

2024

# GNIPST LIFE SCIENCE BULLETIN

*VOLUME 1, FINAL ISSUE*



**School Showcase**

Turn to Page 3!



**Guru Nanak Institute of Pharmaceutical Science and Technology**

157/F, Nilgunj Road, Kolkata- 700114, West Bengal, India

# Message from Director's Office



**Prof. (Dr.) Abhijit Sengupta**

(Director, Guru Nanak Institute of Pharmaceutical Science and Technology)

Happy New Year from Guru Nanak Institute of Pharmaceutical Science and Technology! As we step into 2025, we remain committed to excellence in our core responsibilities: learning, discovery, and engagement. By harnessing the power of educational technology and employing diverse teaching methodologies, we continue to provide our students with a solid foundation in both fundamental principles and practical applications. Our policies prioritize student well-being, fostering an environment that supports both academic success and personal growth. We are dedicated to maintaining a harmonious and inclusive campus culture, where every individual feels valued and respected. Wishing you all a prosperous, successful, and fulfilling New Year!

# Message from Principal's Office



**Prof. (Dr.) Lopamudra Datta**

(Principal, Guru Nanak Institute of Pharmaceutical Science and Technology)

Happy New Year and warm greetings from Guru Nanak Institute of Pharmaceutical Science and Technology, Department of Life Science! We are delighted to welcome you as we begin 2025. As one of the leading educational institutions in West Bengal, we offer state-of-the-art facilities, hands-on experience, and exceptional internship opportunities. We are committed to empowering our students to achieve excellence in their careers and personal lives, guided by strong ethical principles. May this New Year bring you success, growth, and fulfillment in all your endeavors.



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# WHAT'S NEW IN RESEARCH?

## Pioneering Progress!

### Microbiome's Role in Mental Health:

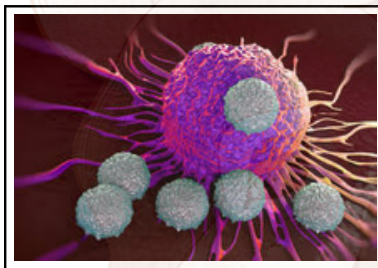
A recent paper in *Cell Host & Microbe* investigated the connection between gut microbiota and mental health, particularly focusing on depression and anxiety. The research found that a disruption in gut bacteria could contribute to neuroinflammation, potentially impacting mood and mental health. The study suggests that modifying the gut microbiome through diet or probiotics might offer a novel therapeutic approach for mental health disorders.



Read more :

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10384867/>

### Immunotherapy Advances in Cancer Treatment:



A groundbreaking study published in *Science* examined the effectiveness of a new combination immunotherapy for non-small cell lung cancer (NSCLC). The research found that combining checkpoint inhibitors with targeted therapies enhanced the immune system's ability to recognize and destroy cancer cells, leading to improved survival rates in patients with advanced NSCLC. This study marks an important step toward more personalized and effective cancer treatments.

Read more :

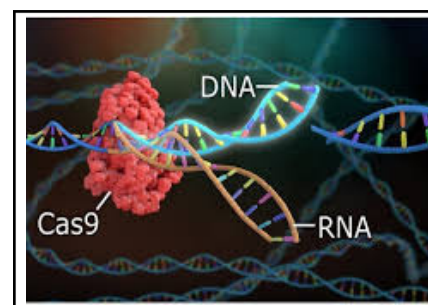
<https://www.sciencedirect.com/science/article/abs/pii/S0344033824000153>

### Gene Editing for Genetic Disorders:

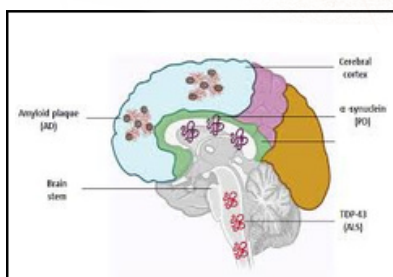
A recent paper published in *Nature Medicine* explored the use of CRISPR-Cas9 to treat sickle cell anemia. Researchers successfully edited the genome of patients' cells to correct the mutation responsible for the disease, showing significant promise for future therapies. The paper highlighted the potential for personalized gene therapies to address genetic disorders and the challenges involved in refining this technology for safe, widespread use.

