



Srijan

सृजन

*Celebrating
Innovation
and Artistic
Creation*

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Message From Head Of The Department



Dr. Veena Pande
Prof. and Head
Department of Biotechnology

It is a pleasure to write for the first edition of our departmental student magazine, Srijan. The Department of Biotechnology has always upheld a rigorous academic environment, where students devote their time and energy to mastering their subjects and excelling in research. In such a demanding field, academic focus is essential.

At the same time, a sharp scientific mind also needs clarity and creative outlets. Writing, sharing ideas, and reflecting on well-being help build communication skills and emotional intelligence — qualities vital for success in the professional world. I am delighted to see our students take the initiative to create this platform, showing that with good time management, creativity can flourish alongside academic excellence.

I warmly congratulate the student editorial board and the Neuronest group for bringing this vision to life, under the guidance and initiative of Dr. Manju Tewari, the founder of the Neuronest team and Srijan. May you continue to keep your priorities clear, work hard in your academics, and carry forward this commendable effort with enthusiasm.

Message From The Mentor



Dr. Deepak Pande M.D.
Author, Program Manager,
Trainer, Lifestyle Coach,
Child and Adolescent
Wellness Expert.

I am very happy to learn about the upcoming magazine Srjan, a very promising initiative of the neuronest team of your institute.

Teaching institutes are commonly seen as shrines of learning, but in fact offer tremendous opportunities for overall development as well. Development, in part, depends on creativity and free and full expression as well. I see Srjan as a welcome step in the direction of encouraging students to express themselves more, to explore the ever changing world around themselves and to cope up better, reach their full potential and excel through novel insights, shared experiences and creation of more effective support systems.

Huge compliments to the administration for facilitating this progressive initiative and my very best wishes for the entire team of Srjan for making this effort maximally meaningful and sustainable for a long, long time and to inspire other institutes to take similar initiatives for the holistic development of their students.

Note From Founder



Dr. Manju Tewari
Assistant Professor
Department of
Biotechnology

It is with great pleasure and profound gratitude that we present the inaugural edition of Srijan, our students' magazine. This publication was inspired by my observations of our students, both in academic settings and beyond. I have come to appreciate that each student brings a unique set of talents and qualities to our community. While some excel academically, others showcase exceptional communication skills, artistic talents, or remarkable observational abilities. This diverse array of skills, expressed through both extroverted and introverted modalities, contributes to the vibrancy of our student body.

Every day, I am inspired by our students' resilience as they navigate contemporary challenges—balancing demanding academic workloads, managing peer pressure, confronting inner self-judgment, and grappling with late-night digital distractions and sleep deprivation. Beneath this strength, many of them exhibit profound vulnerability. Witnessing their journey has instilled in me a meaningful purpose: to create a dedicated space for communal expression. My aim is to establish a platform where students can share their ideas freely, find creative outlets, and be gently encouraged to step away from passive screen time. Through this initiative, we aspire to guide them in harnessing modern tools, such as Artificial Intelligence, for constructive personal development.

This vision would not have been realized without the invaluable contributions of our courageous students, who collaborated in various capacities to bring this project to life. Additionally, the unwavering support from the Department of Biotechnology and our esteemed faculty members has been instrumental in making this endeavor possible. I extend my heartfelt gratitude to everyone involved.

As we present this first edition, we acknowledge the potential for improvement. However, we are committed to learning and evolving alongside our students. I sincerely hope that you will appreciate the creativity and effort that our young minds have dedicated to these pages.

Thank you, and happy reading!

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SRIJAN

The First Edition

Welcome to Srijan

Srijan means creation. It is the act of bringing something new into the world, and it is exactly what this magazine stands for.

With great pride, we present the very first edition of Srijan, a magazine written, designed, and shaped by students. It began as a small idea: that every student carries a story, a thought, a discovery, or a piece of art that deserves to be seen. Today, that idea sits in our hands as a full magazine.

Behind every page is the hard work, late-night discussions, patient revisions, and quiet dedication of many students who chose to show up and share what they are capable of. Some of them had never published before. Some were unsure their words were good enough. All of them took the leap, and this edition is the result.

Srijan is more than a collection of articles. It is a stage for scientific curiosity, creative expression, emotional honesty, and the everyday experience of being a student. Inside, you will find poetry and science, comics and reflections, achievements and memories, all in one place.

Whether you are a student, a teacher, an alumnus, or simply a curious reader, we believe you will find something here that speaks to you. We promise you will love it.

The Visionary Behind

Every great endeavour begins with someone who believes in it first. For Srijan, that person is Dr. Manju Tewari, Assistant Professor, Department of Biotechnology, Kumaun University, and the founder of this magazine.

What Awaits You Inside

This edition has been curated section by section, so that every reader can find a corner to call their own.

Scientific Corner

A space for scientific curiosity, where students and faculty explore ideas, discoveries, and the wonder of science in simple, engaging language.

The Science Behind a Bad Day

A beautifully illustrated comic that follows one difficult day, from the small domino-like stresses to the emotional outburst and the healing that follows. It reminds us to understand the brain before judging a reaction.

A Culture Plate Called College

A story of college life told through the language of the biotechnology lab, where friendships, challenges, and growth are cultured together, one day at a time.

Rewire Your Brain

Why do some people seem to remember everything? This article explores the science of memory, from how neurons form connections to why revision and visualization work. It shows that a good memory is built through habit, not gifted at birth.

Unawareness Yet Aware

A thoughtful reflection on the generation gap. Through the lens of neuroscience and personal experience, it argues that the gap is not a lack of love but a difference of worlds, and that understanding can bridge it.

Poetry Corner

Verse has always been the language of the heart, and this edition gives it a space of its own. Therefore we have kept our poems free from language barriers. This section brings together verses in Kumauni, Hindi, and English, along with a few that mix them. Whichever language a poem is written in, its feeling reaches every reader.

Art Gallery: Drawings, Sketches and Paintings

Some feelings are too big for words, and our student artists have given them colour and line instead. This gallery brings together drawings, sketches, and paintings from across our college, each one made with patience, imagination, and heart. Some are bold and vibrant, others quiet and thoughtful.

Wheel of Emotions

An artistic, colourful guide to naming what we feel, because to name a feeling is to begin to understand it. You will feel it deeper on the days words are hard to find.

Achievement Corner

A celebration of the milestones and accomplishments of our college community, because success deserves to be recognized and shared.

Quiz Corner

Put your knowledge to the test in our Quiz Corner, where curiosity turns into a game. From science and general knowledge to fun brain-teasers, these questions are made to challenge you and maybe teach you something new along the way. Take them alone, or gather your friends and see who comes out on top.

Event-O-Graphy

A look back at the events and celebrations of our college, told through moments that students will happily remember.

Alumni Corner

Not long ago, they sat where you sit now, in the same classrooms and corridors, carrying the same doubts and the same dreams. Today, our alumni have taken what they learned here into laboratories, careers, and lives of their own, and in this corner they return to us as seniors, mentors, and friends. They share the struggles they overcame, the lessons they wish they had known sooner, and the memories they still hold dear. Their stories remind us that every journey begins somewhere, and that the path ahead of you is just as possible as theirs.

A Final Word

Srijan exists because students dared to create. Every article, illustration, and poem is proof of what happens when talent is given a platform and encouragement is given freely. To our contributors: thank you for your courage and effort. To our readers: turn the page, take your time, and enjoy what we have made for you.

As you will close this edition, we hope something in it will stay with you: a line that will make you smile, an idea that will make you think, or a spark that will make you want to create. Srijan was made with passion, and it grows with every reader who believes in the power of young voices. Carry this spirit with you, and let it remind you that your talent is worth sharing. With gratitude and excitement, we welcome you to the journey ahead.

Welcome to Srijan. Welcome to the beginning.

Acknowledgement

We wish to express our profound appreciation to Kumaun University for providing an exceptional platform to disseminate our work and ideas.

We extend our sincere gratitude to Professor Veena Pande, Head of the Department of Biotechnology, for her unwavering support and encouragement. We are equally appreciative of the Department of Biotechnology for cultivating an environment that unites students, faculty, and mentors in a collective pursuit of learning, innovation, and growth. It is this supportive atmosphere, along with the consistent guidance we received, that enabled us to realize our vision.

A special acknowledgment is owed to all the students whose contributions were instrumental in the completion of this publication. Their creativity, effort, and dedication are evident in every aspect of this work.

We also wish to extend our heartfelt thanks to our readers for their willingness to engage with our publication. Their thoughtful readership brings our words to life and enriches the experience of this endeavor.

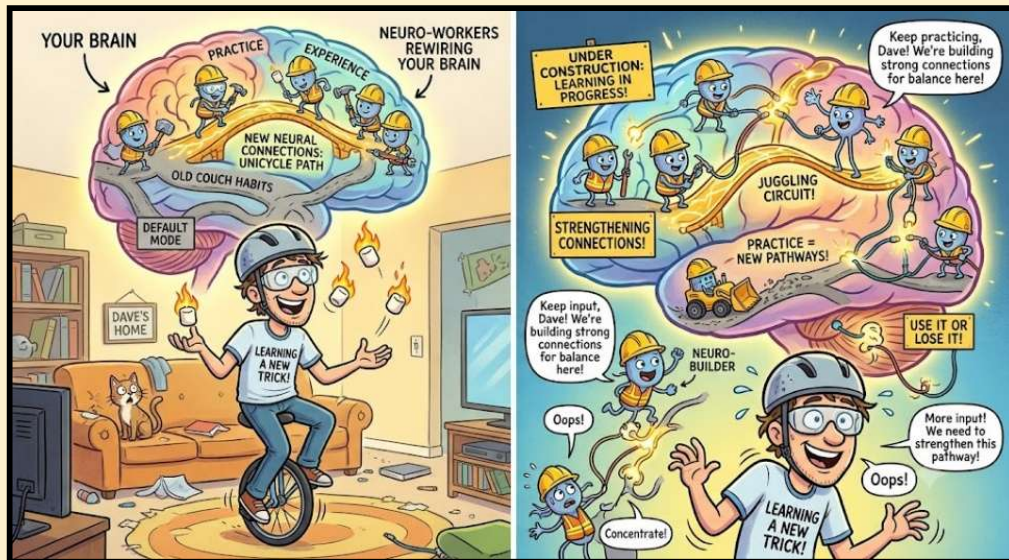
Finally, we are profoundly grateful for divine guidance that has accompanied us throughout this undertaking.

The Everyday Lab

- 1. Neuroplasticity: Building resilience Through change**
- 2. The Domino Effect**
- 3. A Culture Plate Called College**
- 4. From Fear To Hope**
- 5. Rewire Your Brain**
- 6. The Art Of Curiosity**
- 7. Unawareness Yet Aware**
- 8. Nobel Prize Laureate 2026**

Neuroplasticity: Building Resilience Through Change

By Dr. Manju Tewari



"Practice rewires your brain; each new skill builds fresh neural pathways for growth and balance!"

What is Neuroplasticity? How the Brain Rewires Itself

The human brain is often described as the most complex structure in the universe. Within its soft folds, this three-pound organ holds the essence of our humanity: our memories, emotions, creativity, intelligence, and identity. For centuries, scientists believed the brain was like a machine that became fixed after childhood. Once matured, its wiring and abilities were thought to remain unchanged. Damaged brain cells were considered lost forever, and skills not learned early were assumed to be gone for good.

But modern science has revealed something far more extraordinary. The brain is not rigid; it is a living sculpture, constantly reshaped by experience. Every thought, every action, every emotion leaves a mark, subtly rewiring its circuits. Like clay in the hands of a sculptor, the brain molds itself in response to how we live, learn, and feel. This flexibility, called **neuroplasticity**, means our identity is not a fixed blueprint but a dynamic masterpiece, evolving throughout life.

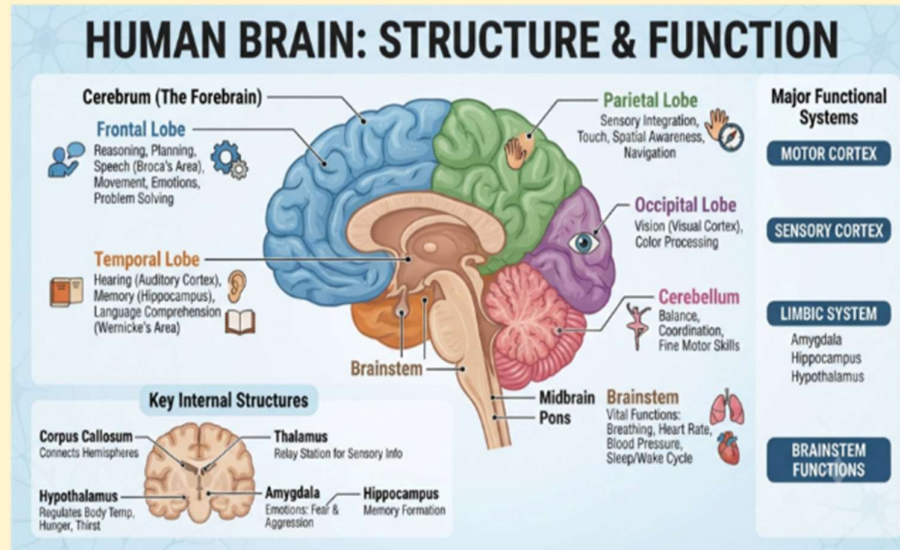
Neuroplasticity refers to the brain's capacity to modify its structure and function in response to experience, learning, injury, and environmental changes. It means that the brain is constantly adapting. Neurons form new connections, strengthen existing ones, or weaken pathways that are rarely used.

The Brain: Architect of Identity and Human Progress

During evolution, the human brain expanded and specialized, giving rise to decision-making, foresight, and language, capabilities that distinguish humans from all other species. As the command center of life, the brain integrates, regulates, and directs every function, shaping not only survival but also the very essence of individual identity.

Your story is still being written, so keep going.

The human brain, as shown in the infographic, shapes how we think, feel, and interact with the world. Each region contributes uniquely: **the frontal lobe** governs decision-making and personality, giving us our sense of self and moral judgment; **the temporal lobe** stores memories and language, weaving our personal narrative; **the parietal lobe** integrates sensory experiences, defining how we perceive our body and surroundings; and the **limbic system**, including the hippocampus and amygdala, encodes emotions and memories that make our experiences deeply personal. Together, these interconnected circuits form the



neural signature of individuality.

