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PRESS RELEASE

IIT Alumni Council announces MegaScope to widen scope and increase accuracy of MegaLab.

- MegaScope to add host genome mapping along with data backbone and AI / ML to the MegaLab initiative.
- MegaScope Target is to improve accuracy of testing, predict likely disease severity/progression, enhance efficacy of treatment and avoid casualties altogether.
- MegaLab to be reconfigured because trial by error treatment unable to prevent deaths or disease progression. RT PCR test , though useful and better than other options , is neither accurate nor capable of assessing likely disease severity or medicinal efficacy. There is no vaccine or cure as yet.
- Consultation to be held with the 18 interested potential partners already identified from the MegaLab competition. Objective of using 100% indigenous test kits with a Chinese free supply chain.
- Pilot testing to start for IIT alumni and their family members/associates in early 2021.

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New Delhi, November 3, 2020: IIT Alumni Council announces the MegaScope initiative to create a data driven platform for predictive, preventive and personalised healthcare. Adding a strong data platform and gene sequencing is likely to significantly improve accuracy of testing and enhance efficacy of treatment.

"The age of healthcare based on one test for all and one medicine for all is fast approaching an end. Covid19 related research has conclusively demonstrated that people react differently to the same pathogen or disease. The effect of the same medicine also varies from person to person. A well meshed data platform with digitising at the sample end and conversion to personalised medicine at the other end is the only way to change the accuracy and efficacy paradigm. A unified MegaLab/MegaTx/Data Platform approach seems to be the best way to fight covid and all such future pandemics" said Ravi Sharma, President and Chief Volunteer of the IIT Alumni Council.

"Under the MegaScope initiative, the entire paradigm has to be re-invented. The RTPCR testing methodology is oriented only towards checking for presence of the virus. It does not involve collecting any data on the host or human body. If host genome data was added and correlated using combinatorial computation, then it would have been possible to predict whether the person required home isolation, quarantining, hospitalisation or emergency procedures. Therefore, the entire diagnosis approach requires a fundamental shift from just RTPCR to next generation sequencing of the DNA, biome analysis and blood biopsy. This is neither cheap nor easily possible in distributed small laboratories. Aggressive indigenisation and optimisation in a central lab will rapidly drive the costs down." added Girish Mehta, an expert in diagnostics and genetic testing, who was Chairperson of the Diagnostics Group in the C19 Task Force.

"Covid19 is neither the first pandemic nor is it likely to be the last. The pandemic tested the efficacy and capability of our entire healthcare ecosystem revealing large cracks

and chasms in it. A pro-active approach is required to handle such pandemics in the future. The threat is more real if one combines it with the possibility of biological warfare based on genetically modified pathogens. The monoclonal antibody based pandemic treatment is one part of the puzzle. Genetic testing is another. Condition assessment through blood biopsy and gut biome testing could be yet another. The unfortunate reality is that as yet, we only know what we don't know. Preparedness is, therefore, critical. We need to shift the focus to a new normal beyond the covid19 pandemic. And that is what MegaScope needs to achieve" added Dr Arindam Bose, an expert in the large-scale production of therapeutic monoclonal antibodies who served as the Chairperson of the Therapeutics Group in the C19 Task Force.

About IIT Alumni Council

IIT Alumni Council is the largest global body of alumni, students and academicians across all the twenty-three IITs and partnering Institutes of the India Innovation Network (I2Net). The IIT Alumni Council aspires to catalyse India's technological renaissance. For this it catalyses the creation of rapid response short term initiatives like the C19 Task Force and perpetual strategically planned initiatives like MegaFund, MegaIncubator and I2Net. Through such initiatives, IIT Alumni Council intends to act as a network and as a bridge between various providers of knowledge, wealth, information, wisdom, ideas, expertise and entrepreneurship to promote appropriate technological solutions to known social challenges at the national level. As a demonstration, the six month C19 Task Force set up in March 2020 conceived of large start-up initiatives like the NSCI Dome, Covid Test Bus, MegaLab and MegaTx – by aggregating over 10 million hours of 20,000+ volunteers, all of it on a pro bono basis. The Council is continuing to rally the considerable resources – both financial and technological - of the global IIT alumni ecosystem to catalyse global scale interventions in the social sector. For more information on IIT Alumni Council, please visit: www.iitalumnicouncil.org

