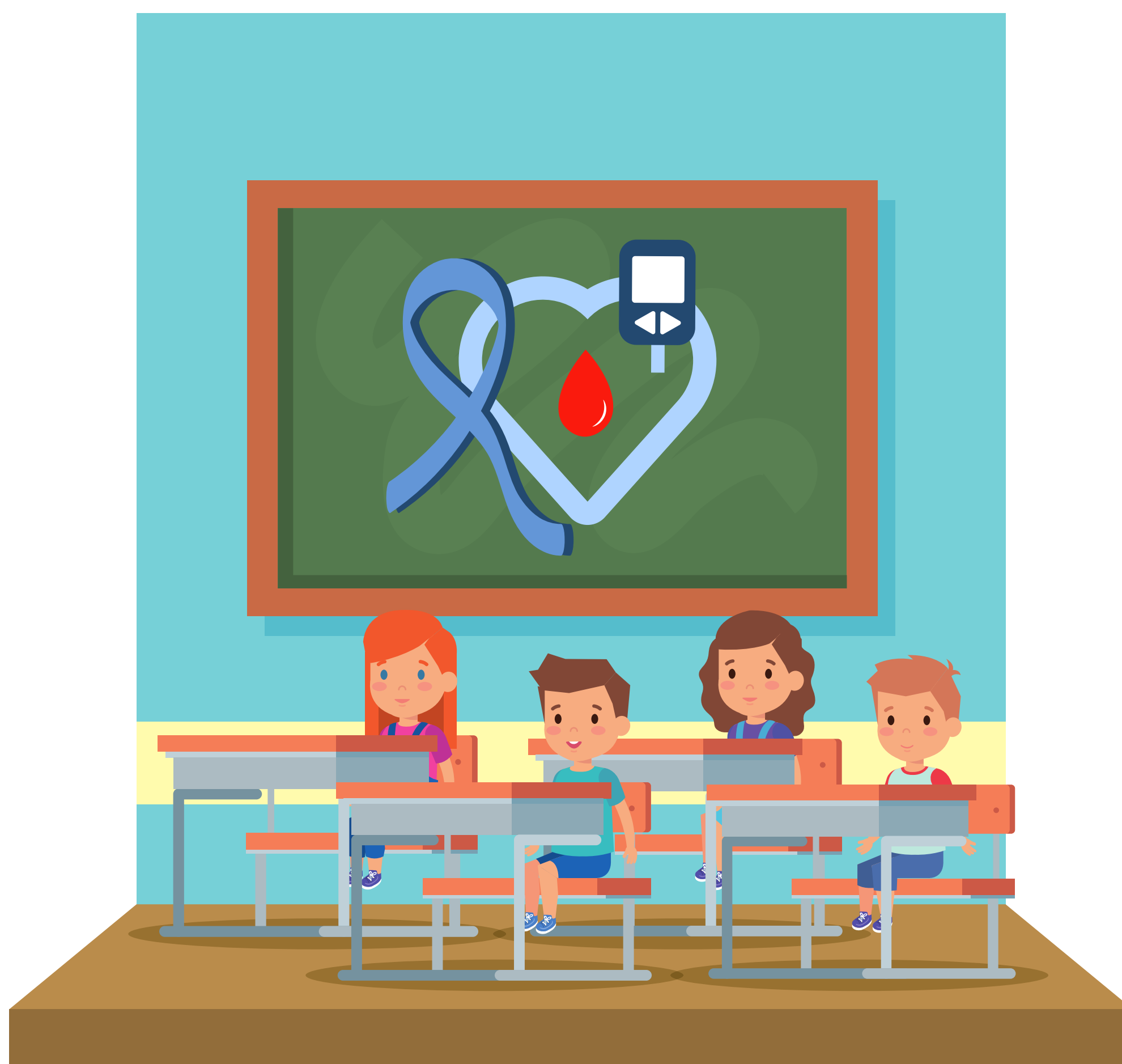


GNIPST BULLETIN LIFE-SCIENCE

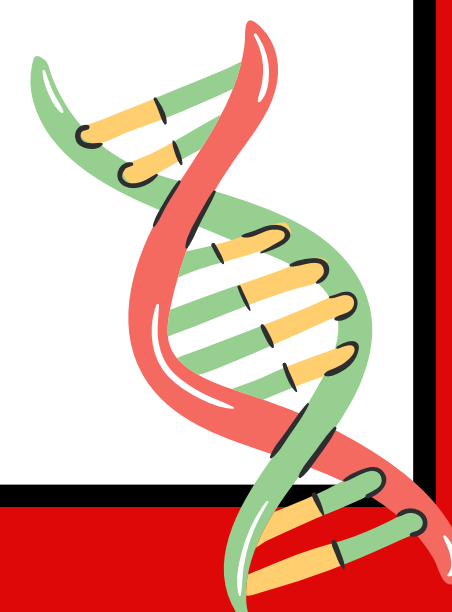
Guru Nanak Institute of Pharmaceutical Science and Technology

Volume 3 Issue 5



Innovating Life, Inspiring Science!

Welcome to our monthly Digital Science Archive!





IN REFLECTION AND VISION

The Director's Note

It is with great pride that we present Volume 3, Issue 5 of the GNIPST Bulletin, a vibrant reflection of our collective academic spirit and scientific inquiry. At Guru Nanak Institute of Pharmaceutical Science and Technology, we remain committed to fostering a culture of excellence through a blend of rigorous academics, practical exposure, and innovative thinking. The life sciences are rapidly evolving, and our students and faculty continue to contribute meaningfully to this dynamic field.

This bulletin highlights achievements, new initiatives, and the creative energy that drives GNIPST forward. We extend our warmest regards to all readers and well-wishers. May this edition inspire continued learning, collaboration, and progress as we collectively strive toward growth, discovery, and success.