Why Neuroplasticity Matters and What It Means to Us

No two brains organize or respond in exactly the same way. Through continuous **neuroplasticity**, the brain refines this identity across life, adapting to learning, relationships, and experiences, making each human mind a living, evolving masterpiece of biology and consciousness.

Cellular Mechanisms: How the Brain Changes

To understand how habits, learning, and experiences alter the brain, it is necessary to examine the physical structures connecting individual neurons.

1. Synaptic Plasticity

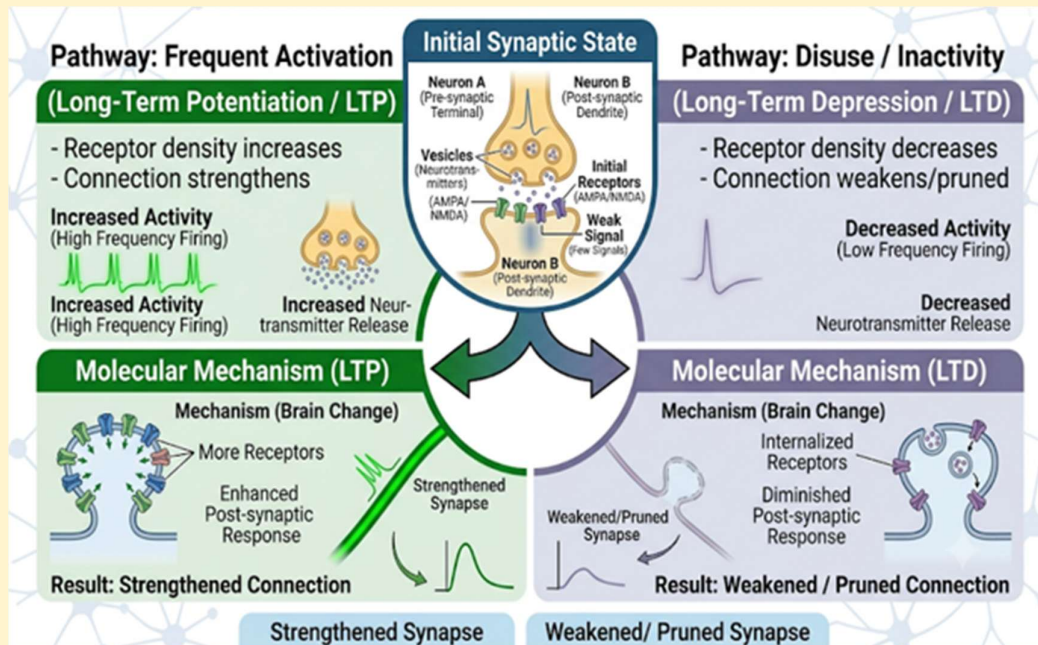
Neurons communicate across tiny gaps called **synapses** using chemical messengers known as neurotransmitters. When two neurons repeatedly signal to one another, the functional

connection between them strengthens, a biological principle summarized by neuroscientist Donald Hebb as **"neurons that fire together, wire together," leading to long-term potentiation (LTP).**

- **Long-Term Potentiation (LTP)**: Persistent, high-frequency stimulation across a synapse increases the density of postsynaptic receptors and enhances signal sensitivity. LTP represents the primary cellular mechanism underlying learning and long-term memory formation.

Even the smallest light can change a dark room.

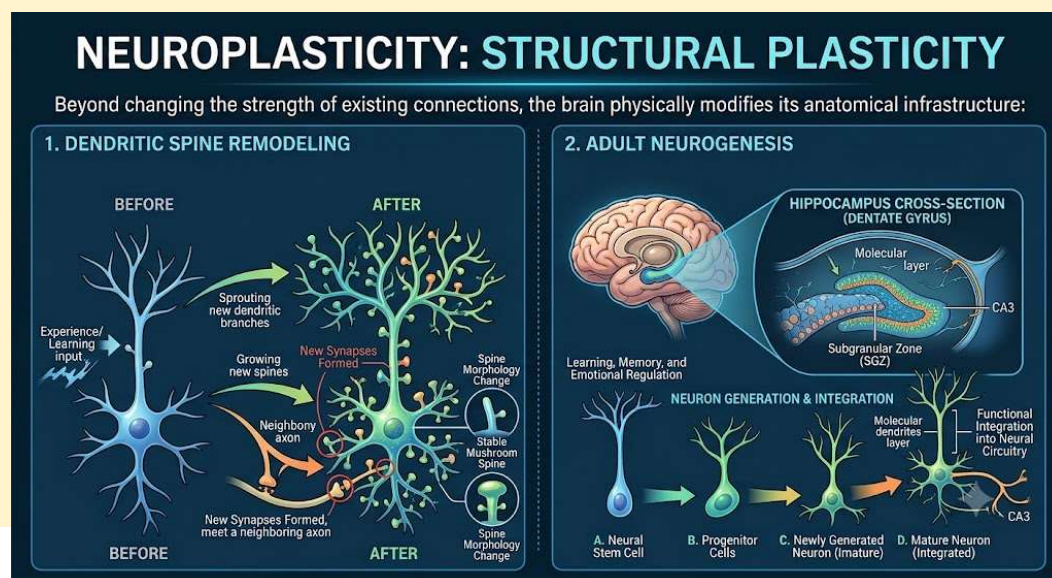
Long-Term Depression (LTD): Conversely, unselected or infrequently activated neural pathways undergo LTD, weakening signal transmission over time. This selective "pruning" allows the brain to optimize efficiency by removing redundant or inefficient connections. In neuroscience, this is often summarized as the *"use it or lose it"* principle that emphasizes that synaptic connections that are not regularly engaged gradually diminish, ensuring that only functionally relevant circuits are maintained.



2. Structural Plasticity

Beyond changing the strength of existing connections, the brain physically modifies its anatomical infrastructure:

- **Dendritic Spine Remodeling:** Neurons sprout new branch-like extensions (dendrites) and tiny protrusions (spines) to establish new connections with neighboring cells.
- **Adult Neurogenesis:** While long considered impossible, research confirms that the adult brain continues to generate new neurons throughout life, predominantly within the **subgranular zone of the hippocampus**, the region dedicated to learning, memory, and emotional regulation.



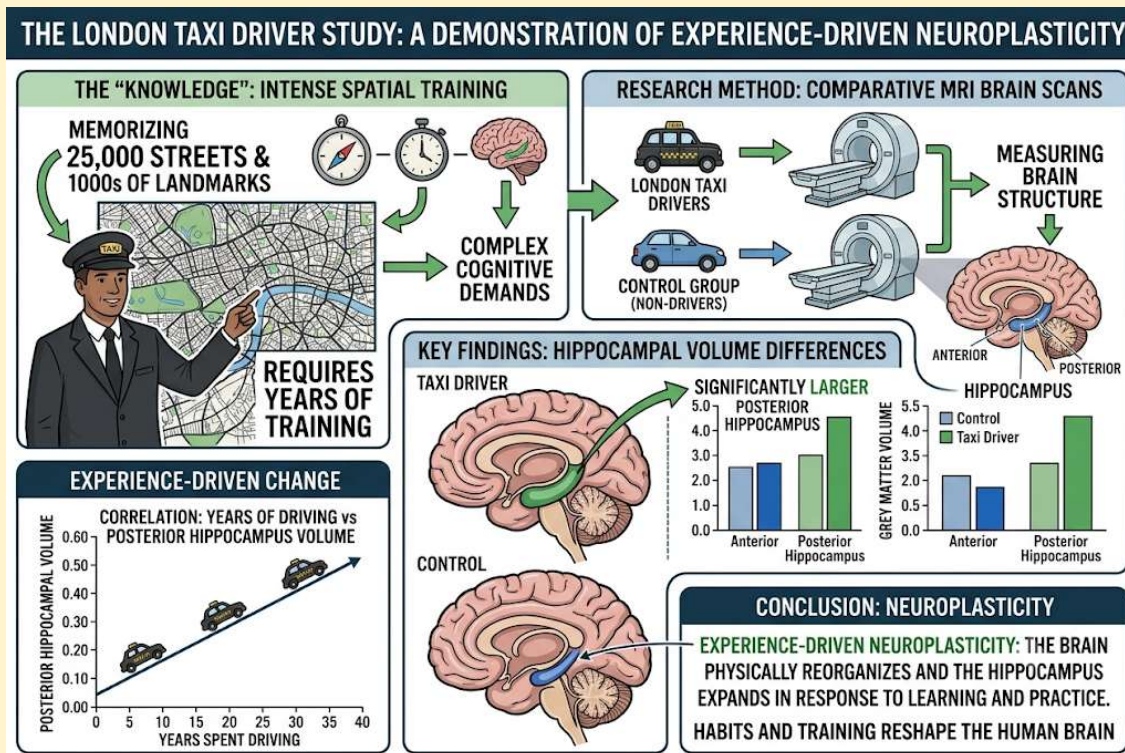
Classical Examples of Neuroplasticity

1. London Taxi Drivers – Enlarged Hippocampus

The London taxi driver story comes from a landmark study led by neuroscientist Eleanor Maguire at University College London in the early 2000s. To become licensed, London taxi drivers must pass a famously difficult test called “*The Knowledge*”, which requires **memorizing about 25,000 streets and thousands of landmarks** across the city. Researchers wondered whether this intense spatial training might actually change the brain.

Using MRI scans, they compared the brains of taxi drivers with those of non-drivers and discovered that the **posterior hippocampus, the region crucial for spatial memory and navigation, was significantly larger in taxi drivers. Even more striking, the size of the hippocampus correlated with the number of years spent driving, showing a direct link between experience and brain structure.**

This case became one of the clearest demonstrations of experience-driven neuroplasticity: the idea that the brain can physically reorganize itself in response to learning and practice. It showed that the hippocampus is not fixed but can expand to meet the demands of complex cognitive tasks, making the London taxi driver study a classic example of how habits and training reshape the human brain (Study: Published in *PNAS*, 2000).



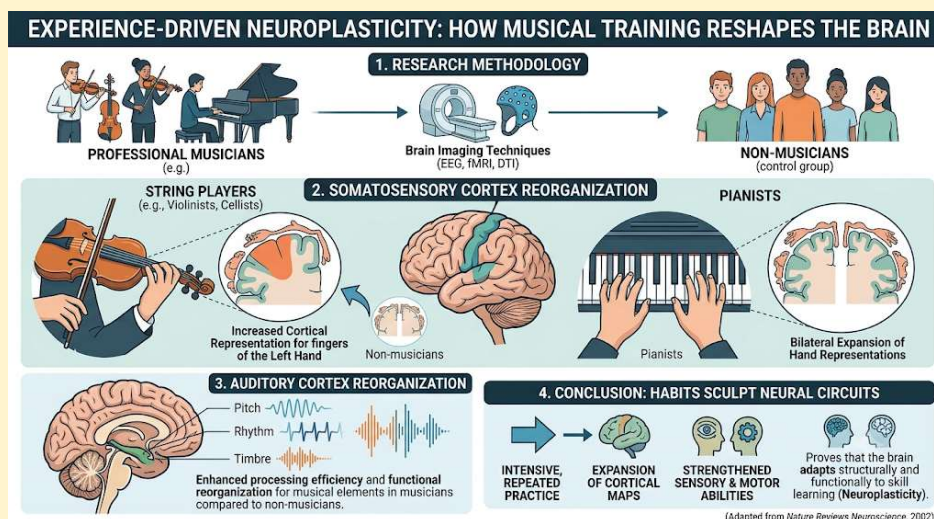
2. Musicians- Expanded Cortical Maps

Early EEG work to modern fMRI/DTI studies have showed that how years of practice physically reshape the brain. Neuroscientists used brain imaging to compare professional musicians with non-musicians and found that the somatosensory and auditory cortices were enlarged in musicians. For string players, the cortical area devoted to the fingers of the left hand (used for fingering on the strings) was significantly expanded, while pianists showed enlargement for both hands. Similarly, the auditory cortex reorganized to process pitch, rhythm, and timbre more efficiently, reflecting the demands of musical training.

Your light shines from within.

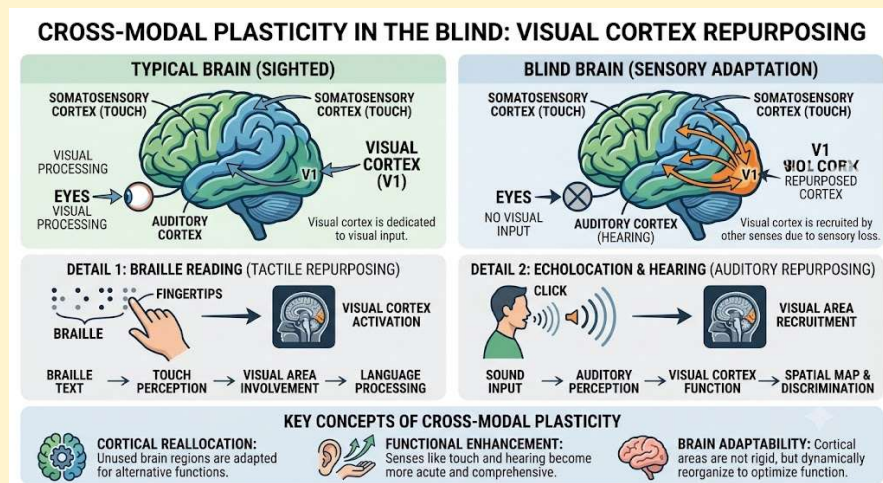
This research demonstrated that intensive, repeated practice can expand cortical maps, strengthening the brain's representation of the body and sound. It became a classic example of **experience-driven neuroplasticity**, proving that the brain adapts structurally and functionally to skill learning. In essence, musicians' brains tell the story of how dedication and repetition sculpt neural circuits, enhancing both sensory and motor abilities (*Nature Reviews Neuroscience*, 2002).

The **Music Cognition Lab at NIMHANS (Bangalore, India)** is also conducting pioneering studies on percussionists playing instruments like tabla, mridangam, and ghatam to explore **sensorimotor neuroplasticity**. Their work also extends to understanding **music-based cognitive remediation**, using rhythm and training to aid recovery in patients with **traumatic brain injury and stroke**, highlighting music's therapeutic potential in reshaping neural circuits.



