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Dr. Krupa Ann Mathew holds a PhD in Biotechnology from the University of Kerala, with her doctoral research conducted at the Rajiv Gandhi Centre for Biotechnology (RGCB). Her research focused on "Hypoxia-Induced Cell Signaling in Drug Resistance of Cancer and the Modulation of Cancer Stem Cells." She has four years of postdoctoral experience as a research fellow at the Advanced Centre for Tissue Engineering (ACTE), Department of Biochemistry, University of Kerala, where her work concentrated on phytochemical-incorporated scaffolds for tissue regeneration and wound healing. She has to her credit several publications in renowned peer-reviewed journals, including *Indian Journal of Experimental Biology*, *Free Radical Biology and Medicine*, *Journal of Cellular Biochemistry*, *Cell Death and Disease*, *Apoptosis*, and *PLOS ONE*. She has presented her research findings at various international and national conferences and serves as a reviewer for prestigious journals. Her expertise includes mammalian cell culture, high-throughput image-based drug screening tools, confocal microscopy, flow cytometry, western blotting, qRT-PCR, electrospinning, 3D bioprinting, and tissue engineering. Additionally, she has experience teaching biotechnology and cancer biology to postgraduate students.

The *DBT Skill Vigyan State Partnership Programme in Life Sciences and Biotechnology* is a government-funded initiative by the Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India. In Kerala, the programme is facilitated by the Kerala Biotechnology Commission (KBC), Kerala State Council for Science, Technology, and Environment (KSCSTE). The programme aims to upskill students and faculty in the latest techniques in life science and biotechnology, thereby enhancing human resource development. KSCSTE partners with 15 academic institutions across Kerala as well as four sector skill councils - Life Science Sector Skill Development Council (LSSSDC), Agriculture Skill Council of India (ASCI), Food Industry Capacity and Skill Initiative (FICSI) and Healthcare Sector Skill Council (HSSC) - for conducting the 'Student, Technician and Faculty Training' courses under the DBT Skill Vigyan - Kerala. Dr. Krupa Ann Mathew is currently serving as a Consultant for the DBT Skill Vigyan – Kerala. Her responsibilities include managing the training courses, overseeing the disbursement of funds, and supervising the assessment, certification, and placement of students in collaboration with DBT, the sector skill councils, partnering institutions, and industries.

During 2024-2025, a total 289 students and 176 faculty members got trained in advanced techniques and methodologies in biotechnology and life sciences. The programme offered 6 courses under the student-training, 9 courses under the technician-training and 9 courses under the faculty-training schemes. Additionally, 25 faculty members participated in the 'Training of Trainers (ToT)' courses to ensure the effective delivery of these programmes. Notably, over 80% of the participants were female. Feedback from participants has been overwhelmingly positive, with most rating the programme as excellent or good. The faculty training programme has notably improved teaching methods and work practices, while students have gained valuable skills to enhance their competitiveness in the job market. The programme has also supported the placement of 15-20% of participants in companies, including Dr. Reddy's Laboratories.