

PRESS RELEASE

MegaLab initiative of IIT Alumni Council to develop and deliver next generation Covid 19 vaccine.

- Rs 300 crore emergency funding sanctioned for the India Vaccine Stack. Target is a two-dose vaccine which stops the spread of covid and prevents infection within a few days of the first dose.
- The fourth generation vaccine will be free of attenuated animal virus or deactivated covid virus or virus fragments. Will need cold chain to be preservative free limiting reach to key metros.
- Ayurveda inspired adjuvant expected to improve efficacy, reduce side effects, work across all Covid variants.
- Vaccine will be priced at a US equivalent price point initially. Delivered via specially retrofitted buses to office or home location.
- Vaccine will initially be available to IIT Alumni community only.

New Delhi, May 13th, 2021: IIT Alumni Council announces fourth generation vaccine with ayurvedic adjuvant under MegaLab initiative. "IIT Alumni Council announces India's first antigen-free, novel vaccine which is self-limiting, locally manufactured and based on indigenous technology. The preservative-free vaccine is being coupled with an Ayurveda inspired adjuvant which will enhance safety as well as be highly efficacious. The end objective is to deliver a continuously upgradable vaccine which can outpace the virus thus helping to end the pandemic." said Ravi Sharma, President of the IIT Alumni Council.

“We have made remarkable progress globally in understanding vaccines since August 2020. This has helped eliminate many of the vaccine modalities being investigated and we now know that a multi-pronged approach that will elicit an antibody response which neutralises a wide variety of virus mutants is the right target to pursue. Furthermore, the potential ability to access and build upon patented vaccine platform technologies could substantially accelerate development timelines.” added Dr Arindam Bose, a Connecticut based Key Thought Leader of the biotechnology industry, Chairperson of the Therapeutic Group in the C19 Task Force and Senior Advisor to the India Vaccine Stack.

“Western medicine has tried to subjugate traditional systems of medicine including Ayurveda & Homeopathy to an extent that their practice is banned in many countries. I have spent over thirty seven years now trying to understand the exact working of ayurvedic therapies. This work has led to the publishing of hundreds of research papers and grant of tens of patents. My colleague at IIT Bombay, Prof Jayesh Bellare was conferred with the Lifetime Achievement Award by the Ministry of Ayush. I have agreed to license all my patents to help in the IIT Alumni Council’s mission of delivering a safe and effective vaccine.” added Dr Shantaram Kane, a highly respected IIT Bombay Silver Medallist in Chemical Engineering and a PhD from MIT. Dr Kane is heading the injectable adjuvant and oral/ nasal drops components of the India Vaccine Stack.

MegaIncubator supported indigenous stacks and MegaLab partners including Krsnaa Diagnostics, Kodoy, Koteleo, Platinae and Brew to divert available technology, laboratory and manpower resources to accelerate vaccine development and delivery. “The vaccination buses are getting ready and will roll out in time for the clinical trials of the injectable vaccine as soon as necessary permissions are received,” added the Managing Director of Krsnaa Diagnostics – one of India’s largest Covid RTPCR laboratory and a MegaLab partner.

A vaccine stack of the kind proposed along with the genetic testing cannot be done at a mass level or at a low cost initially – so the initial drive will be restricted to IIT Alumni and their families/ staff who are based in NCR and Mumbai/Pune. “We are working to get the logistics and supply chain right ab initio. Each vial will be packaged in smart packaging which tracks its provenance as well as temperature history.” said Satish Mehta, Convenor of the MegaFund initiative whose investors are expected to shortly approve a Rs 1800 crore co-investment to the Rs 300 crore seed capital already committed by Social Funds.

About IIT Alumni Council

IIT Alumni Council is the largest global body of alumni 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. Through its initiatives , IIT Alumni Council works to act as a network and as a bridge between various providers of wisdom, knowledge, information, ideas, expertise, wealth and entrepreneurship to promote technological solutions to social challenges. The Council initiatives do not seek or accept any donations from the public. I2Net Alumni, Philanthropist organisations and CSR Donors are welcome to subscribe to units of the Social Fund as per SEBI regulations pertaining to Social Venture Funds under the AIF Regulations.

The C19 Task Force was set up by the Global Board of the IIT Alumni Council in March 2020 to supplement and complement the efforts of the central and state governments in the fight against C19. Its term ended on August 15th, 2020. Initiatives catalysed by the Task Force successfully include the NSCI Dome, Covid Test Bus, MegaLab, MegaTx and MegaIncubator. The India Vaccine Stack initiative is being launched on June 1, 2021. For more information on IIT Alumni Council or to register for the vaccine, 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's 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 (PanIIT Alumni), Mentorship (PanIIT Institute), Social Venture funding (PanIIT Fund), CSR Platform (PanIIT Foundation), a Thinktank (PanIIT Forum) a Biomolecule Mega Incubator (PanIIT Incubator). The IIT Alumni Council is now actively engaged in solving the corona crisis and has formed the C19 Task Force which has the participation of over 20,000 alumni and includes Mumbai University and ICT Mumbai as institutional partners. C19 Task Force initiatives include the 10 million tests per month MegaLab, the 50K litres harvested blood per month MegaTx and Rs 21,000 crore MegaFund.



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. The vaccine group at Pfizer was part of the Bioprocess group headed by him. 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 Akeru 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.



Dr. Shantaram Kane is a Chemical Engineer. He earned a B.Tech from IIT Bombay and a S.M. and ScD. from M.I.T., USA. He worked for 26 years in several companies at senior levels in the management of technology and R&D. He was an Adjunct Professor of Chemical Engineering at IIT-Bombay from 2001-13 where he was involved with research on Bhasma and Homeopathy.

In his personal research - in a journey that commenced in 1983 - he has invented a process to make super-active natural product extracts in edible oil and an integrated therapy concept combining Ayurveda with Homeopathy and Su Jok. Using this, he has evolved patented process for the extraction of nano peptides from plant and other sources which can be used as nasal or injectable prophylactics and therapeutics. He has made super extracts from several hundred ayurvedic herbs and cow products including milk, colostrum and urine – and the same are being widely used in India, especially among the IIT fraternity. He developed a super extract for Covid prevention which was supported by the IIT Alumni Council and tested with 250 individuals in NCR in October 2020. The extracts helped in both prevention of covid as well as in restoration of sense of smell and taste post Covid. These extracts are now being licensed for widespread distribution.

Dr Kane has authored a two volume set called “Curiosity-Driven Explorations” which are the outcome of the author’s hobby of Ayurveda that commenced in 1983.