3. The blind individuals' cross-modal plasticity: The blind individual's story is a classic example of how the brain reorganizes when sensory input is absent. Researchers found that in people who are blind, the visual cortex, normally dedicated to processing sight, does not remain dormant. Instead, it is repurposed to process other senses, such as touch and hearing.

One striking demonstration comes from studies of Braille reading. Functional brain imaging showed that when blind individuals read Braille with their fingertips, the visual cortex becomes active even without visual input. Similarly, auditory tasks like echolocation or enhanced sound discrimination also recruit visual areas, showing that the brain reallocates



unused regions to strengthen other modalities.

This phenomenon, called cross-modal plasticity, highlights the brain's remarkable adaptability. It proves that cortical areas are not rigidly fixed to one sense but can be reassigned to optimize function, ensuring that individuals can navigate, learn, and thrive despite sensory loss.

Age and Neuroplasticity: Unlocking the Brain's Potential for Growth and Resilience Across the Lifespan

Neuroplasticity manifests differently across age groups and biological stages, shifting from broad, automatic development in youth to targeted, experience-driven adaptation in adulthood and compensatory recruitment in old age.

1. Infancy and Early Childhood: Developmental Plasticity

During early childhood, the brain undergoes an extraordinary surge in synaptogenesis, creating up to a million new neural connections every second. This period is marked by critical and sensitive windows when the brain is highly receptive to environmental input. Operating under a “**use it or lose it**” principle known as synaptic pruning, connections that are reinforced by experience and stimulation are strengthened, while those left unused are systematically eliminated to enhance efficiency, as explained earlier.

Real-life examples illustrate this process vividly: in **amblyopia or “lazy eye,”** patching the dominant eye during childhood compels the brain to rewire its visual cortex to process signals from the weaker eye, restoring sight, a treatment far less effective in adulthood once the critical window has closed.

Similarly, children raised in **bilingual households** effortlessly acquire native-like fluency and accent control by naturally wiring phonetic pathways for multiple languages, a feat that adults rarely achieve with the same ease. These examples highlight how early experiences shape the brain's architecture, underscoring the remarkable adaptability of the developing nervous system.

2. Adolescence: Prefrontal Remodeling and Specialization

Adolescence marks a second wave of profound brain reorganization, especially within the **prefrontal cortex**, the region responsible for impulse control, planning, and long-term decision-making, and its connections to the limbic system, the emotional hub.

During this stage, the brain undergoes intensive myelination, a process in which nerve fibers are coated with a fatty sheath called myelin that boosts signal transmission speed up to 100 times. At the same time, unused emotional and cognitive pathways are pruned away, transforming broad, generalist networks into more specialized and efficient circuits. This biological refinement has powerful real-life consequences: an adolescent who devotes hours each week to practicing an instrument, mastering a sport, or learning computer programming physically hardwires those motor and cognitive pathways.

The efficiency built during this period creates a lifelong baseline proficiency, meaning that skills acquired in adolescence remain easier to reactivate later in life compared to those learned entirely from scratch in adulthood. This makes adolescence a critical window for cementing habits and mastering skills that can endure across the lifespan.

3. Adulthood: Targeted, Experience-Dependent Plasticity

In healthy adults, neuroplasticity transitions from being automatic and developmental to experience-dependent. Unlike children, adults do not passively develop new brain structures;

rather, meaningful structural changes require focused attention, repeated practice, and the release of neuromodulators such as acetylcholine and dopamine during challenging tasks.

At the scientific level, adult plasticity is primarily driven by Long-Term Potentiation (LTP), which strengthens existing synapses through repeated activation, and by localized dendritic spine growth, where neurons form new micro-branches to connect with neighboring cells. Real-life examples underscore this adaptability: the case of London taxi drivers and the learning of Braille are classic illustrations of this phenomenon.

These examples demonstrate that even in adulthood, the brain retains a remarkable ability to reshape itself in response to sustained effort and learning.

4. Older Adults and Clinical Groups: Compensatory Plasticity and Rehabilitation

In late adulthood or following neurological damage, the brain relies on **functional plasticity** and **cognitive reserve**, its ability to recruit alternative pathways when primary circuits weaken or sustain damage.

In aging brains, compensatory recruitment often occurs, with older adults activating both hemispheres for tasks that younger adults perform with one side. Those who regularly engage in novel, complex skills such as photography or digital painting build cognitive reserve, helping them maintain strong memory performance despite cellular aging.

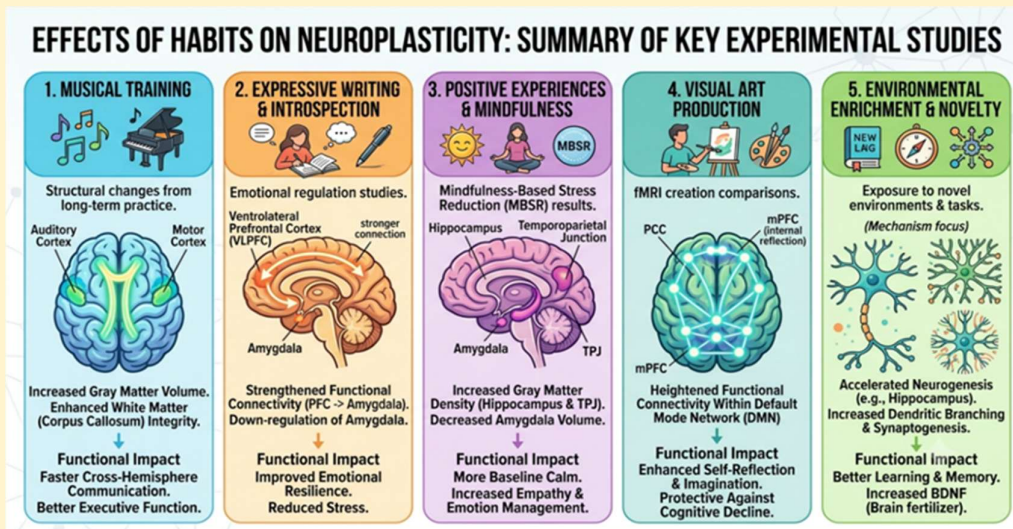
Stroke patients demonstrate cortical remapping, where intact regions assume control over functions lost to ischemia or trauma. A striking example is **Constraint-Induced Movement Therapy (CIMT)**, in which a patient's healthy arm is restricted, forcing use of the impaired arm and prompting intact brain tissue to construct new motor pathways that restore movement.

Amputees reveal another form of reorganization: somatosensory maps corresponding to missing limbs are overtaken by signals from adjacent body parts. This explains the **phantom limb phenomenon**, where touching the cheek of an individual who has lost an arm can evoke sensations in the absent hand, since those regions lie side by side in the brain's sensory map. These cases underscore how, even in late life or after injury, the brain adapts by rerouting and reorganizing its networks to preserve function and resilience.

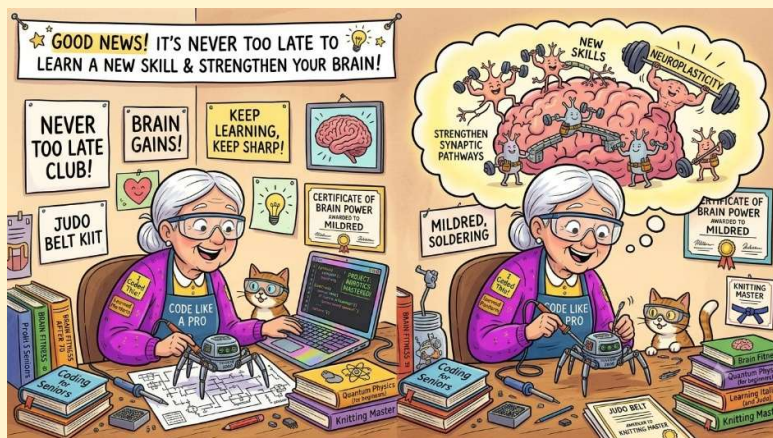
Daily Habits That Nurture Neuroplasticity

We can make use of the brain's property of **neuroplasticity** in daily life by deliberately engaging in habits and activities that strengthen and reshape neural circuits:

- ✓ **Enriched Learning & Curiosity:** Encourage children (and yourself) to learn new skills such as languages, music, puzzles, or even dance. Novelty and challenge stimulate synaptic growth and strengthen neural circuits.
- ✓ **Physical Activity:** Aerobic exercise (running, swimming, cycling) boosts BDNF (Brain-Derived Neurotrophic Factor), a key molecule for neuroplasticity. Even simple daily movement like walking outdoors enhances blood flow and brain oxygenation.
- ✓ **Mindfulness & Meditation:** Practices like yoga, pranayama, and meditation improve attention, emotional regulation, and resilience. They reduce stress hormones that otherwise impair plasticity.



- ✓ **Healthy Nutrition:** Diets rich in omega-3 fatty acids, antioxidants, and polyphenols (nuts, seeds, berries, green leafy vegetables) support synaptic health. Avoiding excess sugar and processed foods prevents inflammation that damages neural pathways.
- ✓ **Sleep & Rest:** Deep sleep consolidates learning and memory. Protecting sleep hygiene from childhood onward ensures the brain can “re-wire” effectively.
- ✓ **Social Connection:** Positive relationships and meaningful conversations stimulate emotional circuits and cognitive flexibility. Isolation, by contrast, weakens neuroplastic potential.
- ✓ **Stress Management:** Chronic stress shrinks hippocampal neurons. Teaching children coping strategies, including journaling, breathing exercises, and creative outlets, helps preserve brain adaptability.
- ✓ **Digital Balance:** Excessive screen time can reduce attention span. Balanced use of technology with offline creative play keeps the brain’s reward and focus systems healthy.



In summary, neuroplasticity reveals that our brains are dynamic and shaped by our daily choices. Positive habits like learning, exercising, meditating, and nurturing relationships are not just lifestyle choices; they are biological investments that foster new pathways, resilience, and adaptability. From childhood to aging, these habits lay the groundwork for growth, discipline, and cognitive health. By cultivating positive habits, we actively participate in shaping our minds, understanding that every action rewires us for greater strength and possibility. Ultimately, embracing neuroplasticity allows us to protect brain health and transform who we are and who we can become.

Always remember: “It’s never too late to learn something new”

A calm heart creates a bright path.

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The Domino Effect

By Priyanshi Sharma

THE SCIENCE BEHIND A BAD DAY

BEFORE YOU JUDGE THE REACTION;
UNDERSTAND THE BRAIN. ♥

PAGE 1

1. THE DOMINO EFFECT – IT STARTS SMALL...



One small thing leads to another. Stress builds up quietly, like dominoes falling.

SCIENCE: THE DOMINO EFFECT

Our brain doesn't reset after every stressful event. Each stressor activates the body's "fight-or-flight" response, releasing cortisol and adrenaline. Many small stressors together keep the brain in alert mode, making us more reactive and less patient.



2. THE LAST STRAW – IT'S RARELY THE BIGGEST.

PAGE 2

Every drop adds up...



...until the last straw.



SCIENCE: THE LAST STRAW

Psychologists call it "the last straw". It's not the final event that causes the reaction—it's the accumulation of everything that came before it. By now, cortisol levels are high and the brain's ability to manage emotions is overloaded.



3. WHY DO WE CRY OVER SMALL THINGS?

PAGE 3



It's not about the earphones. It's about...

- Exam pressure
- Homesickness
- Comparisons
- Financial worries
- Lack of sleep
- So many expectations...

SCIENCE: EMOTIONAL THRESHOLD

We all have an emotional "bucket". Small things keep filling it during the day. Once it overflows, even little things can trigger big emotions. It's not weakness. It's human.



4. THE SAFE PERSON THEORY – WHY AT HOME?

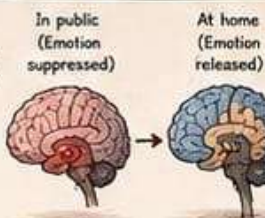


We suppress our emotions all day to survive. Home feels safe, so the nervous system relaxes and the built-up emotions finally come out.



SCIENCE: THE SAFE PLACE EFFECT

When we are in a safe environment, the brain's threat system (calmed down amygdala) allows the body to switch from "fight or flight" to "rest and digest". That's why we cry, get angry or feel overwhelmed only at home.



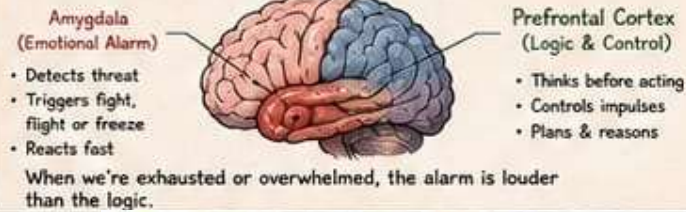
The courage to begin is already half the journey.

5. THE OUTBURST



SCIENCE: WHAT HAPPENS IN THE BRAIN?

During stress, the amygdala (emotional alarm) becomes overactive. It triggers strong emotional reactions—anger, frustration, crying. The prefrontal cortex (thinking brain) which helps us pause, understand and control impulses, becomes less active.



6. THE AFTERMATH



Once we are safe, the emotions we held back come out as tears, not anger.

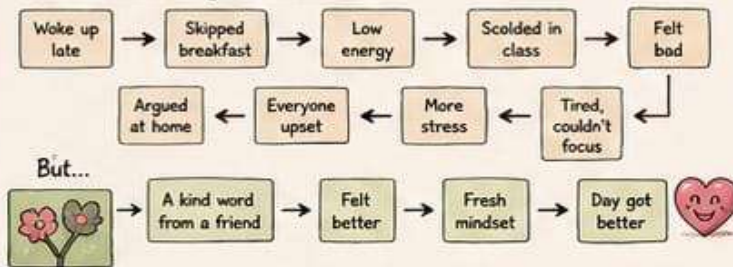
SCIENCE: STRESS RELEASE

Crying or expressing emotions helps the body release stress hormones like cortisol and increases feel-good chemicals like oxytocin, which helps us feel better and connected.