Read more :

<https://pubmed.ncbi.nlm.nih.gov/27406980/>



### New Genetic Insights in Alzheimer's Disease: A Breakthrough in Neurodegenerative Research:



Recent research in biology has focused on understanding the genetic basis of neurodegenerative diseases. A paper titled "Genetic Pathways in Alzheimer's Disease: New Insights from Genome-Wide Studies" published in *Nature Genetics* explores the discovery of new genetic variants linked to Alzheimer's. The study utilized advanced genome-wide association studies (GWAS) to identify several previously unknown genetic markers, offering new potential targets for therapeutic intervention. This research marks a significant step toward personalized medicine, aiming to tailor treatments based on an individual's genetic makeup.



# CAMPUS CHRONICLES

What's going on?

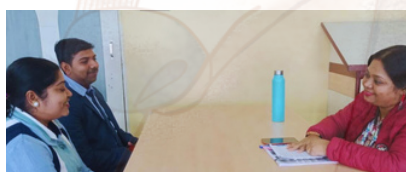
## Victory on the Field

GNIPST students made a remarkable mark at JIS Samman 2025, winning both the Sardar Jodh Singh Memorial Football and Cricket Tournaments. The football team excelled, with players winning Man of the Match, Best Goalkeeper, Top Scorer, and Man of the Tournament awards. The cricket team also triumphed in their respective tournament, showcasing the exceptional talent and hard work of GNIPST athletes.



## Parent-Teachers' Meet

GNIPST recently organized a successful Parent-Teacher Meeting (PTM) for all students, providing a valuable opportunity for parents to interact with their children's mentors one-on-one.



## ICAMM 2024



GNIPST students and teachers participated in ICAMM 2024, gaining valuable insights and exposure to the latest developments in their respective fields. The event provided a platform for academic growth and networking, enhancing the learning experience for both students and teachers.



# SCHOOL SHOWCASE

## Indian Public School, Howrah: A Hub of Inclusive and Holistic Education in Howrah

In an era where education is the cornerstone of progress, Indian Public School (IPS) in Howrah has set a new benchmark by embracing inclusive education. For the first time in Howrah, IPS has introduced dedicated classes for children with special needs, ensuring that no child is left behind in their pursuit of knowledge and growth. This groundbreaking initiative underscores the school's commitment to fostering a nurturing environment for every child, irrespective of its abilities.

### A Vision of Inclusivity and Excellence

IPS has always been at the forefront of innovative education, and its move towards inclusivity aligns with its vision to help every child realize its unique potential. The school integrates specially designed teaching methods and support systems for children with diverse learning needs, ensuring their seamless integration into the academic and social framework.

### Holistic Development: The IPS Promise

Beyond inclusivity, IPS continues its legacy of providing a comprehensive education that balances academics, ethics, and co-curricular excellence.

*Leadership and Ethics:* The school fosters global citizenship, ethical values, and leadership skills, preparing students to thrive in a rapidly changing world.

*Sports and Well-Being:* Physical fitness and mental well-being are integral to the IPS philosophy, with robust sports programs and activities for overall health.

*Technological Integration:* Collaboration with Byju's and Vidyarthi ensures access to cutting-edge digital learning tools.

### Christmas Celebration in IPS



The Indian Public School celebrated Christmas on 21st December with great enthusiasm. Students performed carols, enacted the Nativity scene, and exchanged gifts, spreading joy and festive cheer. The event fostered unity and the spirit of giving among everyone.



### Facilities Tailored for All

To support its inclusive education model, IPS has enhanced its infrastructure with:

- Specialized classrooms equipped for children with special needs.
- A dedicated team of special educators and counselors.
- Barrier-free access to facilities and inclusive extracurricular activities.

### Community and Innovation

IPS actively engages students and families through events like the Winter Carnival and Science Fair. These events not only celebrate student achievements but also highlight the school's inclusive ethos.