Dr. Abhijit Sengupta

The Principal's Note



Dr. Lopamudra Datta

We are delighted to present Volume 3, Issue 5 of the GNIPST Bulletin – Life Science, showcasing the continued journey of our commitment to academic excellence, research, and innovation. As one of the leading institutions in West Bengal, GNIPST remains dedicated to providing advanced laboratory facilities, practical learning experiences, and industry-relevant internships, while nurturing our students with a strong foundation in scientific knowledge, ethical values, and critical thinking.

We extend our warm regards to all our readers, contributors, and well-wishers. Your continued support and enthusiasm encourage us to strive for excellence and to keep advancing in our mission of education, discovery, and service. We look forward to sharing many more stories of achievement, growth, and inspiration in the issues ahead.



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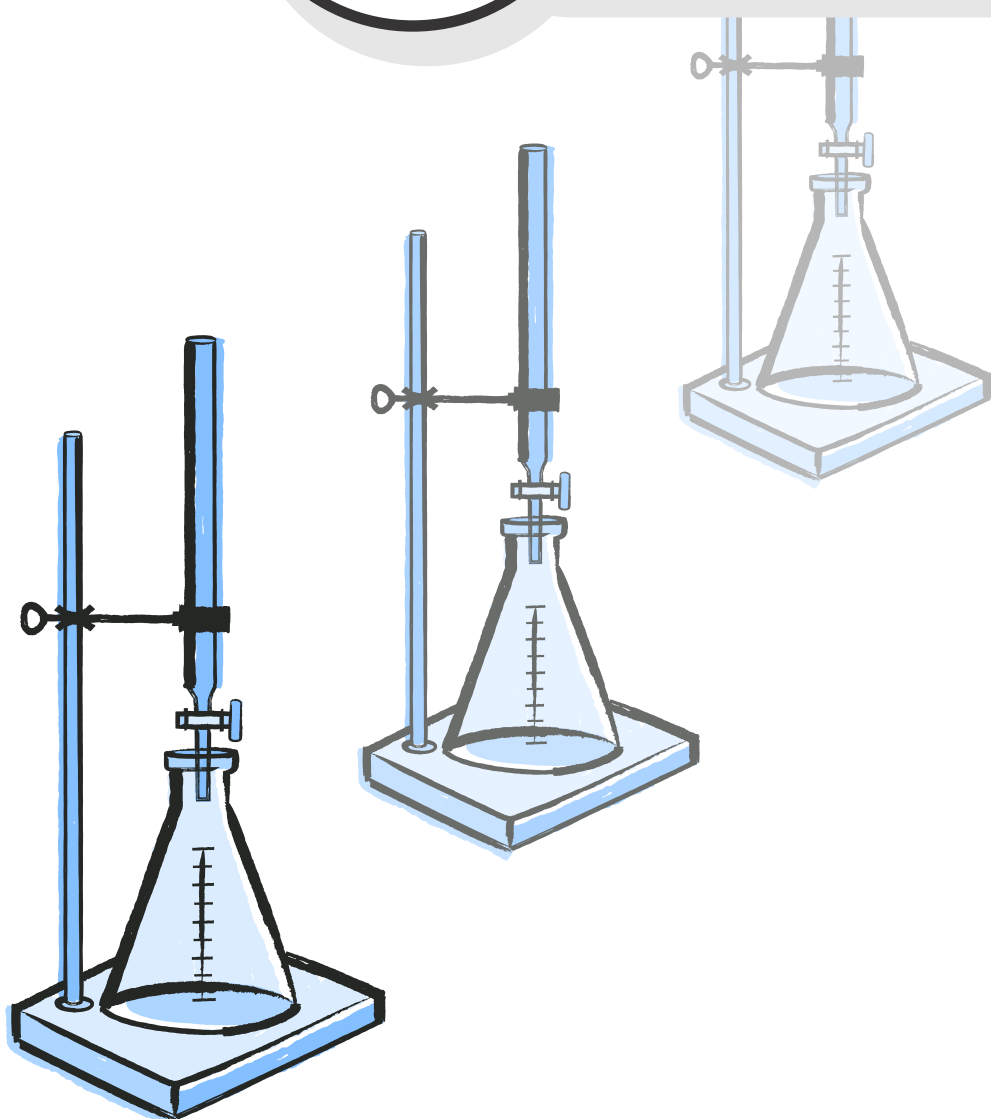
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Editorial Board