7. THE DOMINO, ALL OVER AGAIN

One small moment can change the whole day. But one small change can heal it too.



SCIENCE: NEUROPLASTICITY

The brain can change based on our experiences. Positive moments, self-awareness and small habits of kindness strengthen the prefrontal cortex and help us respond instead of react.



8. REPAIR & RESPONSIBILITY



SCIENCE: APOLOGIZING HEALS

Apologizing activates the brain's care and connection system. It reduces stress hormones, repairs trust and releases chemicals like oxytocin that help rebuild relationships.



9. A GENTLE REMINDER



KINDNESS ISN'T JUST IN OUR WORDS. IT'S IN OUR UNDERSTANDING.



Abstract

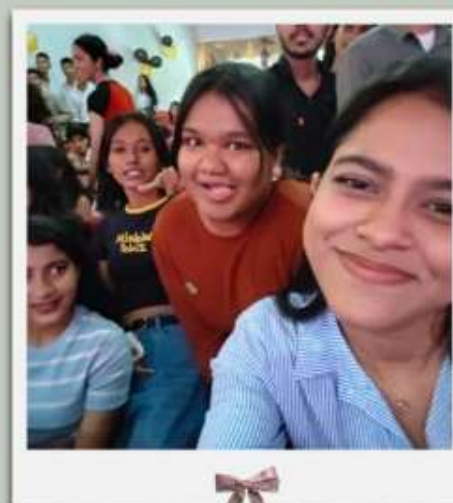
The present experiment was conducted to observe the growth and development of a group of young organisms known as college students under a highly unpredictable environment.

The organisms were transferred from their respective homes and inoculated into a common medium known as college.

The initial observations showed signs of excitement, confusion, homesickness and excessive confidence.

The experiment was expected to produce educated individuals.

However, several unexpected colonies were observed.



A Culture Plate Called College

- Beauty Kakati
B.Sc. Biotechnology
(1st Semester)



Even the smallest light can change a dark room.

The experiment began on the day we entered college. A group of fresh, slightly confused organisms was introduced into a completely unfamiliar environment. Each organism arrived carrying different genetic material, different personalities, different dreams—and, most importantly, different levels of confidence. Some entered the campus as if they owned the place. Some immediately started looking for friends. Some were silently calculating how they would survive the semester. And some were simply trying to figure out where the classroom was.

The first day of the experiment began with me stepping onto the campus with my mother. The place felt familiar since I had already visited it during counselling, but this time, I arrived with one major difference—an unreasonable amount of luggage. Before I could even figure out where to keep it, a few kind-hearted people appeared to help me carry it to the hostel. The first signs of a healthy culture were already visible: cooperation among newly introduced organisms. And then came the real surprise—I somehow found a group of friends on the very first day itself. No applications, no interviews, no selection process; just a few conversations and suddenly, colony formation was successful. They were far more comforting than I expected, and within hours, complete strangers started feeling a little less strange. Thus, the organism had successfully adapted to its new environment—with luggage, confusion, and, fortunately, a support system.

The organisms were then divided into several groups. Some formed colonies within hours. Others required days. A few remained isolated until they discovered someone equally awkward. Thus began the process of social colonisation.



The hostel food, surprisingly, turned out to be good—almost suspiciously good. Naturally, this raised an important scientific concern: "How long will this last?" So, my friends and I decided to make the most of it, because in hostel life, you never know when the taste might suddenly disappear. Then came the mysterious special diet, which somehow became a matter of confusion between the seniors and juniors. The seniors opposed it for reasons we juniors still haven't completely figured out. The funniest part? We are still trying to figure it out while happily eating it. Whatever the scientific explanation may be, the current results are quite clear: the food is good, the organisms are well-fed, and the culture is thriving.



THE CULTURE MEDIUM

The college environment consisted of several essential nutrients. The primary nutrients included:

- Gossip
- Assignments
- Attendance
- Sleep deprivation
- Occasional motivation
- And an unlimited supply of "kal se pakka padhungi"

The hostel environment provided additional nutrients such as midnight conversations, shared snacks, emotional breakdowns and suspicious amounts of laughter.



The medium appeared suitable for growth. However, contamination was inevitable.



Be the reason someone believes in themselves today.

THE FIRST COLONIES”

Within a few weeks, distinct colonies began appearing. The Topper Colony could usually be found near the front benches, surrounded by an alarming knowledge of the syllabus. The Middle-Bench Colony preferred the rear region of the classroom and showed remarkable resistance to academic stress. The Attendance-Deficient Colony was observed appearing only when attendance became a matter of survival. Then came the Outside Canteen Colony. This group demonstrated the highest rate of growth.

I soon found myself surrounded by friends whose habits were completely different from mine, yet somehow, their little traditions slipped into my routine with surprising ease. The girl who was once strictly told not to have milk tea was now a daily tea drinker and the adaptation to the word "bhayankar"—a successful case of environmental adaptation. Our evenings developed their own protocol: a daily walk to the market, followed by an almost compulsory visit to the canteen, even when our bank balances were quietly begging for mercy. I learnt Pahari dance, taught them Bihu, and spent far too much time discussing the variety of food we would bring back from home after the next vacation. And then came the real survival experiment—figuring out how to stretch one paratha till night because money was disappearing faster than water. Somehow, between food, dance, walks, empty wallets and endless conversations, we weren't just adapting to college; we were developing our own little culture.

The Outside Canteen population increased rapidly whenever someone announced: "Let's just go eat something." No one knew how they had money. No one knew where they found the time. Yet they were always there.



GROWTH CONDITIONS

The experiment required several environmental conditions. Temperature: Highly variable. Humidity: Dependent on the weather and the number of people crying before the due date of assignments.

- pH: Stable until someone mentioned attendance.
- Nutrients: Questionable.
- Incubation period: One semester.
- Main growth factor: Friendship.

It was soon observed that students exposed to supportive friends showed significantly better survival rates. Those exposed to toxic environments showed reduced growth and increased levels of "Mujhe ghar jaana hai." Interestingly, the strongest colonies were not necessarily formed by organisms with similar characteristics. They were formed by organisms who simply learned how to grow together.



Your voice matters, even when it trembles.

MUTATION DURING ASSIGNMENT SUBMISSION

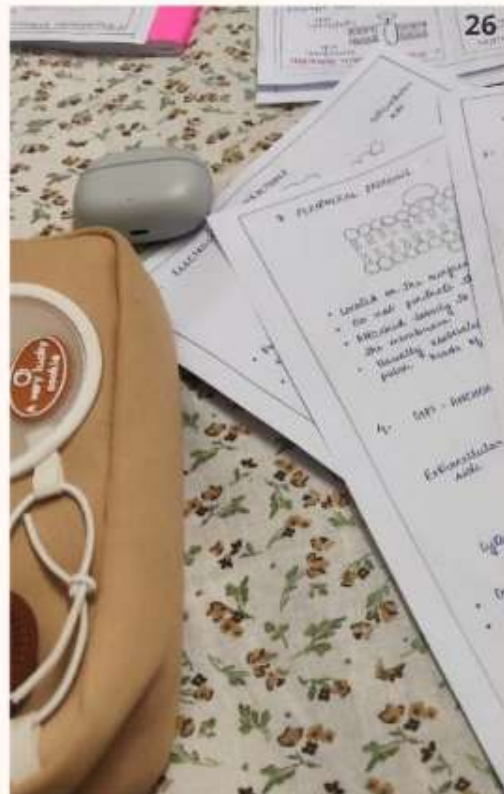


A major mutation was observed approximately two days before the due date of assignments. Students who had previously demonstrated no interest in academics suddenly developed extraordinary abilities.

They began:

- borrowing notes
- watching lectures at 2x speed
- learning entire units overnight
- asking, "Kal dena hai?"
- and promising to not keep backlogs from now on.

This mutation was temporary. After the due date of submission, most organisms returned to their original state.



It is often said that the people we meet on the first day of college aren't necessarily the ones who stay until the last. Our large colonies slowly become smaller as time passes, but I don't think that's something to regret. I wouldn't regret the friends I've made now, even if some of them aren't beside me by the end of the semester. Each of them has made this unfamiliar place feel like home in their own way. I'm grateful for the people who cared, who stayed, and especially those who approached me when I couldn't find the courage to approach anyone myself. It may sound small, but friendships are hard to find. And sometimes, they don't need to last forever to matter. Some people may stay only for a chapter, yet quietly heal something in us they never even knew was hurting. So perhaps a colony becoming smaller isn't a failed experiment. Some organisms are simply meant to grow with us for a while, leaving behind something that continues to grow long after they leave.

UNEXPECTED OBSERVATIONS

However, not everything in the culture plate was scientific. Some changes could not be explained through laboratory terminology. The organisms began changing. The person who arrived shy slowly became confident. The one who was afraid of being alone found friends. Someone who had never cooked learned to survive on hostel food. Someone who thought they couldn't live away from home eventually stopped counting the days until they could return.



And somewhere between lectures, assignments, late-night conversations, laughter and occasional breakdowns, something unexpected happened. We grew. Not just academically. As people.



RESULT

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After one month of incubation, the culture plate showed significant growth. The organisms had developed new skills, new friendships, new habits and several questionable sleep schedules.

Some colonies survived.

Some disappeared.

Some merged.

Some changed completely.

But none of the organisms remained exactly the same as they were on Day 1.

The experiment, therefore, proved that college does not simply educate students. It cultures them.

It places strangers into the same environment and watches what happens.

Sometimes they compete.

Sometimes they contaminate each other's lives.

Sometimes they form colonies that last only a semester.

And sometimes— they become the kind of people you carry with you long after the experiment is over.

CONCLUSION

Perhaps college was never meant to be a perfect culture. It was supposed to be a living one.

Messy.

Unpredictable.

Full of mutations.

Full of growth.

And maybe, years from now, when we look back at this strange little culture plate we once called college, we won't remember every lecture or every assignment. We'll remember the colonies.

The people. The laughter. The midnight conversations.

The days we thought we couldn't survive. And the people who helped us survive them. Because in the end, the most successful organisms were not

necessarily the ones who grew the fastest. They were the ones who grew together.

EXPERIMENT CONCLUDED.

GROWTH: SIGNIFICANT.

CONTAMINATION: UNAVOIDABLE.

MEMORIES: PERMANENT.

Curiosity is the soul asking to grow.

From Fear To Hope

By Bhumika Martolia & Yogita Papnai

Breast Cancer

Awareness
Today
for Brighter
Tomorrows



1 Know the Warning Signs

- Lump or thickening in the breast
- Change in size or shape
- Nipple discharge
- Inward-turning nipple
- Redness or skin changes
- Pain or swelling

2 Check Regularly (Self-Examination)

- Look for changes in front of a mirror
- Feel for lumps
- Check both breasts and armpits
- Do it once a month

3 Medical Examination

- Consult a doctor if you notice any unusual change
- Clinical breast examination by a trained professional
- Don't ignore symptoms

4 Diagnosis

- Imaging tests (mammogram/ultrasound)
- Biopsy to confirm
- Helps determine the stage and type of cancer

A Stronger Tomorrow

A Story of Courage, Love and Awareness

1 Something Feels Different

Savita, a 40-year-old working mother, noticed an unusual discharge, swelling and her nipple seemed to be turning inward.

This doesn't feel normal. I should get this checked.

2 A Visit to the Doctor

Savita visited a doctor and underwent tests.

We need to do a mammogram and a biopsy to be sure.

3 The Diagnosis

The reports confirmed breast cancer.

You have breast cancer. We will plan the best treatment for you.

5 Treatment

- Surgery
- Chemotherapy
- Radiotherapy
- Hormone therapy
- Targeted therapy (as advised by doctor)

4 Keeping it a Secret

Savita decided not to tell Vedika immediately as her 17-year-old daughter's exams were near.

I don't want to worry her now. Let her focus on her exams.

5 Vedika Notices

But Vedika noticed her mother's changed behaviour.

Mom, are you okay? Is something bothering you? You look so tired nowadays. What's happening? You can tell me.

6 The Truth

Savita finally shared her diagnosis.

I have breast cancer, Vedika. I got to know four days ago. I didn't tell you because of your exams.

It's okay, Mom. We will face this together. I'm with you.

7 Fighting Together

Vedika supported her mother through every step of treatment.

You are so strong, Mom.

- Helped with housework
- Brought medicines on time
- Learned about breast cancer
- Stayed beside her emotionally

8 Learning and Healing

Savita learned to listen to her body, pay attention to pain and take better care of her health.

I am more aware now. I will never ignore any change again.

- Rest
- Good nutrition
- Regular check-ups
- Mental peace
- Self-care matters

9 Good News

After several months of treatment, the doctor gave happy news.

Your treatment has worked well. The scans look good. Continue regular follow-ups.

Thank you, doctor! I feel so much better and stronger now.

6 Follow-up

- Regular check-ups
- Imaging as advised
- Monitor for recurrence
- Take care of your physical and mental health

10 Back to Life

Savita returned to her work and normal life with a new perspective and gratitude.

I'm back at work, more mindful, more grateful and stronger than before.

11 10 Years Later...

Vedika is now married, and she continues to take care of her breast health. She is aware that family history can increase the risk, so she gets regular check-ups and encourages other women in her family too.

Because of what my mother went through, I never ignore any change. I get regular check-ups and spread awareness among the women in my family.

7 Prevention & Risk Reduction

- Maintain a healthy lifestyle
- Exercise regularly
- Eat a balanced diet
- Limit alcohol
- Maintain healthy weight
- Be aware if there is family history
- Keep checking regularly

Don't fear the change.

NOTICE IT. CHECK IT.

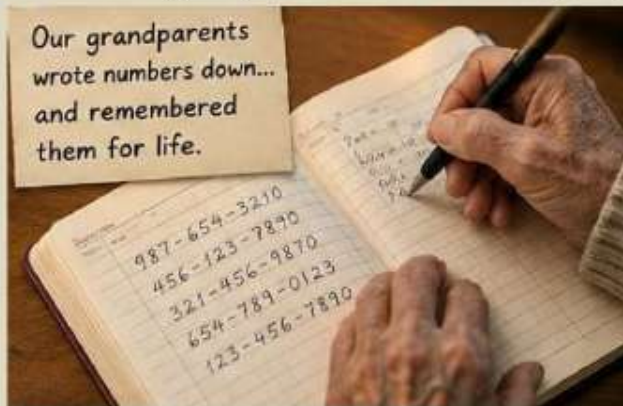
Not every seed blooms in a day, but every one deserves faith.

