PAN-FAB
GREATER BOSTON PANDEMIC FABRICATION TEAM

Harvard-MIT Center for Regulatory Science

PANDEMIC RESPONSE: RESILIENCE AND RECOVERY IN THE ERA OF COVID-19

Case Studies in Pandemic Response by the Students and Fellows of the Greater Boston Pandemic Fabrication Team

JUNE 23 | 10AM - 3PM ET | bit.ly/panfabagenda

DAY 1 AGENDA

Speaker list below

10:00 AM	**Introduction to PanFab: Mobilizing a volunteer response to COVID-19** Deb Plana, *Harvard Medical School*
10:15 AM	**Panel Discussion: Cross-training and resiliency in a pandemic** *Moderator*: Peter Sorger, *Harvard-MIT Center for Regulatory Science* *Panelists* -- Nicole LeBoeuf, *Brigham and Women's Hospital* -- Sherry Yu, *Brigham and Women's Hospital* -- Arash Mostaghimi, *Brigham and Women's Hospital* -- Kevin Tyan, *Harvard Medical School* -- Helen Yang, *Harvard-MIT Center for Regulatory Science*
11:15 AM	**The importance of negative results: Gamma radiation sterilizes and degrades functionality of N95 masks** Mike Short, *MIT, Nuclear Science and Engineering*
11:30 AM	**Ionized hydrogen peroxide for N95 respirator sterilization** Avilash Cramer, *Harvard-MIT Program in Health Sciences and Technology*
11:45 AM	**Fast evaluation of masks during COVID-19 pandemic** Enze Tian, *MIT & Tsinghua University*
11:55 AM	**KN95 Counterfeit testing** Mary Carmack, *Boston Children's Hospital & Harvard-MIT Center for Regulatory Science*
12:00 PM	**Additional time for group Q&A** Mike Short, *MIT, Nuclear Science and Engineering* Avilash Cramer, *Harvard-MIT Program in Health Sciences and Technology* Enze Tian, *MIT & Tsinghua University* Mary Carmack, *Boston Children's Hospital & Harvard-MIT Center for Regulatory Science*
12:10 PM	*Lunch*
12:25 PM	**A foray into augmenting ventilator capacity** Shriya Srinivasan, *Brigham and Women's Hospital & MIT*
12:45 PM	**Guidance for makers prototyping PPE and medical supplies in a pandemic** Christopher Van, *PanFab & Independent*

1:00 PM	**Medical supplies design in a crisis-setting** MJ Antonini, *Harvard-MIT Program in Health Sciences and Technology*
1:10 PM	**Brazil maker community response to COVID-19** Luis Freitas, *Federal University of Parana*
1:15 PM	**Leveraging local information for pandemic response internationally** Aditi Gupta, *Harvard-MIT Program in Health Sciences and Technology*
1:25 PM	**Additional time for group Q&A** Shriya Srinivasan, *Brigham and Women's Hospital & MIT* Christopher Van, *PanFab & Independent* Luis Freitas, *Federal University of Parana* Aditi Gupta, *Harvard-MIT Program in Health Sciences and Technology*
1:30 PM	*Break*
1:35 PM	**Impact of facial skin protectants on N95 mask fit testing** Tram Bui, *Harvard Medical School & Brigham and Women's Hospital*
1:50 PM	**3D Printed Frames for N95 Masks to Replace Defective Bands and Improve Fit** Malia McAvoy, *University of Washington*
2:05 PM	**Converting existing UVB phototherapy units to UVC light-sources for N95 decontamination + MA Outreach** Bina Kassamali, *Harvard Medical School & Brigham and Women's Hospital* Zizi Yu, *Harvard Medical School* Introduction by Avery LaChance, *Brigham and Women's Hospital*
2:20 PM	**De novo PAPR design and manufacture to address commercial supply shortages** Lyla Atta, *John Hopkins University* Akshay Kothakonda, *MIT*
2:45 PM	**Additional time for group Q&A** Tram Bui, *Harvard Medical School & Brigham and Women's Hospital* Bina Kassamali, *Harvard Medical School & Brigham and Women's Hospital* Zizi Yu, *Harvard Medical School* Lyla Atta, *John Hopkins University* Akshay Kothakonda, *MIT*
2:50 PM	**Closing remarks** Peter Sorger, *Harvard-MIT Center for Regulatory Science*
3:00 PM	**End of Day 1**

Learn more at bit.ly/panfabAgenda

DAY 1 SPEAKERS

Deborah Plana, BS
MD-PhD Candidate, Harvard Medical School

Peter K Sorger, PhD
Otto Krayer Professor, Department of Systems Biology,
Head of the Harvard Program in Therapeutic Science,
Harvard Medical School

Nicole LeBoeuf, MD
Assistant Professor of Dermatology, Brigham and Women's Hospital

Clinical Director, The Center for Cutaneous Oncology, Dana-Farber Cancer Institute

Sherry H. Yu, MD
Resident in Dermatology, Harvard Combined Dermatology Residency Training Program

Deland Fellow in Healthcare and Society, Brigham and Women's Hospital

Arash Mostaghimi, MD, MPA, MPH
Assistant Professor of Dermatology, Harvard Medical School

Director, Inpatient Consultation Service, Department of Dermatology, Brigham and Women's Hospital

Kevin Tyan, BA
MD Candidate, Harvard Medical School

Helen Yang, BS
Program Manager, Harvard-MIT Center for Regulatory Science

Michael Short, PhD
Associate Professor, MIT Nuclear Science and Engineering

Avilash Cramer, MS
PhD Candidate, Harvard-MIT Program in Health Sciences and Technology

Enze Tian, BS
PhD Candidate, MIT & Tsinghua University

Mary Carmack, BS
Research Assistant, Boston Children's Hospital & Harvard-MIT Center for Regulatory Science

Shriya Srinivasan, BS
Postdoctoral Fellow, Brigham and Women's Hospital & MIT

Christopher Van
PanFab Prototyping, PanFab & Independent

Marc-Joseph Antonini, MEng, MS
PhD Candidate, Harvard-MIT Program in Health Sciences and Technology

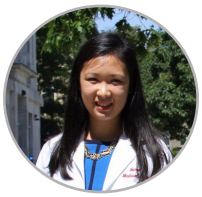
Luis Freitas
Medical Student, Federal University of Parana

Aditi Gupta, BS
PhD Candidate, Harvard-MIT Program in Health Sciences and Technology

Tram Bui, BS
Medical Student Researcher, Harvard Medical School & Brigham and Women's Hospital

Malia McAvoy, MS
Neurosurgery Resident, University of Washington

Bina Kassamali
Medical Student, Harvard Medical School



Zizi Yu, BA, BS
Medical Student, Harvard Medical School

Lyla Atta, BS
MD-PhD Student, John Hopkins University

Akshay Kothakonda, MS
PhD Candidate, MIT