



# SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY  
(DEEMED TO BE UNIVERSITY)

ACCREDITED WITH GRADE "A++" BY NAAC  
CATEGORY - 1 UNIVERSITY BY UGC



# UNIVERSITY OF WESTMINSTER



## 2<sup>nd</sup> International Conference on Translational Research in Biomedical Sciences (TRIBS 2.0)

19<sup>th</sup> to 21<sup>st</sup> Feb 2025

**Venue:** Tmt. Soundrabai Auditorium, III Floor, Sathyabama Centre  
for Advanced Studies, Sathyabama.

### Organized by

Centre for Drug Discovery and Development  
Sathyabama Institute of Science and Technology  
Chennai, India.

### In association with

University of Westminster  
United Kingdom.

### Co-Organizers

Vivagen Dx Lab,  
Chennai, India.

**VIVAGEN** Dx  
Labs  
Tomorrow's Medicine Today

3 GOOD HEALTH  
AND WELL-BEING



4 QUALITY  
EDUCATION



9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



17 PARTNERSHIPS  
FOR THE GOALS



**nirf** NATIONAL  
INSTITUTIONAL  
RANKING  
FRAMEWORK



**NBA**  
NATIONAL BOARD  
OF ACCREDITATION

**ABET**



EXCELLENT  
★★★★★  
**QS**

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# Organizing Team

Patrons Sathyabama	Patrons University of Westminster
<p><b>Dr. Mariazeena Johnson</b> Chancellor</p> <p><b>Dr. Marie Johnson</b> President</p> <p><b>Mr. J. Arul Selvan</b> Vice President</p> <p><b>Ms. Maria Bernadette Arulsevan</b> Vice President</p> <p><b>Ms. Maria Catherine Johnson</b> Vice President</p> <p><b>Dr. T. Sasipraba</b> Vice Chancellor</p>	<p><b>Prof. Peter Bonfield</b> Vice Chancellor and President</p> <p><b>Prof. Dibyesh Anand</b> Deputy Vice-Chancellor, Global Engagement and Employability</p> <p><b>Prof. Andrew Linn</b> Deputy Vice-Chancellor for Research and Knowledge Exchange.</p>
<p><b>Convenors</b></p> <p><b>Dr. Krupakar Parthasarathy</b> Professor (Research) Centre for Drug Discovery and Development Sathyabama Institute of Science and Technology, Chennai, India.</p> <p><b>Dr. Kalpana Surendranath</b> Director, Gene Editors of the Future, University of Westminster, London.</p> <p><b>Dr. Kanagaraj Radhakrishnan</b> Senior Lecturer, IMBAE St George's, University of London, UK.</p>	<p><b>Organizing Secretaries</b></p> <p><b>Dr. M. Radhakrishnan</b> Professor (Research) Centre for Drug Discovery and Development Sathyabama Institute of Science and Technology, Chennai, India.</p> <p><b>Dr. V. Hari Balaji</b> Founder Director Chief Scientific Officer Vivagen Dx Lab, Chennai, India.</p>

## Co-Organizing Secretaries

### Sathyabama

**Dr. V. Gopikrishnan**  
Assistant Professor (Research)

**Dr. T. Rajasekar**  
Assistant Professor (Research)

**Dr. R. Sam Ebenezer**  
Assistant Professor (Research)

### University of Westminster

**Ms. Harshana Chaurasia**  
Research Scholar

**Ms. Mishal Mansha Akhtar**  
Research Scholar

**Ms. Maha Mansha Akhtar**  
Research Scholar



## About Sathyabama:

Sathyabama is a prestigious institution which excels in the fields of Engineering, Science and Technology for more than three successful decades. It offers multi-disciplinary academic programmes in various fields of Engineering, Science, Technology, law, Dental Science, Pharmacy, Nursing, Management, Arts and Science and Allied Health Sciences. It is established under Sec.3 of UGC Act, 1956 and is been Accredited with 'A++' Grade by the National Accreditation and Assessment Council. The Institution has been Graded as Category I University by UGC under the UGC (Categorization of Universities (only) for Grant of Graded Autonomy) Regulations, 2018. The Institution persistently seeks and adopts innovative methods to improve the quality of higher education and is responsive to the changes taking place in the field of education on a global scale. The Institution has a team of dynamic and outstanding faculty, innovative pedagogical practices, state of the art infrastructure and world class Research Facilities.