Rewire Your Brain

By Nandini Jaggi

You have likely seen people around you who remember phone numbers and exact routes—for instance, if you give them a location, they don't even need Google Maps; they can take you straight there.

Consider our grandparents: back in their day, they had to write numbers down in diaries.



Through the repeated process of writing and dialling those numbers, they ended up memorizing them—even today, they can recall them easily. In contrast, we—the current generation—often struggle to properly remember even a person's name.

Let's keep it simple: if you are in school or college, you might have noticed that teachers and professors

remember the names of scientists and their years of discoveries, chapter titles, the specific topics within those chapters, and even the diagrams. While we might occasionally need to open a book to check exactly what we are studying or what a diagram looks like, teachers and professors remember everything—so much so that we often refer to them as “walking encyclopaedias”.

You have likely seen students in your class who excel at history—knowing exactly when Napoleon was born or died, and so on—while others dislike the subject simply because they struggle to memorize such a vast amount of information.

How should we describe this? Is it an innate talent that our teachers and professors possess, or is it the result of daily habits they cultivate? If we were to incorporate these practices into our own lives, perhaps we too could eventually become “walking encyclopaedias.”

And here we talk about memory. Many people would be familiar with this word memory, but many people might not know about it, and they might actually think that it is their natural talent that we remember so many things, but it's not like that.



According to Dr. Hugnair, director of the John Hopkins department of neuroscience, “memories are who we are?”, but making memories is also a biological process, and this process has many questions. How do we create memories? Where it is formed? How it is formed? And how learning and experiences change the connections in our brain?

Create something, even if no one has seen it yet.

According to science:

Memory is defined as the cognitive process of acquiring, storing, and retrieving information essential for environmental adaptation and survival.

Memories aren't stored in just one part of the brain. Different types are stored across different, interconnected brain regions.

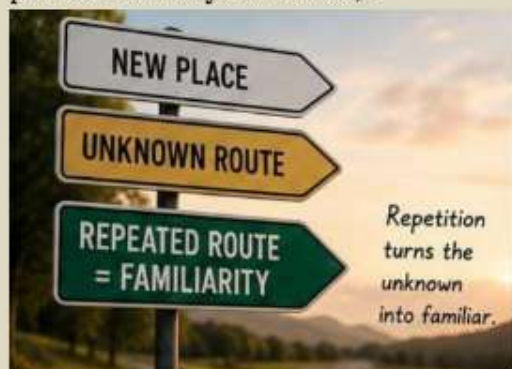
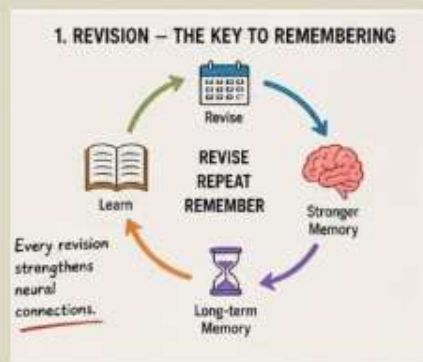
explicit memories – which are about events that happened to you (episodic), as well as general facts and information (semantic) – there are three important areas of the brain: the hippocampus, the neocortex and the amygdala.

Now, when we learn something new—even as simple as someone's name—brain cells called neurons form new connections.

At first these connections are weak which is why we often forget what we study after a few days.

And this brings us to the very first scientifically proven memory trick used by competitive memorizers: revision.

Every time we revise the same topic these neural connections become stronger. This is why regular revision helps convert short term memory (lasts from minutes to hours) into long term memory (can persist from days to weeks).

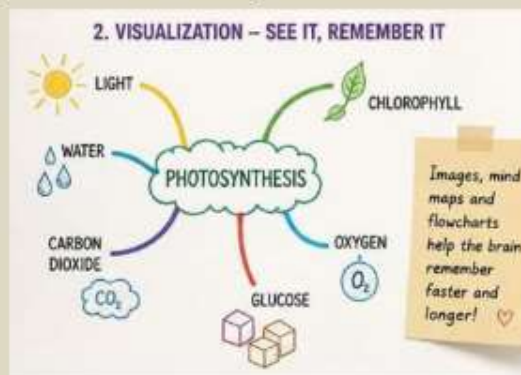


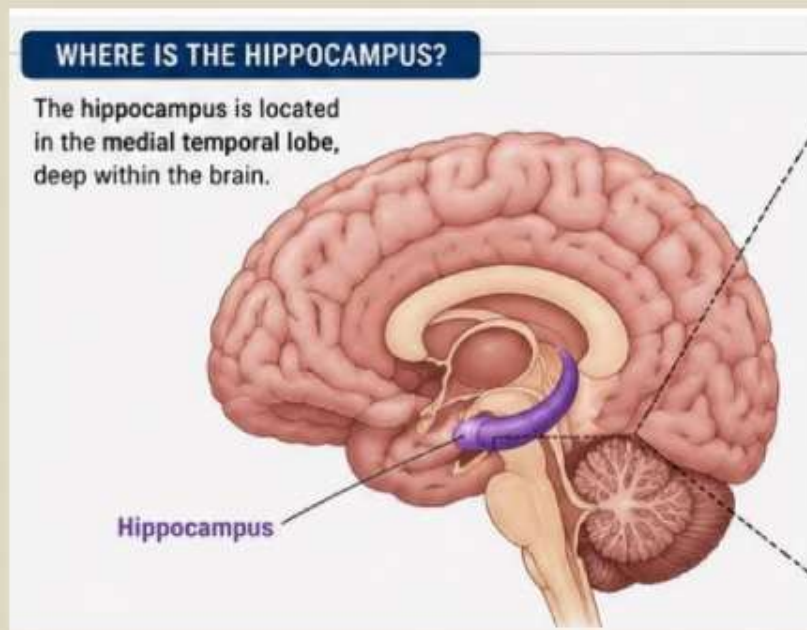
If we relate this to real life, whenever we visit a new place, we aren't familiar with the routes there; however, once we follow the same route repeatedly, we become quite familiar with it—knowing who lives there, what is available in the area, and so on.

The second memory technique is visualization; I believe that visualization naturally accompanies the revision process. Our brains

tend to retain images more effectively than plain text; when we look at an image rather than just text, multiple areas of the brain activate simultaneously. That is why we use tools like flowcharts, mind maps, and visual imagination to memorize topics, making it easier to remember long paragraphs.

To understand this better, we can consider another example: sometimes, when we have met someone in the past, we might not remember their name, but we do recall what they were wearing and what they looked like.





Ultimately, the takeaway is that memory is not merely an innate talent; we can strengthen it through daily revision and visualization. This is precisely what distinguishes a student who studies consistently from one who crams the night before an exam. A regular student reinforces connections and facilitates neuronal interaction through constant revision, allowing information to transition from short-term to long-term memory. Furthermore, because they revise regularly, they truly grasp the concepts rather than relying on rote memorization. In contrast, students who study only at the last-minute fail to establish these deep connections; they might retain the information for a day or two, but ultimately, they forget it.

THE ART OF CURIOSITY

Why Asking Questions Matters More Than Having Answer

— Kanika Ramola • BSc. 1st Year

*"I have no special talent.
I am only passionately curious"*
— Albert Einstein



Have you ever found yourself staring at the ceiling at 2 a.m., wondering why the sky turns orange at sunset? Or why certain songs make you emotional for no reason? Or maybe just—what if I took a completely different path?

We've all had moments like these. But somewhere between childhood and college, we stop asking. We get busy. We get practical. We start believing that knowing the right answer is what matters most.

But here's the thing: answers are everywhere. Questions? Those are rare. And maybe, just maybe, the questions we ask matter more than the answers we find.



The Problem with Being "Right"

Let's be honest—finding answers today is embarrassingly easy. Google, YouTube, AI chatbots, Wikipedia... it's all a few taps away. You can know the capital of Uzbekistan in three seconds. You can solve a calculus problem in thirty.

But knowing something and understanding it are two very different things.

As college students, we fall into a rhythm: attend class, take notes, study, give exams, get marks, repeat. And there's nothing wrong with that. Grades open doors. But if all we're doing is collecting marks, are we really learning?

Real learning doesn't happen when we memorize. It happens when we ask, "Wait... but why does this work?" or "Is there another way to see this?"

Sometimes one extra question teaches us more than ten pages of notes ever could.

Fall, learn, rise, and repeat until it becomes your strength.

THE POWER OF A QUESTION

33



The Power of the Question Mark

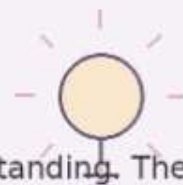
Almost every meaningful discovery begins with curiosity.

A scientist notices something unusual and asks, "Why?"

An inventor looks at an everyday problem and wonders, "Could this be done differently?"

An entrepreneur sees an inconvenience and asks, "Is there a better way?"

Even the simplest questions can open enormous doors.



Questions challenge assumptions. They expose gaps in our understanding. They make us look at familiar problems from unfamiliar angles.

Think of it this way:

Answers close a chapter.

Questions open a new one.

When you focus only on collecting answers, you become an archive of information.

When you learn to question, you become an investigator.

And investigators don't simply accept the world as it is. They examine it.

Why Do We Stop Asking?

As children, questions come naturally.

Why is the sky blue? Why do birds fly? Where does rain come from?



We don't worry about sounding foolish. We simply want to know.

As we grow older, however, marks, exams and competition can turn curiosity into performance. We begin to think:

"What if this is a stupid question?"

"Everyone else probably understands."

"What if people laugh?"

So we remain silent.

But asking a question isn't a sign of weakness. Sometimes it means you are paying attention. The question you are afraid to ask might be exactly the one that helps you understand.

The smartest person in the room isn't always the one with the fastest answer. Sometimes it's the person brave enough to ask the right question.

Sunlight always follows the shadows.

STAY CURIOUS. KEEP DISCOVERING.

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How to Stay Curious

Curiosity doesn't require genius. It requires practice.

Ask "Why?" and "How?" instead of stopping at "What?"

Don't be afraid of the "dumb" question. If you don't understand something, someone else may be confused too.

When everyone agrees quickly, ask, "What are we overlooking?"

Explore beyond your subject. A biotechnology student can learn from psychology; a literature student can explore technology. Some of the best ideas appear where different subjects meet.

And learn something simply because you enjoy it. Not everything needs to be useful for an exam.



The Question That Matters Most

We often believe education has an end point: school, college, degree, job.

But learning never really ends.

New technologies will appear. New problems will emerge. Old answers will be challenged.

So perhaps the goal isn't to become someone who knows everything. That's impossible.

The goal is to become someone who never stops learning.

Someone who can say, "I don't know," without embarrassment.

Someone who can say, "I might be wrong," without fear.

And someone who can follow those words with:

"Let's find out."

The next time your professor asks, "Any questions?", don't immediately look down.

Pause.
Think.
Ask.

Because answers tell us what we know.

Questions show us what we are willing to discover.

So don't try to be the person who knows everything.

Be the person who wonders about everything.

And when you don't know where to begin, begin with three simple words:

"I wonder why..."

Nurture your mind, bloom from within.

Unawareness Yet Aware

By Jigyasa Sharma

Why do elders hate their lives this much? Isn't it lovely, why do they worry about small things and hold back so many grudges against each other? They are free from all the burden of life. They don't have exams to prepare for; they can plan lunch dates with friends whenever they want without worrying about anyone's consent or approval. They can stay awake all night as they have no school the next day.

I am not that lucky and have to think about all these things, yet feel that life is beautiful. Am I being delusional or life is waiting to give me some kind of check? I don't know or I think I don't care. Maybe as I don't care about most of the things around. It gives me greatest joy to be surrounded by MY PEOPLE the ones who makes the life worth living by adding all the fun and humour. I am sure this will stay the same forever and ever because I will remain the same. I can't afford to lose them and I know they will and always will remain with me that's our unsaid promise and this will just get better and better with age. The elders will never understand this as they lack this emotion and I lack the ability to explain it to them.



Perhaps this is one reason the generation gap feels so wide.

Every generation grows up in a different world. We as a generation are growing up with instant communication, social media and reels. We express ourselves through messages, memes, playlists, and shared interests. Our friendships often become our second family

because we spend so much of our lives growing, learning, and struggling together.

The way I see my parents today is very different from how I saw them as a child. When I was younger, they seemed perfect. They had all the answers, made every decision, and I rarely questioned them. But adolescence changes that.

Science explains this surprisingly well. During our teenage years, the prefrontal cortex- the part of the brain responsible for reasoning, planning, and independent thinking is still developing



and continues to mature until our mid-twenties. At the same time, the limbic system, the brain's emotional centre, develops earlier and is highly sensitive to rewards, relationships, and social acceptance. This mismatch means teenagers often experience emotions more intensely while simultaneously beginning to think critically about the world around them.

As a result, we slowly stop seeing our parents as superheroes and begin seeing them as ordinary human beings. We notice their flaws, question their decisions, and sometimes mistake disagreement for distance. It doesn't mean we love them less; it simply means our brain is learning to build its own identity. Psychologists even describe adolescence as a period of identity formation, where young people naturally seek independence while still needing emotional security from their families but are themselves unaware about it.

