

PRESS RELEASE

Mumbai University and IIT Alumni Council join hands to setup Covid19 MegaLab in Mumbai

New Delhi, June 2nd, 2020: IIT Alumni Council will set up one of the world's largest MegaLabs in Mumbai with a capacity of 10 million tests per month. While scientists are still at work to develop a vaccine, testing and biotherapeutics capacity have emerged as the biggest challenges. MegaLab Mumbai equipment and test kit partners are being chosen through a global competition being launched later this week. In order to enable the creation of an entire ecosystem to support the world's largest RTPCR lab, Mega Lab Mumbai is tying up with reputed institutions in Mumbai and the National Capital Region.

"MegaLab will be based on the end-to-end Kodoy indigenous technology stack and will have adequate capacity for testing the entire population of Mumbai for infectious diseases, each month " according to Ravi Sharma, President of IIT Alumni Council.



IIT Alumni Council has been on forefront of finding solutions to the challenges of C19. The Council, along with partner organizations, and Dr Muffazal Lakadwala's team, set up digital x-ray systems that successfully used Al to detect C19 for the first time in India. Subsequently, within one week of the first contactless c19 isolation center going live at NSCI, the team launched India's first C19 Test Bus in Mumbai on Maharashtra Day. Pool testing recommendations were simultaneously released and submitted to the Govt. for its consideration. On the 10th of May 2020, work started on indigenization of the test kits and the IIT Alumni groups have expressed confidence in meeting national demand for the same within 100 days with 100% indigenization. The x-ray has thereafter been superseded with ultracompact ultrasound scanners so that the entire functionality of a covid bus can now be fitted in a cab. On the 22nd of May 2020, the Council finalized the launch of MegaLab Mumbai at 10 million tests per month, a 2x upgrade from the 5 million test capacity proposed last month to complement the Bus and 5,000 Ola/Uber cab-based sample collection points.

About MegaLab Mumbai

The MegaLab Mumbai is the largest C19 initiative of the IIT Alumni Council. This initiative aims to design and establish the largest genetic testing laboratory for C19 and other infectious diseases (for example, Tuberculosis) with an end-to-end capacity to carry out over 10 million tests per month. Keeping in mind the opportunity to replicate with smaller capacities at other places in India & in other developing counties, the MegaLab would comprise of three independent lines – 1 million tests per month (tpm), 3 million tpm and 6 million tpm.

About Engineered Biomolecules

Engineered biomolecules are the key constituent of any RTPCR testing system. These account for over 60% of the cost of testing and developing, approving and continuously checking the quality of these is integral to ensuring the cost, speed and accuracy of RTPCR testing. Several IIT alumni teams supported by the IIT Alumni Council have already developed 100% indigenous kits which are in various stages of manufacturing and approvals. We expect to operationalize enough manufacturing capacity in India so as to meet the entire requirement of developing countries including India, China, Asean, Middle East, Africa and Latin America.

MegaLab Mumbai would work with Mumbai University's National Centre for Nanosciences and Nanotechnology and the Innovation and Incubation center of Mumbai University in this mammoth undertaking. Mumbai University alumni including Dr Lakadawala, the C19 Mission Head at the NSCI Dome are already doing a commendable job on the ground in Mumbai with technology and knowledge support from the IIT Alumni Council.

"With a 160+ years history of excellence in academics, University of Mumbai has been a pioneer in research work across multiple disciplines. Building on its strength in biotechnology and related research areas such as biosciences, it is now chartering a new path by partnering in a path breaking initiative promoted by the IIT Alumni Council to create one of the largest labs ever built for molecular diagnostic and genetic testing in Mumbai with a capacity of 10 Million RTPCR tests per month", said Prof. Suhas Pednekar; Vice Chancellor, University of Mumbai

Prof. Ravindra Kulkarni, Pro-Vice Chancellor Mumbai University added: "University of Mumbai has an outstanding track record in the area of biological and medical sciences. Several doctors who are at the forefront in the fight against Corona Virus have been our Alumni and we take pride in their contribution. By partnering in the Mega Lab initiative with the IIT Alumni council, we intend to provide our research students and teaching staff an opportunity to gain exposure to and to contribute to the latest technologies and innovations in the field of molecular diagnostics and genetic testing."

"The Megalab initiative of IIT Alumni Council would strongly support our already planned specialized lab in the Nano-science Center of University of Mumbai as part of the Engineered Biomolecule Manufacturing Consortium. This facility would conduct research on covid19 as well as other infectious diseases. The learnings from MegaLab

as well as the data generated would not only be very helpful in developing prophylactic and therapeutic solutions for covid19 but also for other pressing issues such as tuberculosis" said Dr Samir Kulkarni, Director of Innovation, who manages the 40,000 sq ft. Mumbai University Incubation Center "MU-IDEAS" and who also holds additional charge as the Director of the National Center for Nanoscience and Nanotechnology of the Mumbai University.

About Mumbai University

The University of Mumbai, informally known as Mumbai University (MU) is a collegiate public state university located in Mumbai, Maharashtra. It offers bachelors, masters, and doctoral courses, as well as diplomas and certificates in many disciplines such as fine and applied arts, commerce and management, science, architecture, biotech, pharmacy, and engineering. The language of instruction for most courses is English. Mr. Ratan Tata is the appointed head of Mumbai University's advisory council.

The University of Mumbai was established in 1857. It was modelled on the universities in the United Kingdom, specifically the University of London. The university has two campuses across Mumbai (Kalina Campus and Fort Campus) and three outside Mumbai. The Fort campus, which is a UNESCO designated world heritage site, carries out administrative work while the Kalina campus boasts of several academic and research centres, including the National Centre for Nano-sciences and Nanotechnology. The university used to manage the departments of Medicine and Medical Research located in several prominent hospitals in Mumbai until 1998 when the government decided to consolidate all the Medical colleges of the state into a separate university.

Presently, the university has over 800 affiliated colleges and autonomous institutes/colleges; with more than 8.0 lakh students enrolled in more than 550 different academic programs. The university has established collaborative research programs with several national/international universities/institutes.

About IIT Alumni Council

IIT Alumni Council is the largest global body of alumni, students and faculty across all the twenty-three IITs with 100+ city chapters. The IIT C19 Task Force was set up in February 2020 by the Global Board of the IIT Alumni Council. The objective of the Task Force is to rally the technological and venture capital prowess of alumni of all the IITs to launch a frontal attack on the Sars Cov2 virus that leads to the Covid19 disease. The IIT C19 Task Force is Chaired by IIT Kanpur alumnus Dr K Vijay Raghavan, Principal Scientific Officer of the Government of India. It is financially supported by global foundations and Tier 1 social funds including the PanIIT Fund. The PanIIT Fund, which commenced operations in April 2020 is India's largest SEBI regulated domestic social philanthropic fund that brings together IIT Alumni, IIT faculty/students and industry to arrive at technological solutions for urgent social challenges.

With over 20,000 active technologist participants and over one hundred city chapters, the IIT C19 Task Force set up by the IIT Alumni Council aspires to lead the fight against C19 by supplementing and complimenting the efforts of the central and state governments. The Council has rallied the considerable resources of the global IIT alumni to catalyze technological and financial interventions in Mumbai city.

For more information on IIT Alumni Council, please visit www.iitalumnicouncil.org