Sathyabama has a good presence in rankings and ratings at National and International level. The Institution has been ranked in 51st position by the National Institutional Ranking Framework (NIRF), Government of India among the Universities in India for the year 2023 and ranked one among the top 100 Universities for eight consecutive years. Sathyabama is ranked among the Top 5 Institutions in the Country for Innovation by ATAL ranking of Institution for Innovation Achievements, Govt. of India. Times Higher Education and QS has ranked Sathyabama among the top Institutions worldwide. Sathyabama Institute of Science & Technology has alliances with leading Universities and research establishments at National and International Level. It is a research intensive University with world class laboratories and research facilities and is involved in research in the emerging areas of Science and Technology. Sathyabama has undertaken various sponsored and collaborative R&D projects funded by National and International Organizations. Sathyabama has written a special page in the history of space research on 22nd June 2016 with the launch of "SATHYABAMASAT" in association with ISRO.

## About Centre for Drug Discovery and Development:

The Centre for Drug Discovery and Development (CDDD) was established in 2013 at the university in Col Dr. Jeppiaar Research Park with the goal to discover novel drugs to fight against life-threatening infectious diseases. The centre revolves around microbial bioprospecting, Natural product drug discovery, research on Tuberculosis and Virology, Biofilm biology, Genomics and Proteomics, Translational immunology and vaccine research, marine bioprospecting, Bio-nanomolecular research, Vector-borne disease laboratory and CMOAR lab. The centre has received research grants from esteemed organizations including DST, DBT, NCPOR, ICMR, SERB, MHRD-SPARC, and MoES.

## About the University of Westminster:

The University of Westminster started out 180 years ago as the first polytechnic in London and one of the first in the UK, established to educate the working people of London. Our people stand out as significant contributors to their communities - through their innovation, enterprise, and problem-solving skills - seeking to make the world a more sustainable, healthier, and better place. With nearly 20,000 students from 169 different nationalities, the university fosters a global outlook through its inclusive curriculum and co-curricular opportunities. Rated Silver in the 2023 Teaching Excellence Framework UK (TEF, UK) for very high quality teaching and outcomes, it excels in life sciences, art, media, law, tourism, English, and architecture. Recognised in the top 15% globally for contributing to the UN's Sustainable Development Goals (The Impact Rankings 2024), it ranks second in London for research quality and among the top 50 worldwide for international outlook (The Young University Rankings 2024).

The School of Life Sciences at the university occupies modern laboratories in the heart of London with excellent facilities supporting cutting edge research in a number of disciplines including: molecular and cellular biology, fermentation and biotechnology, and human health and performance. Notable examples of internationally recognised research within the school include, but are not limited to, research on genome editing, cancer, obesity, inflammation, human exercise performance and ageing, nutrition and global public health, social prescribing and resilience. MSc and PhD students on postgraduate research degree programs, post-doctoral research assistants, technical services staff and academic members of staff support the research efforts of the school. Research is funded by grants from national and international funding bodies and also by industrial partnerships.

## About Gene Editors of the Future:

Gene editing allows the introduction of desirable changes in the genome of living cells using CRISPR/Cas and has fundamentally transformed research and development in biomedical sciences and biotechnology. Termed the largest and longest-running extracurricular initiative in CRISPR, the Gene Editors of the Future program of the School of Life Sciences at the University of Westminster vertically integrates researchers of all levels interested in gene editing, enabling them to develop essential skills through experiential and authentic learning experiences. It equips researchers of all levels with the theoretical knowledge and practical expertise necessary to investigate molecular and cellular puzzles using CRISPR/Cas technology. Since 2020, the program has co-created and collaborated with over 700 participants of all levels through co-curricular and extracurricular activities. The program has seen a surprising majority of women participants across all courses and levels at the University of Westminster, who not only engage actively in training but also gain access to a wide range of opportunities, equipping them with the skills necessary to take on various leadership roles within the scientific community and the broader society. Funded by the Quintin Hogg Trust, the program is expanding rapidly and actively collaborating with reputed institutions, including Wellcome Connecting Science, Queen Mary University London, and Royal Holloway University of London.

## About Conference:

Translational research in Lifescience aims to understand and refine the process of turning observations in the laboratory, clinic and community into interventions that improve health of individuals and communities. Scientific translational research happens along a spectrum: from bench to bedside and on to populations. But this spectrum is not linear or unidirectional; each stage builds upon and informs the others. In the past decades, there have been an enormous number of proof-of-concept studies in regenerative medicine.

