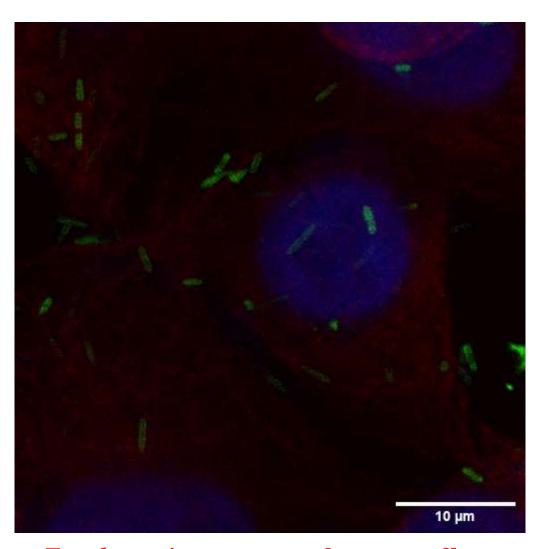
Integrated Cancer Genomics Lab

DECEMBER NEWSLETTER 2024

Cheers to a year of growth and achievements – Welcome to our year-end edition!



Fusobacterium meets oral cancer cells – highlighting the intricate interplay of bacteria and cancer under microscope.

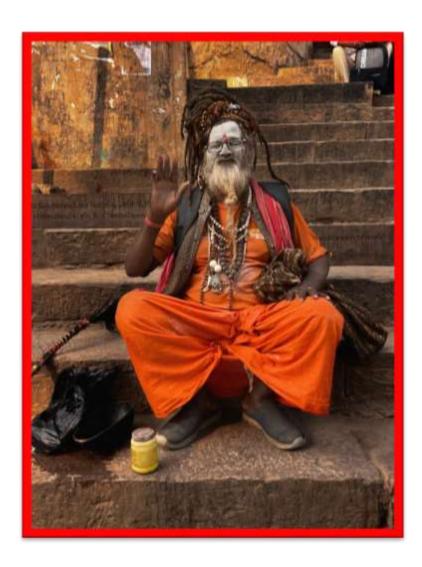
Photo courtesy: Aniket Chowdhury

Academic Milestone!



Congratulations to Dr. Bhawna on successfully defending her PhD and earning her doctorate!

Lab Creativity Spotlight



Scenes from the Ghats of Banaras. Photo by Akshita Chaudhary

Lab Creativity Spotlight



A glimpse of Red Fort through a window, within a window – Layers of perspective.

Photo by Akshaya

Insights and Inspirations: Interview with Neetu Tyagi

General Facts

- 1. Can you introduce yourself? Hello, I am Neetu Tyagi
- 2. Can you share a brief overview of your educational background?

I completed my 10th and 12th from Amrit Inter College, Muzaffarnagar, under the U.P. Board. I earned a Bachelor's in Biotechnology from ITS



Paramedical College, Ghaziabad, and a Master's in Bioinformatics from Banasthali Vidyapith, Rajasthan. I am completing my PhD in Bioinformatics at ICGEB, New Delhi, under the RCB-GSK program, focusing on the integrative analysis of high-throughput datasets from various platform technologies.

- 3. Where are you originally from, and where did you grow up? I was born and brought up in Baheri village, Muzaffarnagar, Uttar Pradesh.
- 4. What influenced your decision to pursue a career in your field of study? I have always been fascinated by the intersection of biology and technology. During my studies, I discovered how computational tools can uncover complex biological insights, which inspired me to pursue a career in bioinformatics to contribute to impactful research.
- 5. What are some lesser-known facts about you?

I'm a nature lover who enjoys long walks accompanied by good music and beautiful views it's my way of unwinding and staying inspired.

Personal Life

- 1. What are some of your hobbies or passions outside of research?
- Outside of research, I'm a sports enthusiast who loves playing badminton and table tennis. Staying active through sports keeps me energized and balanced.
- 2. As a child or teenager, what were your career aspirations, and what influenced those ambitions?

As a child, I was passionate about science, which inspired me to dream of becoming a scientist. Over time, this passion led me to pursue a career in research and bioinformatics.

- 3. Can you share an important life lesson or philosophy that guides you today? I believe that hard work, honesty, and dedication are key to success. Staying true to these values will eventually pay off no matter how hard the challenges.
- 4. Is there a particular person or event that has greatly influenced you?

My father has greatly influenced me. I am fulfilling his dream by pursuing a career in research, and his support, encouragement, and belief in me have shaped the person I am today.

5. If you could spend a day entirely to yourself, how would you spend it?

If I could spend a day entirely to myself, I would start the day with a peaceful morning, enjoying a cup of tea while taking in a beautiful view. Then, I'd spend the rest of the day outdoors, exploring nature and going on long walks, reflecting and recharging my mind.

Science and Research

1. How would you define research, and what does it mean to you personally?

For me, it's about making meaningful discoveries that can shape the future of science and improve lives.

- 2. What keeps you motivated to pursue research, especially when challenges arise? My motivation comes from the belief that every challenge is an opportunity to learn and grow. The possibility of making meaningful discoveries that can contribute to science and improve lives keeps me going, even during tough times.
- 3. What has been the (a) most exciting and (b) most challenging scientific question you've explored so far?

The most challenging question has been integrating multi-omics data to identify key biomarkers for cancer prognosis. It requires careful analysis and overcoming complex data issues, but the potential impact makes it worthwhile.

4. What motivated you to join your current research lab or group?

I'm excited to work with a team focused on high-throughput dataset integration, as it aligns with my passion for analyzing complex datasets to support clinical decision-making. This research will improve patient diagnosis and prognosis, ultimately benefiting healthcare outcomes.

5. How has your perspective on science and research evolved over time?

Over time, I've seen research as an ongoing journey of discovery rather than a destination. It's about constantly evolving ideas, embracing new technologies, and learning from each step, whether it's a success or a setback. This approach has deepened my understanding and passion for scientific exploration.

6. If you could contribute one significant discovery to your field, what would it be?

If I could contribute one significant discovery, it would be conducting research that identifies novel biomarkers for the early diagnosis of tumors. My goal is to develop diagnostic tools that can aid in personalized treatment plans, ultimately improving outcomes for tumor patients.

7. What advice would you give to someone just starting their journey in scientific research?

Stay curious and embrace challenges as learning opportunities. Be patient, as research can be a slow process, but persistence and a willingness to learn from failures are key to success.

8. What do you think is the most underrated aspect of research?

The most underrated aspect of research is the lack of data sharing. Open collaboration and data accessibility can significantly accelerate progress, allowing researchers to build on each other's work and make discoveries faster.