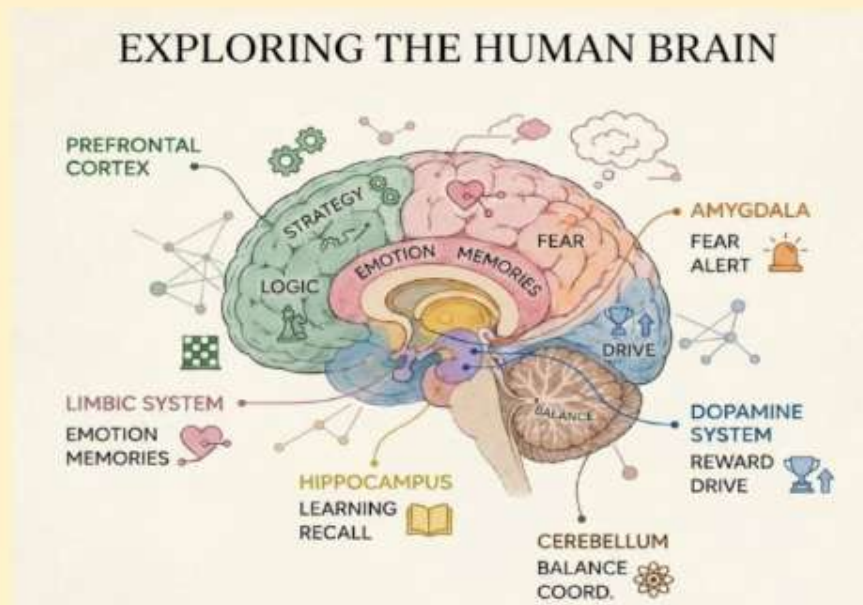
This causes stress for both sides. Teenagers crave freedom because their brains are learning to make independent choices, while parents often become more protective because they can see risks that we cannot. The conflict has no win as it is about two brains looking at the same situation through different lenses.

Different generation carries a different brain shaped by a different world. While my parents grew up without social media, constant notifications, or

the pressure of comparing themselves to thousands of people online, my generation has never known a world without them. Naturally, we think differently.

Maybe one day my perspective will change too. But I hope I never forget what it feels like to be a student, the curiosity to keep asking questions, the willingness to keep learning, and the excitement of discovering something new. Neuroscience tells us that our brains remain capable of

learning and adapting throughout life, a quality known as neuroplasticity. Contrary to the belief that our personalities and ways of thinking become



fixed with age, research shows that our brains continue to learn from new experiences, meaningful conversations, and different perspectives. Every time we listen with an open mind or understand someone else's point of view, our brain is literally rewiring itself.

Perhaps this is how the generation gap can be bridged, by allowing our minds to remain flexible enough to understand experiences different from our own.

Even the smallest light can change a dark room.

2026 NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE

Karl Deisseroth • Peter Hegemann • Georg Nagel

for their discoveries concerning "light-gated ion channels and optogenetics"

Optogenetics is a technique that combines molecular genetics with optical stimulation to precisely control neuronal activity. Peter Hegemann and Georg Nagel first identified **channelrhodopsins**, light-gated ion channels in the alga *Chlamydomonas reinhardtii*, which open under blue light to alter a cell's electrical state. Building on this, Karl Deisseroth and colleagues introduced channelrhodopsin genes into mammalian neurons, showing that light pulses could reliably trigger action potentials. This innovation created a genetic "light switch" for neurons, enabling temporally and spatially precise modulation of neural circuits and providing unprecedented insight into the causal links between defined neuronal populations and behavior.



KARL DEISSEROTH

Neuroscientist • Bioengineer • Psychiatrist

Professor of Bioengineering and Psychiatry & Behavioral Sciences, Stanford University

Applied channelrhodopsin as a precise light-controlled switch in neurons. His work helped establish optogenetics as a tool for testing causal links between neural circuits and behavior.

Photo credit: Stanford Medicine



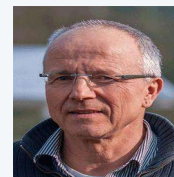
PETER HEGEMANN

Biophysicist • Experimental Biophysicist

Professor of Experimental Biophysics, Humboldt University of Berlin; Hertie Senior Research Chair for Neurosciences

Studied how microorganisms sense light and helped identify channelrhodopsins—the light-gated proteins that became the molecular foundation of optogenetics.

Photo credit: American Academy of Arts & Sciences



GEORG NAGEL

Biophysicist • Neurophysiology / Molecular Plant Physiology

University of Würzburg; Nobel-award affiliation

Characterized light-gated ion channels, including ChR1 and ChR2, demonstrated their function in animal cells—key steps toward precise optical control of neural activity.

Photo credit: Millencolin / Wikimedia Commons (CCO)

KEY DISCOVERY TIMELINE

EARLY 2000s

HEGEMANN & NAGEL

Channelrhodopsins were identified in green algae. Light could open the ion channel and change membrane electrical activity.

2005

DEISSEROTH & COLLABORATORS

Channelrhodopsin was introduced into mammalian neurons, allowing blue light to precisely trigger neuronal firing.

2007

LIVING-BRAIN OPTOGENETICS

Light-controlled neural switching was demonstrated in the brains of living mice, enabling circuit-level studies of behavior.

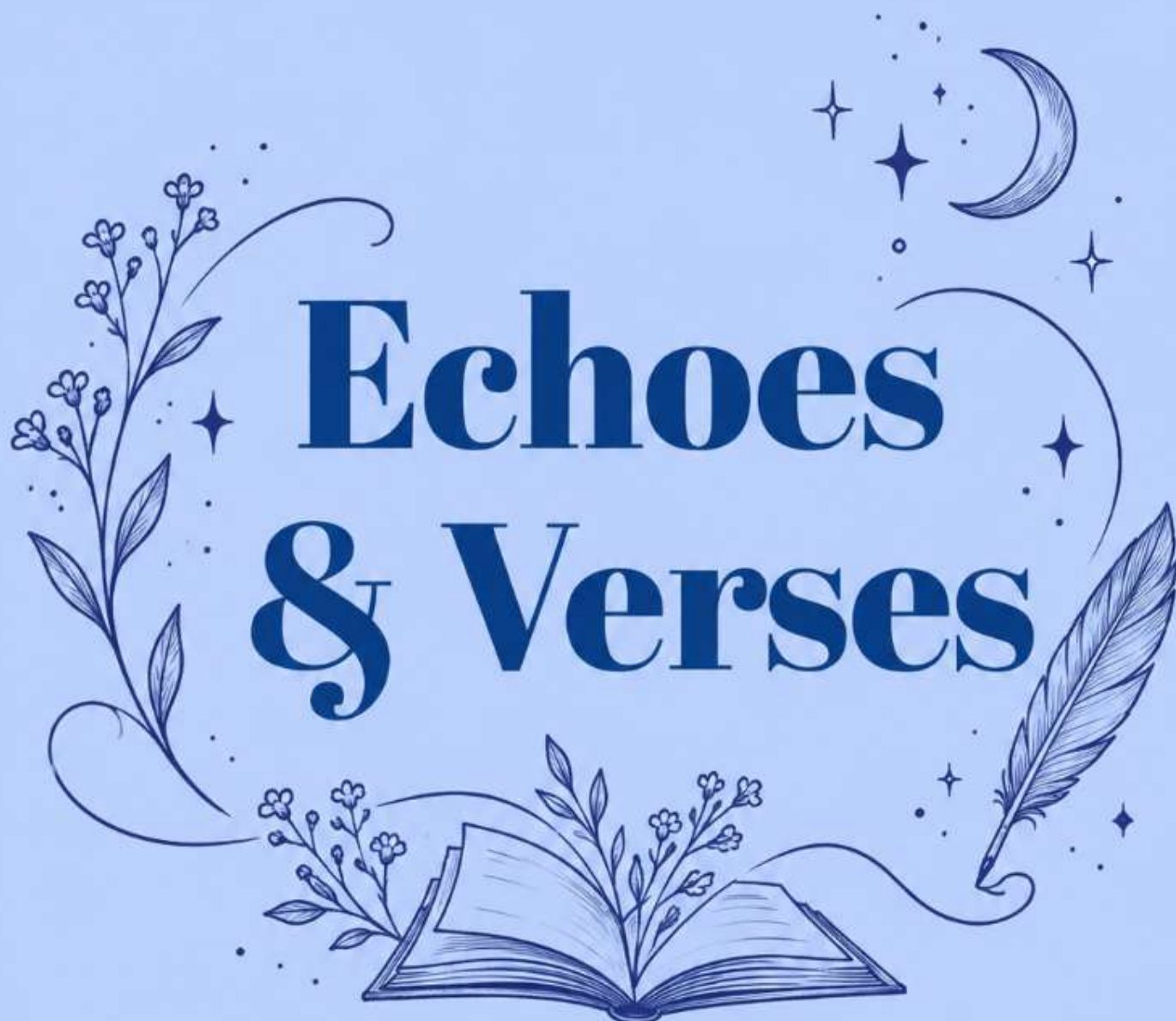
WHY DOES IT MATTER?

Optogenetics revolutionized neuroscience by shifting from passive observation to precise manipulation of brain circuits. Using light-sensitive proteins, researchers can selectively activate or silence neurons, revealing causal links between neural activity and behavior. This has clarified how the hippocampus supports memory; the amygdala shapes emotion, and cortical networks drive decision-making. Beyond research, the method is being explored for restoring vision, treating neurological and psychiatric disorders, and advancing neurotechnology, opening a new era of brain science with unprecedented precision.

IN SIMPLE WORDS: **Optogenetics** uses a genetic "light switch" to control selected cells. This gives scientists a precise way to test how particular groups of neurons influence what the brain does.

Avighna Mathpal
M.Sc. Biotechnology 1st Year

Every spark begins as something small.



The Silence between the Heartbeats

The Silence between the heartbeats
feels like an eloquent void
Seems like the most terribly sacred
Some whimsical wraithlike place to be,

A breathless hush of loss
a fade illusion of time that's gone
The nothingness that defines presence
Or a tiny wave of Introspection.

The silence between the heartbeats
is nothing but a cocoon of solace
Like a bedroom sanctuary
or a deliberate retreat from world.

~ Ishmeet kaur
Bsc. Biotechnology
First Semester

आओ रे मैसो आव !

❖ नि करो प्रकृति दगाड़ खिलवाड़
दरिक् जाल सबै पहाड़ ॥
सुखि जाल हिमाल, सुखि जाल गाड़ गध्यार
पेड़ नि होला
बारिश कसी होली काँ रौल चढ़
का जाल किड़ - मकोड़ ॥
बिना बोट डाव काँ बैदुल गमिं में
काँ देखुँल हरयाव ॥

❖ डाव नि होला हाव का बै आली
साँस कसी ल्यून , कसि जीवन
गोरू- बाछा, नान तिना
सबं कै खाण कसि खिलुँल
कसि जीवन सरल बडूल
कसि हवाल घर , कसि बंग्याल बंडूल
बिन बोट - डावेक , अंतिम साँस ले गिनूल
नि करो प्रकृति दगाड़ खिलवाड़ दरिक्
जाल सबै पहाड़ ॥

❖ आओ रे मैसो आव म्यार दगाड़ हिटो
प्रकृति बचूणाँ लिजी सबै दगाड़ हिटो
नौल बचाओ , धार बचाओ
पाणि बचूणाँ तै गाड़ - गध्यार , डान-काना बोट लगाओ
नि करो प्रकृति दगाड़ खिलवाड़
दरिक् जाल सबै पहाड़ ॥

❖ भली मति सिखो , भल संस्कार सिखो
घर आँगन , अगल - बगल डाओ बोट लगाओ
नौल - धार साफ़ धरो
नि करो गंदगी नि करो प्रदूषण
आर्धल डूणी नानतिन नैकि ले संसाधन बचाओ
नि करो प्रकृति दगाड़ खिलवाड़
दरिक् जाल सबै पहाड़ ॥

❖ नि होल पाणि , नि होली हाव
नि होली हाव त उ नानतिन का जाल ?
घर - घर जाओ बोट लगाओ
हाव बचाओ , पाणि बचाओ
गाड़ बचाओ , गध्यार बचाओ
खेल खलिहान हरयाव लाओ
नि करो _ _ _ _

❖ आओ रे मैसो ! आओ बोट - डाव लगाओ
आज न तो कभै नै
धरती गरम होली , हिमालयक हयूँ बिला - जाल
पाणिक सबै स्रोत सागर में समा जाल
फिर हमी हाथ मलनै रेंजुल
के नि पड़ हाथ , बस आँसू- आँसू रें जाल
यो प्रकृति हमन कै श्राप दि जाली
फिर कि कराल नानतिन ॥
कि खाल , कि पियाल , कसिक हवाल
के समझ नि ज़ैन
आओ रे मैसो आओ
प्रकृति बचूणाँ लिजी सबै एक हैं जाओ
आओ रे मैसो आओ
समय पर सबै जागरूक हैं जाओ ॥

अदिति पाठक

ये बारिशें मुझे लिखने पर मजबूर करती हैं
जब भी ये बारिशें आती हैं

मुझ पर बरस
मेरी रूह को भीमाती हैं

इत्मेनान करती हैं मुझे
दिल - र - सुकून से मयस्सर करवाती हैं
जब भी ये बारिशें आती हैं ॥

रुक अजीब सा ठहराव लाती हैं

अजियत दूर कर देती हैं मुझसे
फितूर - र - सुकून से मिलाती हैं

जब भी ये बारिशें आती हैं ॥
मेरे दिल को श्रितधार करती हैं

मेरी जुलैफें भीगा इकरार करती हैं

मेरे जिस्म और रूह से मिल कर

मेरे आंसुओं में घुल कर

मेरी परेशानियां आलम से छुपाती हैं

जब भी ये बारिशें आती हैं ।

~ मोहिका रेंगाई

यदि पुनर्जन्म ले पाऊ

चाह नहीं मैं धन कुबेर, ना ऊँचे महल ही पाऊ,
चाह नहीं मैं नेता के घर का वारिस हो जाऊ,
चाह नहीं मैं साधु वन मंदिर मैं धुनि रामऊ,
चाह नहीं मैं राज महल की शोभा बन जाऊँ।

चाह है इस मातृभूमि मे, कुर्बान मैं हो जाऊ,
काम आ सकूँ भारत माँ के, समर्पित हो जाऊ,
सिकुड़ रही सरहदों का, रखवाला बन जाऊ,
भारत माँ के चरणों का दास बन, धन्य हो जाऊ।

नहीं महलो में, ना राजकुमार का ताज पाऊ,
सरहद में सैनिक बन वीर गति को प्राप्त हो जाऊ,
उदय हूँ कही, अस्त होने भारत भूमि ही आऊ,
चरणों में भारत माँ के रह, वारि - वारि जाऊ।

जीवन अपना भारत माँ की सेवा में बिताऊ,
लूटने वाले भारत माँ को, कड़ा सबक सिखाऊ,
न्यौँछावर हो जाऊ वहाँ, मैं देशभक्त कहलाऊ,
कुछ ऐसा करु "यदि पुनर्जन्म ले पाऊ" ॥