SCIENCE UPDATE

New gene-editing systems beyond CRISPR — a potential paradigm shift

A newly discovered family of RNA-guided DNA-targeting systems, dubbed TIGR-Tas (published early 2025), may provide a powerful alternative to CRISPR: these systems are smaller, modular, don't require PAM sequences (allowing more flexible target sites), and may improve delivery and specificity — potentially simplifying future gene-editing and therapeutic applications.



Read More <https://en.wikipedia.org/wiki/TIGR-Tas>

Living-cell DNA sensor allows continuous observation of DNA repair in organisms

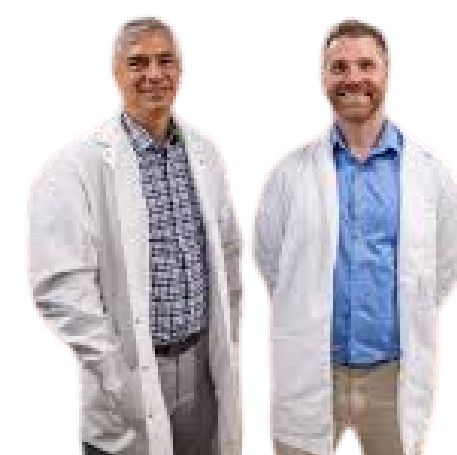
The newly developed fluorescent DNA damage sensor (by Utrecht University) doesn't just work in isolated cells — it can also be used in living organisms. This enables long-term studies of DNA repair dynamics in tissues and could transform research in aging, cancer, and environmental genotoxic stress.



Read More : <https://www.uu.nl/en/news/new-sensor-lets-researchers-watch-dna-repair-in-real-time>