### The IPS Impact

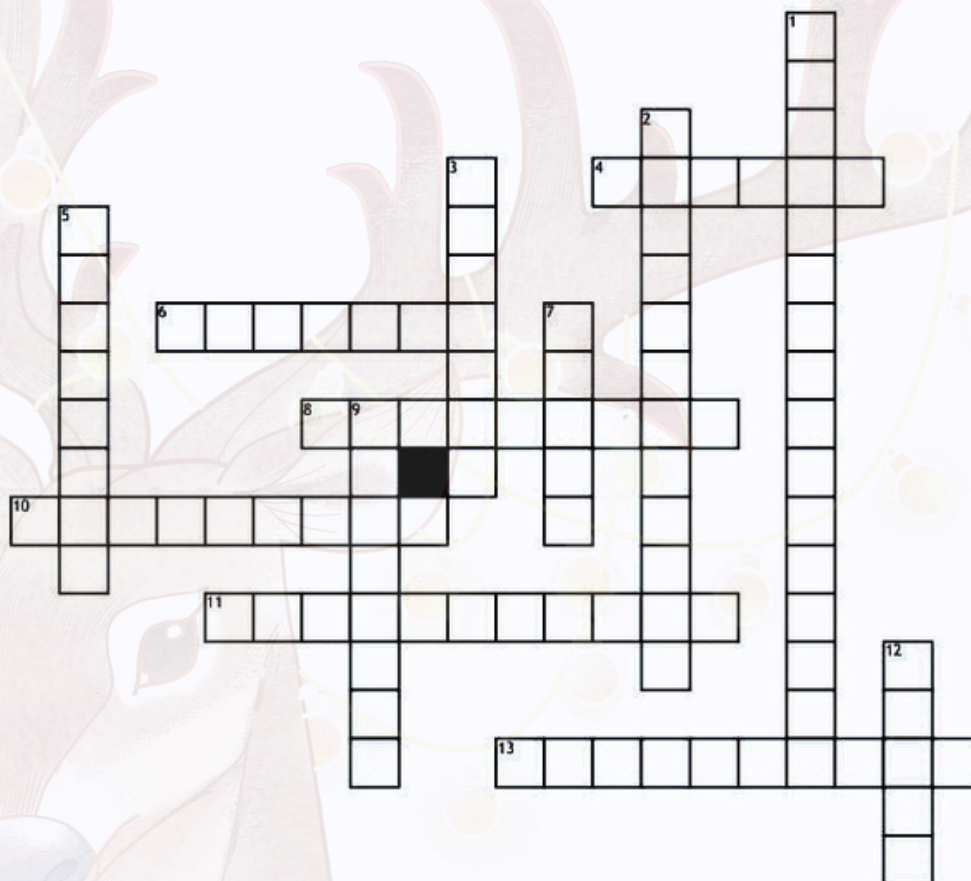


"Indian Public School, Howrah, is not just an institution; it is a movement towards inclusive and holistic education. By introducing classes for special children for the first time in Howrah, IPS is shaping a future where every child, regardless of its abilities, can learn, grow, and thrive. We are thankful to Guru Nanak Institute of Pharmaceutical Science and Technology for giving us this wonderful opportunity."

**-Samarjit Mullick, Teacher & HOD- Science, Indian Public School**

# ACTIVITY CORNER

## Puzzle Power : Crack the Crossword



### Across

4. A specific action that is always done in the same way and at the same time  
6. A large formal meal that many people attend as a party  
8. A white wine with bubbles in it that is drunk a celebrations  
10. A group of people that come together for the same occasion

11. The items used to make something more beatify or nice to look

13. A promise to do something or to change something during the following year

### Down

1. The precise moment when a clock goes from 11.59pm to 12.00am  
2. A traditional Scottish folk song that is sung at midnight on the 31st of December

3. A specific action that is always done in the same way and at the same time

5. A written record of the days and months in each year

7. To celebrate an occasion or person by drinking something

9. The after effects of drinking too much alcohol

12. A large group of people

SUBMIT YOUR ANSWERS:

CLICK

HERE

Stay tuned for a shout out to fastest correct answers in the next edition!



# ANSWER KEY

Volume 1, Issue 5

## Sacred Scramble : Decode the jumbled letters into words

TRAVEL

LAHORE

HINDU

MUSLIM

DISAPPEARANCE

NANAK

PAKISTAN

SIKH

PANTH

MERCHANT

SIKHISM

KHALSA

NANAKSHAHI

MANJI

GURU



**Shout out to the "Activity Corner" Winner of Volume 1, Issue 5 !**



**Ushasi Bhattacharjee**

Guru Nanak Institute of Pharmaceutical Science and Technology, B.Sc

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### *Life Science UG Courses*

- B.Sc in Biotechnology
- B.Sc in Microbiology
- B.Sc in Genetics
- B.Sc in Medical Lab Technology
- BBA in Hospital Management

### *Life Science PG Courses*

- M.Sc in Biotechnology
- M.Sc in Microbiology
- M.Sc in Genetics
- M.Sc in Medical Lab Technology

"The best is yet to come. Here's to a year of new beginnings and limitless possibilities!"

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