लक्षिता नेगी

भारत
माता
की जय

बादल और बच्चे ।

इन पहाड़ों ने बादलों को गोद में कुछ
यूँ समा रखा है,
जैसे एक माँ ने
अपने बच्चे को सीने से लगा रखा हो।

फिर बादल भी पहाड़ों से
कुछ यूँ दूर चले जाते हैं।
ऐसे बच्चे बड़े होकर
माँ की गोद से दूर हो जाते हैं।

पर माँ की गोद की तरह,
पहाड़ों का प्यार भी
उन बादलों के साथ
हमेशा बना रहता है।

Anonymous Bsc 1st Year



ArtVerse



-Ishita Lohani (MSc 2nd year)



-Pradyumna (BSc 2nd year)



-Priyanshi (BSc 1st year)



-Ruchika (BSc 2nd year)

ArtVerse



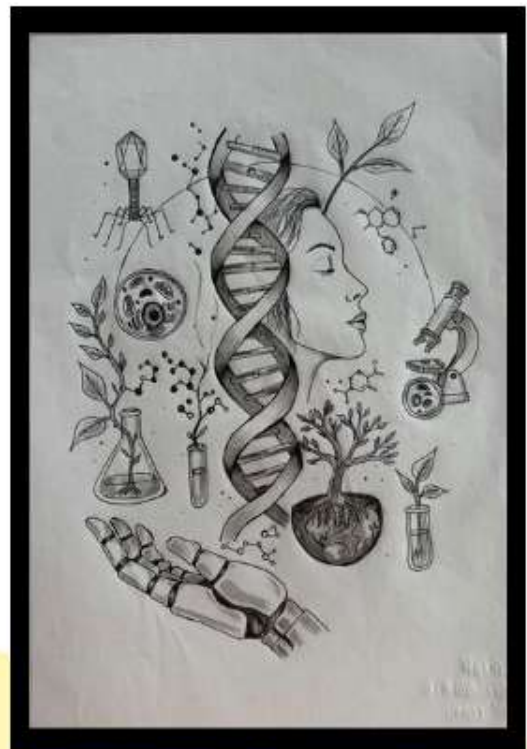
-Divyanshi (MSc 2nd year)



-Insha (BSc 3rd year)



-Meenakshi (MSc 2nd year)



-Tripti (BSc 1st year)

ArtVerse



-Ashmita Bora (BSc3rd year)



Believe in the magic of becoming

--Dr. Manju Tewari



World Health
Organization

MENTAL HEALTH FOR ALL

10 OCTOBER 2026

WORLD MENTAL HEALTH DAY

LIVED EXPERIENCES HEARD:
REAL VOICES, REAL CHANGE.



NEUROPLASTICITY
LEARNING
HEALING
GROWTH



SEROTONIN
MOOD
REGULATION



GENETIC AND
ENVIRONMENTAL
FACTORS



Sharing lived experiences is especially important for mental health because it **breaks isolation**, **reduces stigma**, and **fosters a sense of belonging**.



When individuals openly talk about their struggles and coping strategies, it **normalizes conversations** mental mental wellbeing and helps others **feel less alone** in their challenges.



Personal stories carry **emotional weight** that clinical explanations often lack, making them powerful tools for **empathy and understanding**.



They encourage people to **seek help earlier**, remind them that **recovery is possible**, and build **supportive communities** where vulnerability is seen as strength rather than weakness.



In essence, lived experiences transform mental health awareness from abstract concepts into **human connections** that heal, empower, and inspire resilience.

A kinder
mind
brighter
tomorrows.



Lived Experiences Heard: 49

Real Voices, Real Change

WINGS GROWN IN NEURONEST

Hello everyone!

Looking back at these two semesters, one of the most meaningful parts of my journey has been being a small part of the Neuronest team, an initiative led by Dr. Manju Tewari Ma'am.

When I joined Neuronest, I initially thought of it simply as an opportunity to participate in activities and contribute to something in the department. But gradually, I realized that it was much more than that. Every activity, workshop, and interaction gave me an opportunity to learn something not only about others but also about myself.

One of the most memorable moments for me was when we contributed a small amount to help Mahendra Daju through one of our initiatives. Seeing the tears in his eyes along with his bright smile made my entire day. It was a small contribution from our side, but that moment made me realize how even a small act of kindness can have a meaningful impact on someone's life.

On a personal level, Neuronest also helped me overcome some of my own fears and lack of confidence. I still remember giving my first presentation during one of the Neuronest activities. It may have seemed like a small thing, but for me, it was a significant step. That experience gave me the confidence to believe that I could overcome the things that once made me hesitate.

Another very important part of these two semesters has been the counselling sessions with Dr. Manju Tewari Ma'am. Her calm nature and willingness to listen without judgment make it easier for students to express what they are going through.

There was a phase when I felt overwhelmed and struggled to manage everything around me. I found myself constantly overthinking even the smallest things, despite knowing that it was affecting both my mental and physical well-being. During that time, Ma'am encouraged me to take one step at a time instead of allowing my thoughts to take control, and to look at situations from a healthier perspective. Her guidance helped me understand that sometimes we do not need to solve everything at once; sometimes, taking one step forward is enough.

These two semesters have taught me that personal growth does not always come through big achievements. Sometimes, it comes from giving your first presentation, helping someone in a small way, having an honest conversation, learning to manage your thoughts, or simply having someone who listens without judgment.

I feel grateful that I got the opportunity to experience all of this through Neuronest and under the guidance of Dr. Manju Tiwari Ma'am. Her efforts have created a space where students could actually experience the importance of listening, understanding, empathy, and support.

For me, Neuronest has been more than just a team or a series of activities. It has been a part of my journey of becoming more confident, more aware, and more willing to support others. And I hope that whatever I have learned from this experience, I can carry forward and, one day, create the same sense of support for someone else.

– A student who found her voice.

SILENCE BROKE, SUNLIGHT ENTERED

Hello everyone! I hope you are all doing well.

My mental health challenges didn't begin overnight; they started during my teenage years. For a long time, I didn't understand what I was going through. As time passed, my anxiety, overthinking, low mood, and sleep problems became more noticeable and started affecting my studies and daily life.

I sought professional help, including medical treatment. While medication helped in some ways, I also experienced side effects, which made me realize that recovery is not just about medicine; it also requires self-awareness, guidance, and consistent effort.

One of the biggest turning points in my journey was counselling with Dr. Manju Tewari Ma'am. She patiently listened to me, understood my feelings without judging me, and helped me see life from a healthier perspective. After classes, I often spoke with her, and every conversation made me feel heard, understood, and hopeful. Her guidance gave me the strength to believe in myself again.

Along with counselling, I took responsibility for my own well-being. I learned to express my emotions instead of keeping everything inside, focused on my health, stayed connected to my faith, and gradually became my own guide.

My message to every student is simple: Please don't suffer in silence. If you are struggling, talk to a teacher, counsellor, psychologist, doctor, or someone you trust. Seeking help is a sign of courage. With the right support and your own effort, healing is possible, and it can truly transform your life.

I learned that life becomes much lighter when we stop worrying about the past or constantly fearing the future. Live in the present, set meaningful goals, and take one step at a time. Along with working hard, make time for things that bring you joy, whether it's spending time with loved ones, pursuing a hobby, exercising, praying, or simply taking a walk.

Every day doesn't have to be perfect; it just has to be lived with hope. Focus on today, take care of yourself, and trust that small, consistent steps will lead to a better tomorrow. You are enough, just as you are. Don't compare your journey with anyone else's. Embrace who you are, live in the present, study with purpose, laugh with your friends, take care of yourself, and find joy in the little moments. Self-love isn't about being perfect; it's about accepting yourself, growing at your own pace, and believing that you are worthy every single day.

Today, I am much calmer, more confident, and able to balance my studies and personal life.

Looking back, I truly believe that asking for help was one of the best decisions I ever made.

– A student who chose hope.

HOME BEYOND HOSTEL WALLS

Hello everyone!

I hope you all are doing well.

I sincerely thank Dr. Manju Tewari Ma'am and the entire Neuronest team for the support and guidance over the past three years. Being a part of Neuronest has been a wonderful experience, and I have learned so much from every activity and session.

The workshops, awareness programs, and counseling sessions were truly meaningful. They not only helped me understand important topics, but also encouraged me to look after my own well-being and approach challenges with a positive mindset.

I am especially grateful to Ma'am for her constant encouragement, patience, and kindness. Her guidance has motivated many students, including me, to become more confident and keep growing, both academically and personally.

I still remember coming to Ma'am when I had no one else to talk to, when I felt no one would understand me, and when I feared being judged. I just knew she wouldn't judge me. It is no small thing to say, but she created a true home away from home. Navigating these three years of hostel life was just as challenging as my studies, but she was always that trusted person I could turn to, confident that she would help me find a way forward. The way she speaks, shares stories, and truly understands people, no one else could have provided that for me during that phase of my life.

Thank you, Ma'am, for being that person for me. Your resilience, patience, kindness, and deep empathy have always inspired me. You are someone I deeply look up to, and I hope to become someone who offers others the same comfort, understanding, and strength that you have given me.

"Sharing my journey reminds me that mental health support is not a privilege but a right, and safe spaces like Neuronest show how compassion and understanding can transform student lives."

Thank you once again, Neuronest, for providing a safe space for students.

- A student who found safety

BEYOND THE WHITE COAT

Hi everyone!

For three years, my entire life revolved around NEET. I truly believed that becoming a doctor was my only destination. The white coat, the stethoscope, treating patients, earning their blessings, and making my parents proud—this was the dream I lived with every single day. In our society, clearing NEET is often seen as the ultimate symbol of success, not just for the student but for the entire family. Above all, I wanted to give my parents that moment of pride.

After three years of hard work and multiple attempts, I still couldn't clear NEET. I was completely devastated. I lost the motivation to study and began questioning my own worth and abilities. NEET was no longer just an exam; it had become my identity. Failing it made me feel as if I had failed at life itself.

I had one close friend who supported me through countless phone calls, and I will always be grateful for her. But deep down, I longed for someone who could truly help me navigate my confusion and see beyond a single examination.

When I joined college, I was still carrying that heavy disappointment. I didn't know who would understand me or guide me toward a new direction.

Thankfully, I met Manju Ma'am and Ragini Ma'am. They were among the most supportive professors I have ever encountered. I am also deeply grateful to my other teachers, who understood my situation and gave me the flexibility to continue preparing for NEET during my first year.

Even then, one persistent fear never left me: "What if I fail again?"

I had become afraid of trying, because every time I gave my best, I feared everything would fall apart again. But then, I decided to take a leap of faith and have a genuine conversation. I decided to open up to my professors about what I was going through.

Opening up to them was one of the best decisions I have ever made. Their guidance, patience, and perspective slowly changed the way I looked at life. The lessons I learned through Neuronest, personal mentoring, and our candid conversations didn't change me overnight, but they gradually helped me heal. Looking back today, I can confidently say that I am a much stronger person than I was a year ago. I now carry a brand-new purpose and aim in life.

One thing I realized is that meaningful, honest conversations are rare—and sometimes, the advice we don't want to hear is exactly what helps us grow.

Today, I no longer define myself by a single exam or a single failure. I have learned that dreams may evolve, but hard work, resilience, and the lessons we gain along the way stay with us forever.

I will always be grateful to Neuronest, Manju Ma'am, Ragini Ma'am, and everyone who believed in me when I struggled to believe in myself.

Sometimes, all a person needs is someone who listens, guides, and reminds them that their story is far bigger than one examination.

-A student who found a new purpose

Managing Emotions: Name it to tame it



*Know how you are feeling at the moment.
It's okay not to be okay.*

The Achievers' Corner

Anushka Rai is an undergraduate Biotechnology researcher at Kumaun University. Selected as a **National Finalist** in the Daiki Axis Innovation Application League (DIAL) 2025-26, under theme of "**Water Positive Environment Strategy Of Bharat**", her work focuses on decentralized wastewater management, aquatic ecological monitoring, and policy integration for environmental sustainability in India.

Achieving a water-positive Bharat requires moving away from capital-intensive centralized grids toward localized, technologically sound infrastructure that treats every drop at the source."

By bridging field analytics, advanced engineering, and grassroots community governance, this research presents a actionable blueprint for safeguarding India's vital freshwater resources.

In the face of rising ecological stress in Himalayan ecosystems, this research presents a scalable, decentralized approach to wastewater management. Grounded in field analytics from Naukuchiyatal Lake and utilizing Japanese Johkasou treatment technology, the study outlines an actionable blueprint for achieving water positivity across India's sensitive eco-zones.



Research Project Summary: Water-Positive Strategy for Naukuchiyatal Lake
Core Focus: Addressing aquatic degradation in high-altitude ecosystems through localized, tech-driven wastewater management.

Case Study: Naukuchiyatal Lake (Bhimtal, Uttarakhand) — selected to analyze severe pH fluctuations, organic pollution, and nutrient runoff caused by tourism and local settlement expansion.

Key Implementation of Japanese Johkasou technology — modular, on-site treatment systems that process blackwater and greywater without needing massive centralized sewer infrastructure.

Policy & Community Strategy: Adapting Japanese water management frameworks for Indian municipal bodies, paired with a three-tier youth-led monitoring program to ensure long-term community participation.



Presenting and Receiving award at **INDIA INTERNATIONAL CENTRE** (Delhi)



The Achievers' Corner

My Internship Journey ♥

Indian Academy of Sciences – INSA – NASI
Summer Research Fellowship 2026



How I got selected?

LFS2981 - IASc-INSa-NASI Summer
Research Fellowship 2026



IASc-NASI 23 Apr
to me

Dear Ms Priyanshi,

This has reference to your application LFS2981 for an IASc-INSa-NASI Summer Research Fellowship in 2026. We are happy to offer you a Fellowship to work for two months during this summer subject to verification of your marks as stated by you in the application with the marks sheets. You will be working with Dr. Dinesh Kumar, Centre of Biomedical Research, Lucknow (e-mail: dineshcbmr@gmail.com, dinesh@cbmr.res.in).

Selected for the IASc-INSa-NASI
Summer Research Fellowship 2026



Where I worked?