DNA 'barcodes' developed could open new frontiers in biology

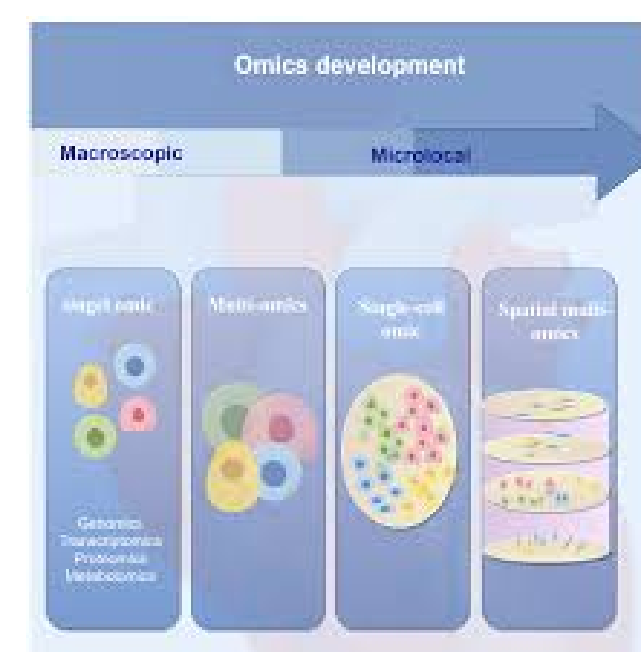
Researchers at Clemson University teamed up to create tiny tags made from DNA and fluorescent dyes that light up in unique ways, potentially enabling new tracking and monitoring techniques in biological systems.



Read More : <https://news.clemson.edu/dna-barcodes-developed-at-clemson-university-could-help-open-new-frontiers-in-biology/>

AI and proteomics join forces — shaping the future of biology research

A comprehensive review published in 2025 emphasizes how combining advanced mass-spectrometry-based proteomics with artificial intelligence (AI) tools is accelerating discovery — enabling better protein identification, quantification, mapping of protein-protein interactions, spatial proteomics, and integration of multi-omics data. This convergence is poised to revolutionize systems biology and our understanding of complex biological networks.



Read More : <https://arxiv.org/abs/2502.15867>



THE CAMPUS PULSE



GNIPST organized a Blanket Distribution Drive on 01.11.2025-02.11.2025 in association with International Vedanta Society in Bankura, West Bengal.



The Second Parent Teachers" Meeting for Odd Semester 2025 was conducted on 08.11.2025



Celebration of National Constitution Day at GNIPST



A seminar n Mental Health was organised for the students of GNIPST



In our upcoming Faculty Development Program!





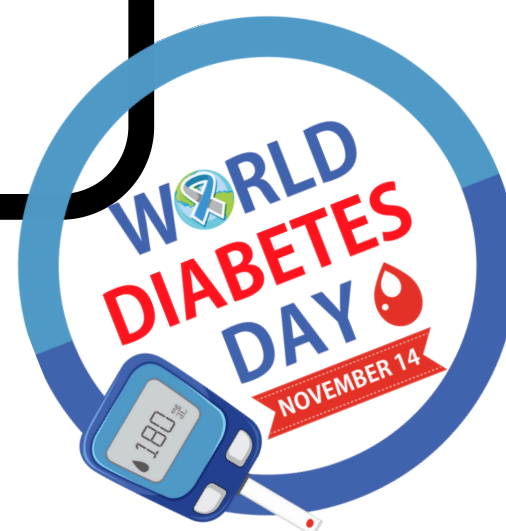
ACTIVITY CORNER

World Diabetes Day, observed on 14th November, is marked worldwide with a spirit of awareness, responsibility, and collective commitment to better health. Commemorating the birthday of Sir Frederick Banting—the co-discoverer of insulin—the day highlights the rising impact of diabetes and the importance of early detection, healthy lifestyle choices, and proper management. Across India and beyond, health institutions, schools, and community groups organize awareness rallies, screening camps, seminars, and educational programs to promote balanced nutrition, regular exercise, and timely medical check-ups. The blue circle symbol, informative displays, and public messages emphasize support for those living with diabetes and the need for accessible treatment and preventive care. Bringing together families, professionals, and communities, World Diabetes Day stands as a reminder that informed action and compassionate support can help reduce the burden of diabetes and inspire a healthier, more aware society.

WORD SCRAMBLE CHALLENGE: !



NISLUNI →
EGSLUCO →
RSENAWESSA →
HCEKCUP →



Fastest correct entry wins a shoutout in our next bulletin!



ANSWER KEY (VOLUME 3 ISSUE 2)

YPRRAEE → PRAYER

PMAL → LAMP

YADI → DIYA

REKFIRWOS → FIREWORKS

SHOUT OUT TO THE “ACTIVITY CORNER’ WINNER OF VOLUME 3 ISSUE 4



Debangana Majumder, Guru Nanak Institute of Pharmaceutical
Science and Technology, BBA(HM)



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