A distinguished Alumnus of IIT Roorkee, former Corporate leader and now full time Philanthropist - Ravi Sharma plays an active role in global revitalisation and unification of IIT alumni across countries, across IITs and across age groups. He is the President and Chief Volunteer of the IIT Alumni Council and also leads the Institute Outreach & Branding initiatives. The main deliverables of the Council are facilitating alumni networking, fortifying Brand IIT and Brand India, catalysing alumni participation in nation building and accelerating technological developments in key areas of our economy including start-ups, manufacturing and digital transformation. The Council has six operating missions - Alumni Networking , Research Mentorship, Social Venture funding, CSR Platform, a policy Thinktank and a Mega Incubator. The IIT Alumni Council is now actively engaged in solving the corona crisis and had formed the C19 Task Force with participation of over 20,000 alumni. The India Innovation Network includes Mumbai University and ICT Mumbai as institutional partners. C19 Task Force initiatives being taken forward include the 12.5 million tests per month MegaLab and the 50K litres harvested blood per month MegaTx.

Girish Mehta holds a BTech from IIT Bombay and a PGDM from IIM Calcutta (1990). He started his career in FMCG and management consulting. Since the late nineties, he has been involved in the healthcare sector. He served as President and CEO for the diagnostic services business of the Piramal Group where he built Piramal Diagnostics into a 110 lab profitable operation over 7 years. Currently the business is part of SRL Limited. He has also served as Director RSD of Thermo Fisher Scientific where he restructured and turned around the ailing Fisher Scientific business. He returned to diagnostics as Group CEO of Oncquest Laboratories from 2013 to 2015 and as CEO of Medgenome from 2015 to 2018. MedGenome is the pioneer in the evolving space of Genomics and its research and clinical applications. . As CEO, led the successful entry of Medgenome into Oncology and Fertility verticals and consolidated its leadership position in rare diseases. During his tenure, Medgenome's diagnostics and paid research business grew rapidly and trebled it's revenues in three years. Medgenome continues to reap the benefits of work done during his tenure to further build on the business and continues to be the market leader in this space. Girish continues to be thought leader in the medical diagnostics knowledge due to his deep understanding of all aspects of the medical diagnostics space in India and South Asia and is sought after for his views on the same.

Girish served as Chairperson of the Diagnostics Group of the C19 Task Force. He has been the driving force towards creation of requisite infrastructure for mass testing and was closely involved with conception of MegaLab. He currently works as an independent business consultant. Additionally he provides executive coaching and mentoring services to individuals and organizations.

Dr. Arindam Bose retired from Pfizer Worldwide Research & Development in 2016 after 34 years in leadership roles in bioprocess development and clinical manufacturing. Dr. Bose's final position at Pfizer was Vice-President, Biotherapeutics Pharmaceutical Sciences with responsibility for external sourcing, competitive intelligence and external influencing as well as for executing the technical development plan for Pfizer's entry into biosimilars. He is widely recognized as a Key Thought Leader in the biopharmaceutical industry. Dr. Bose was elected to the US National Academy of Engineering for innovations in biologics manufacturing. Dr. Bose currently provides consulting services in bioprocessing to several start-up biotechnology companies including a part-time process development management role at Akero Therapeutics. He received a Ph.D. in chemical engineering from Purdue University, a M.S. from the University of Michigan, Ann Arbor and a B. Tech from the Indian Institute of Technology, Kanpur.

Dr Arindam Bose has been a key mentor and coach to the engineered biomolecule initiative of the IIT Alumni Council. He has advised the Council on a host of issues of both a technical and techno-economic nature. He has helped conceptualise and plan the Rs 500 crore Engineered Bio Molecule Mega Incubator (EBMI) which will include a phygital incubator, 100K square feet pilot plant facilities,, a 10 acre residential training campus, a BSL3 Laboratory equipped research centre and a 100 acre biologics manufacturing cluster for biologics exports in the NCR Biologics ecosphere which includes AIIMS, CSIR IGIB, EBMI training campus, EBMI SEZ, THSTI, ICMR, AIIA, Bibcol, DBT, DST and TDB. The BioTherapeutics Task Force of the IIT Alumni Council has close to 100 PhD volunteers , most of who are alumni of the IITs, ICT and MU.