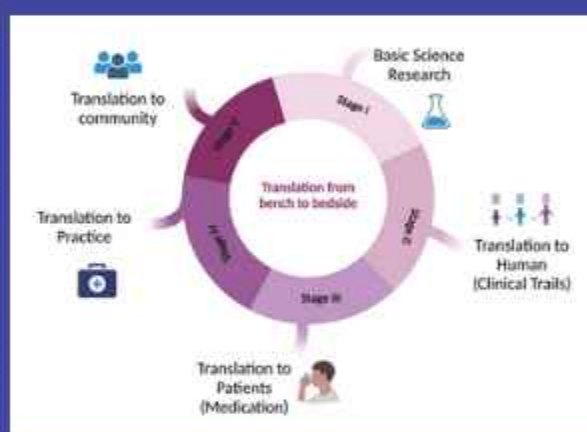
This conclave establishes a platform for accelerating the translational research among the academicians, scientists and industrialists working in several aspects of medicine and healthcare to come closer and share their ideas. Young research scholars and students can present their ideas and innovations as presentations.

## Conference Themes:

1. Gene Editing Technologies
2. Genome Integrity & Repair
3. Translational Immunology & Vaccine Research
4. Microbial Technologies
5. Multi-omics, Bioinformatics & Computational Biology
6. Maternal Health & One Health
7. Bioeconomy & Sustainable Healthcare
8. MedTech, Biopharma & Biomanufacturing

## Pioneering Clinician-Academia-Industry Focus Group Panel Discussions

The convergence of clinicians, academia, and industry creates a dynamic synapse for pioneering research in life sciences and biotechnology. This triad leverages the practical insights of clinicians, the research expertise of academicians, and the innovative capabilities of industry. Clinicians bring real-world medical challenges and patient data to the table, ensuring that research is grounded in clinical relevance. Academia contributes a robust understanding of biological mechanisms and advanced research methodologies. Industry plays a crucial role by translating scientific discoveries into marketable products and therapies, providing resources, funding, and a pathway to commercialization. This collaborative synergy accelerates the pace of research, fosters innovation, and ultimately enhances patient care and health outcomes. The innovative focus group panel discussion aims to bring real-world examples of outcomes from such collaborative research onto the conference platform.





## Vertically Integrating Cutting-Edge Science Session

The session, a first of Unique event at Sathyabama, introduces a Vertically Integrated format to a research conference. Vertically Integrated Projects (VIPs) are transformative initiatives in higher education that bring together undergraduate and postgraduate students, academic staff, and external partners to collaborate on long-term research and innovation projects.

In the face of increasing uncertainties in higher education globally, VIPs are strategically designed to align academic learning with real-world problem-solving. They provide significant benefits to students, institutions, and society, amplifying their impact manifold and fostering meaningful contributions to addressing pressing challenges. The session will explore the opportunities presented by VIPs, as well as the challenges posed by the evolving landscape of higher education. Moreover, the vertically integrated gene editing session will bring together student researchers of all academic levels and disciplines including biomedical, biotechnology, bioethics, and bioengineering to explore the transformative potential of CRISPR technology.

### Session Themes:

1. Education for sustainable development
2. Students as Researchers
3. CRISPR Disease Modelling Project.


An "Introduction to CRISPR Gene Editing Workflows" pre-conference workshop session:

