VRI. He majored in molecular biology at Colgate University, received his Ph.D. in microbiology and molecular genetics from Harvard University for his work on neural network signaling in bacterial pathogens, and concentrated on finance and statistics as part of his MBA at Boston University.



Jill Crittenden, Ph.D., is a research scientist at the Massachusetts Institute of Technology who uses viruses and genetic engineering to study brain circuits that motivate motor action in health and disease. While the laboratory is closed, Jill has been volunteering her time to review and communicate data-based methods to mitigate the transmission of SARS-CoV-2. She currently works with two teams of scientists researching N95 mask decontamination and reuse, N95Decon.org and MGB COVID Innovation Re-use. Jill is also co-chair of the Cambridge City COVID-19 Expert Advisory Panel.



David Sun Kong, Ph.D., is a synthetic biologist, community organizer, musician, and photographer based in Lexington, MA. He is the director of the Massachusetts Institute of Technology Media Lab's new [Community Biotechnology Initiative](#). Their mission: empowering communities through biotechnology. David conducted his graduate studies at MIT's Media Lab, receiving a master's degree for developing technology for printing nanostructures with energetic beams and a Ph.D. for demonstrating the first gene synthesis in a microfluidic ("lab-on-a-chip") system. He was recognized as an emerging leader in synthetic biology as a "LEAP" fellow, served as a guest faculty member at the Marine Biology Lab in Woods Hole, MA, and is co-founder and managing faculty of "[How To Grow \(Almost\) Anything](#)," an international course on synthetic biology. He founded and chaired new Microfluidic and Hardware Tracks for the [International Genetically Engineered Machines Competition \(iGEM\)](#) and is the official iGEM DJ. He was technical staff in the Bioengineering Systems & Technologies group at MIT's Lincoln Laboratory and a founding member of the synthetic biology team.