**Date :** 18th February 2025.

**Time :** 2:00PM - 5:30PM

**Participants :** 40 Selected Participants only.

**Venue:** Seminar Hall, Centre for Drug Discovery and Development, Sathyabama Research Park, Sathyabama.



## Eminent National Speakers

**Dr. Taruna Madan**  
Scientist F and Head  
ICMR-NIRRH, Mumbai.

**Dr. Uma Kanga**  
Associate Professor  
AIIMS- New Delhi.

**Dr. Pragya D. Yadav**  
Director in Charge  
NIOH- Nagpur.

**Dr. Amit Awasti**  
Senior Professor  
THSTI, Faridabad.

**Dr. Saravanan Matheshwaran**  
Associate Professor,  
IIT-Kanpur.

**Dr. Sujatha Sunil**  
Group Leader  
ICGEB-New Delhi.

**Prof. H.Shakila**  
School of Biotechnology  
Madurai Kamaraj University  
Madurai.

**Dr. V. Thillaisekar**  
Associate Professor  
Pondicherry University  
Pondicherry.

**Dr. Luke Elizabeth Hanna**  
Scientist- E  
ICMR-NIRT, Chennai.

**Dr. Viswanadham Duppatla**  
Vice President  
IKP Knowledge Park,  
Hyderabad.

**Dr. T. Ramani Devi**  
President, TNFOG  
Ramakrishna Medical Centre, Trichy.

**Dr. Sujatha N**  
Professor  
IIT-Madras.

**Dr. Neelagandan Kamariah,**  
Team Lead-CCBT,  
DBT-InStem, Bangalore.

**Dr. Anandi Karumbati,**  
Team Lead-CCBT,  
DBT-InStem, Bangalore.

**Dr. Pragyan Acharya,**  
Assistant Professor  
AIIMS-New Delhi.

**Dr. E. Babu**  
Senior Consultant,  
Kauvery Hospitals, Chennai.

**Dr. Prabhu Kanchi**  
Senior Consultant  
Kauvery Hospitals, Chennai.

**Dr. Supraja K**  
Director -Medway Institute of  
Pulmonology Chennai.

**Dr. Vaibhav Bhatia**  
CEO  
Lamark Biotech Pvt Ltd., Pune.

**Dr. V. Hari Balaji**  
CEO, Vivagen Dx Lab  
Chennai.

## Eminent International Speakers

**Dr. Siddappa Byrareddy**  
Vice Chair for Research  
Nebraska Medical Center  
Omaha, Nebraska, USA.

**Dr. Giuseppe Viola**  
Director - Queen Mary Centre for  
Undergraduate Research,  
Queen Mary University of London,  
UK.

**Dr. Anusha Seneviratne**  
Lecturer in Health Studies,  
Royal Holloway University  
of London, UK.

**Dr. Anthony Chua**  
Co-Founder and CEO  
StratifiCare™ Pte. Ltd  
Singapore.

**Dr. Sergio Ieiva**  
Associate Professor  
Austral University of Chile  
Valdivia, Chile.

**Dr. Kalpana Surendranath**  
Director, Gene Editors of the  
Future, University of  
Westminster, London, UK.

**Dr. Prashanth Bajpe**  
Senior Lecturer  
University of Bedfordshire,  
Luton, UK.

**Dr. Kanagaraj Radhakrishnan**  
Senior Lecturer, IMBAE  
St George's, University of  
London, UK.

## Pre-conference Workshop "Introduction to CRISPR Gene Editing Workflow"

**Dr. Kalpana Surendranath and Gene Editors  
University of Westminster, London, UK.**

CRISPR is a Nobel Prize-winning discovery and a revolutionary genetic tool with a wide range of applications, including curing diseases, developing new crops, producing biofuels, and enhancing sustainability measures. The double-strand breaks introduced by the CRISPR/Cas system are repaired by the double-strand DNA repair mechanisms. The introduction of excess CRISPR/Cas complexes into cells forces conditions that promote imprecise repair resulting in mutations, insertions, or deletions at the target site, leading to the knockout of target genes. This workshop offers a unique opportunity for researchers from diverse disciplines who are keen to apply CRISPR/Cas technology in their work. Participants will engage in a concise yet comprehensive journey through three key stages of the gene editing workflow:

- 1) Overview of the CRISPR/Cas System – In this stage, participants will explore the mechanism and versatility of the CRISPR/Cas system, gaining a solid foundation for its applications in genome editing.
- 2) Duplexing Guides for CRISPR Plasmid Construction - This stage focuses on designing and assembling guide RNAs for effective targeting, with hands-on experience in plasmid construction.
- 3) Clonal Screens to Investigate Editing in Selected Human Chromosome Locations – In this stage, participant learn how to perform clonal screens to evaluate editing efficiency and investigate outcomes at specific genomic loci.

Throughout the workshop, the "Gene Editors of the Future" team will provide CRISPR-related technical expertise, troubleshooting support, and practical advice to enhance participants learning experience.



UNIVERSITY OF  
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## Call for Oral Presentation/Posters

### Who Can Participate ?

Academicians, Scientists, Research Scholars, Students from Universities, Colleges, Research Institutes and Industrialists.

### Abstract format :

MS-word, Times New Roman; font size 12; double spacing; Abstract should not exceed 200 words. The soft copy of the abstract in document should be sent to e-mail : bgerc2025.cddd@gmail.com

Last date for abstract submission is 07-02-2025

Last date for Registration : 07-02-2025

Selected Abstracts will be called for oral presentations and poster presentations.

### Poster Specification :

Research scholars and students can present their Research work as a poster and the best poster presentations will be rewarded. The poster size should be of 4 feet in length (Vertical) and 3 feet in width (Horizontal).

Selected abstracts will be called for full-length manuscript submission, which will be submitted for publication (Special Issue) in a reputed journal.

### Registration Fees

#### Indian Participants

Students/Scholars - Rs.1500/-

Faculty/Scientist - Rs. 2500/-

Industry person - Rs. 3500/-

Foreign participants - \$100 USD

### Registration Link

<https://forms.gle/F7gmYpeAFPR6zFSNA>



## Payment Details

Account Holder Name	Dean (Publications and Conferences) Sathyabama Institute of Science and Technology (Deemed to be University)
Account No	891734627
IFSC Code	IDIB000T020
Branch Code	098
Branch Address	Indian Bank, Thousand Lights, Chennai

## Contact Details

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**Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology.**