Centre for Biomedical Research (CBMR),
Lucknow



Lucknow, Uttar Pradesh



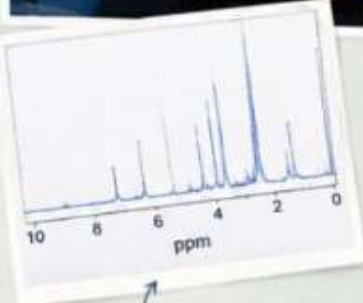
My Work

NMR Spectroscopy

I worked on NMR spectroscopy for the analysis of samples, learning about data acquisition, processing and interpretation. It was an exciting experience to see how spectral data helps in understanding the structure and behaviour of molecules.



//



My Mentor



Under the guidance of
Dr. Dinesh Kumar

Additional Professor
Department of Advanced Spectroscopy & Imaging
CBMR, Lucknow



The Achievers' Corner

RECOGNITION THROUGH INTERNATIONAL PARTICIPATION

Dr. Manju Tewari

Assistant Professor
Department of Biotechnology
Kumaun University

Dr. Manju Tewari, Assistant Professor in the Department of Biotechnology at Kumaun University, has brought distinction to the institution with two prestigious international selections in the field of neuroscience.



01

International Conference on Translational Neuroscience (ICTN 2026): Brain to Behavior



14–16 September 2026



Cochin University of Science and Technology (CUSAT), Kochi, Kerala

Dr. Tewari was selected to deliver an oral presentation at the International Conference on Translational Neuroscience (ICTN 2026): Brain to Behavior. Her presentation, entitled "*Microglia at the Crossroads: Surveillance, Signaling, and Neuroinflammation*," was shortlisted after a rigorous scientific evaluation, highlighting the impact of her contributions to neuroscience research.



02

IBRO APRC School on Brain-Immune Interactions: From Molecular Mechanisms to Behaviour



17–24 September 2026



Kochi, Kerala

Adding to this accolade, Dr. Tewari was chosen for the elite International Brain Research Organization – Asia Pacific Regional Committee (IBRO APRC) School on Brain-Immune Interactions: From Molecular Mechanisms to Behaviour. Selected from a highly competitive pool of over 210 international applications, this dual recognition reflects her exceptional dedication to advancing neuroscience research and higher education.

The best stories come from those who dared to write them.

The Quiz Quest

Q1. Which is a sign of good mental health?

- A) Happiness
- B) Frequent sadness
- C) Isolation
- D) Constant worry

Q2. What is the primary symptom of generalized anxiety disorder?

- A) Panic attacks
- B) Excessive worrying
- C) Hallucinations
- D) Obsessive-compulsive behaviors

Q3. Which professional should we consult first in mental health issues?

- A) Psychiatrist
- B) Psychologist
- C) Neurologist
- D) Neurosurgeon

Q4. Which change is a common sign that it might be time to check in with a mental health professional?

- A) Occasional boredom
- B) Preferring quiet weekends
- C) Getting nervous before a test
- D) A lasting shift in sleep or appetite

Q5. Someone says, “I have OCD because I like my desk tidy.” What is the most accurate response?

- A) That is what OCD means
- B) OCD is a phase that everyone has sometimes
- C) OCD involves obsessions and compulsions that cause distress or impairment
- D) OCD is only about perfectionism at work

Q6. Which activity can boost mental well-being?

- A) Watching TV
- B) Sleeping
- C) Socializing
- D) Eating

Q7. According to global health data and mental health surveys, which age group is statistically more likely to experience anxiety disorders than any other age group?

- A) 65 years and older
- B) 40 to 55 years old
- C) 18 to 29 years old
- D) 5 to 12 years old

Q8. During prolonged chronic stress, which hormone is released?

- A) Oxytocin
- B) Cytosol
- C) Insulin
- D) Melatonin

Q9. How does high cultural or societal stigma surrounding mental illness primarily act as a barrier to well-being?

- A) It causes immediate biochemical corrections in neurotransmitters.
- B) It automatically enhances community-based support systems.
- C) It discourages individuals from openly discussing symptoms and seeking early professional intervention. **Correct!**
- D) It ensures all health providers offer culturally tailored treatment

Q10. What is the term for a persistent, irrational fear of a specific object, activity, or situation?

- A) Agoraphobia
- B) Obsessive-compulsive disorder (OCD)
- C) Phobia
- D) Panic disorder

Answers:

1-A; 2-B; 3-B; 4-D; 5-C; 6-C; 7-C; 8-B; 9-C; 10-C

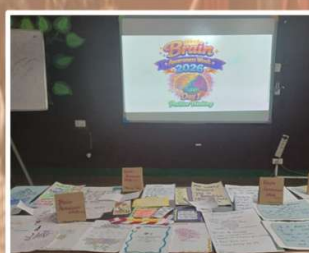
You are someone's inspiration, even if you don't know it yet.

Event-O-Graphy



BRAIN AWARENESS WEEK

17 - 27 MARCH 2025



Even the smallest light can change a dark room.

Event-0-Graphy

BRAIN GAMES

12 August 2026



Keep your face to the sunshine and you cannot see a shadow.

Event-0-Graphy

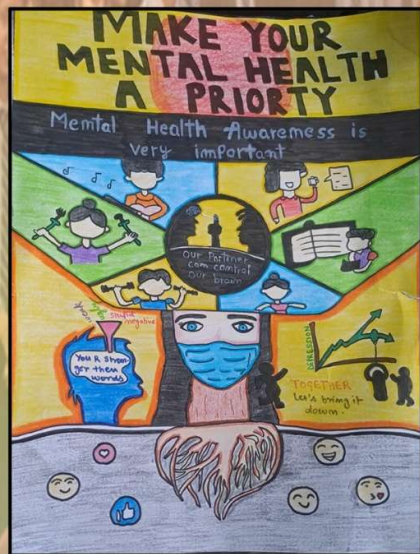
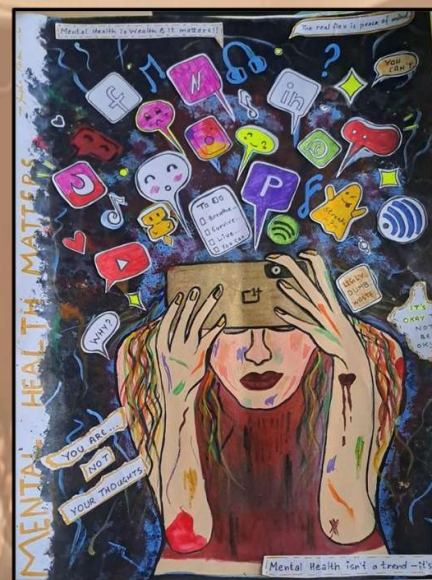


CAREER OPPORTUNITIES IN BIOTECHNOLOGY

27 July 2026



Out of difficulties grow miracles.



Our legacy, Our future



HARSH BHANDARI
Onco Technologist – NGS & Sanger Sequencing, Molecular Biology | Amrita Hospital, Faridabad
Batch - 2023-2025

“I am delighted to see Neuronest taking this wonderful initiative through Srijan. During my time in the department, the activities and interactions helped me grow beyond academics, particularly in confidence, communication, scientific thinking and expressing my ideas. Looking back, these experiences have contributed to my journey both personally and professionally. I hope Srijan becomes a platform where students feel encouraged to explore science, art, creativity and their own thoughts without hesitation. I wish the entire team the very best for this initiative and hope it continues to inspire many more students in the years ahead.”

Dear Neuronest Team,

A big congratulations on Srijan! Seeing something like this come from our department honestly feels special. It's lovely to see a space where science, creativity, and the things we don't always get to talk about in academics can come together.

My Master's days in Bhimtal gave me much more than what I learned from books and the lab. They taught me to stay curious, ask questions, make mistakes, learn from them, and slowly figure out my own path. When I look back, it's often the people, conversations, challenges, and little moments that I remember the most.

It's really nice to see the juniors creating something that gives students a chance to share their ideas and express themselves. I hope Srijan keeps growing and becomes something that brings the department together, year after year.

And to my juniors—keep exploring, keep asking questions, and don't be afraid to try something new. If you ever need a little guidance about research, higher studies, or anything along the way, feel free to reach out. I'd be happy to help.

All the best for Srijan! Keep creating and keep inspiring.



-Prerna Rana
PhD scholar, AIIMS, New Delhi
M.Sc. Biotechnology (2021-23)



Ajay (ajayneuro@gmail.com)
PhD Scholar, Dhananjay Huilgol's Lab
National Brain Research Centre,
Manesar, Gurugram
MSc Biotechnology (2021-2023)

Dear Neuronest Team and Students,
Heartfelt congratulations on the launch of Srijan, a wonderful platform for creativity, curiosity, and meaningful conversations beyond the classroom.

My time in the department shaped not only my academic journey but also taught me the value of community. Inspired by Kimi no Nawa, I often feel nostalgic for the department, the city, and the people who made those days feel like home a beautiful glimpse of a life once mine.

As you move forward, remember that setbacks are a part of growth. I faced 20-30 rejections in JRF exams and PhD applications, and each taught me where I needed to improve. Trust the process, learn from failures, and lean on your mentors. Dr. Manju Tewari Ma'am was a vital source of motivation during difficult times; every department deserves a professor like her.

Research can be demanding, with modest financial rewards, but the joy of discovery and the right people make it worthwhile. And if you ever realize this field isn't for you, remember that it is never too late to follow your true passion.

Feel free to reach out for guidance on books, PI selection, or institutes. My heartfelt thanks to Dr. Manju Ma'am for this opportunity.

Wishing Srijan and its team a meaningful and inspiring journey ahead!

Dear students, wishing the entire Neuronest team the very best for Srijan.

It's really wonderful to see students creating a space where science, creativity and well being come together.

Make the most of your college journey by balancing academics with extracurricular activities. Focus on your studies but also explore your interests, learn new skills and step out of your comfort zone. Remember, college is not just about earning a degree but also about growing as individuals. All the best for your journey ahead.



-Himshikha
MSc biotechnology
Batch 2024-26



-Devansh Goyal
M.Sc. Biotechnology,
Batch [2022-2024]

My heartfelt wishes to the Neuronest team on the launch of Srijan! Education extends far beyond marks and degrees; it is about self-discovery, building confidence, and fostering empathy. I hope Srijan continues to inspire students and create meaningful connections for generations to come.

Looking back, some of my most valuable lessons came from experiences beyond the classroom. Co-curricular activities taught me to communicate, collaborate, and face challenges with confidence. My journey has taught me the importance of patience, trusting the process, and running my own race rather than comparing myself with others.

As an average student who believed in hard work and persistence, I have learned through my career in Healthcare & In Vitro Diagnostics that sincere efforts are never wasted. Even when results take time, every experience helps us grow and prepares us for future opportunities. So, explore beyond your comfort zone, take risks, embrace mistakes, and never stop learning.

Success isn't about being the best or reaching a destination first; it is about becoming a better version of yourself with every experience. I am delighted to see Srijan bringing science, creativity, and genuine emotions together.

Wishing the Neuronest family continued success and every student a bright, confident, and fulfilling future!

Good luck to the Neuronest team for Srijan. Being the first batch, we had an opportunity to be a part of the initiation of this amazing program or initiative we can say and it is just wonderful to watch it unfold.

The one thing that I loved the most was the talks. Mam was never restrictive about talking about anything academic. She was always open in discussing those issues which the students are facing in real life like lack of focus, distractions, relationships, health, insomnia, overthinking, self-doubt, etc. and would always try to help us figure out the solution.

There was always something that we could take back, sometimes it used to be an idea, sometimes a new perspective, and sometimes just the comfort of knowing that we were not alone.

I really hope Srijan carries this spirit forward and continues to give many more students a space to think, express, connect, and grow.



-Ritika Parihar (2024-2026)
Masters in Biotechnology



THE EDITORIAL BOARD



Dr. Manju Tewari (Kumaun University, India)

Dr. Manju Tewari is a biophysicist and neuroscientist currently serving as an Assistant Professor of Biotechnology at Kumaun University. Trained at premier global institutions, including Pantnagar University, NIMHANS, NBRC, and Saint Louis University (USA), she brings expertise to our board. Beyond her research, Dr. Tewari is deeply passionate about student mental health and dedicated to bridging the gap between science and society through impactful scientific communication.



Dr. Bineet Kumar Joshi (ICFAI University, India)

Dr. Bineet Kumar Joshi is Head of the Department of Computer Science & Engineering at ICFAI University, Dehradun. With over 20 years of experience in higher education and academic leadership, his expertise spans Cloud Computing, Cybersecurity, Machine Learning, and Intelligent Systems.



Dr. Piyushi Gupta Vallur (Free lance)

Dr. Piyushi Gupta Vallur is a cancer research scientist specializing in preventive healthcare, diet, and nutrition, dedicated to translating laboratory discoveries into actionable everyday health practices. A proud mother of three lovely kids, she is also an active community educator and volunteer focused on youth development and values-based education.



Dr. Thenmoly K. Damodaran (AIMST University, Malaysia)

Dr. Thenmoly K. Damodaran is a physiologist and neuroscientist specializing in zebrafish models of neurodegenerative diseases like Parkinson's. As an educator, she employs student-centered pedagogy—using interactive 3D models, comics, and hands-on learning alongside mindfulness, breathing, and yoga practices to support academic focus and student well-being.



Dr. Bansari Shah (The University of Melbourne, Australia)

Dr. Bansari Shah is a postdoctoral researcher specializing in T cell immunology, cancer vaccine development, and the role of oral bacterial membrane vesicles in neuroinflammation and neurodegenerative disease. She is also an active clinical lecturer in oral pathology and mentor to undergraduate and postgraduate students.



Dr. Subhashika Govindan (IIT Madras, India)

Dr. Subashika Govindan is a neurobiologist and stem cell biologist with over 15 years of experience in tissue engineering, brain organoid modeling, and gene editing. She has expertise in studying brain development and neurological disorders, integrating in vitro, in vivo, and in silico tools. Proficient in grant writing, scientific writing & communication.



Meet The Team

Behind the vision—a passionate group of minds



Hi, I'm Saumya Joshi, a dreamer with a curious mind, a positive soul, and a heart full of ambitions.



Hi, I'm Komal Awasthi, an MSc Microbiology student aspiring to deepen my scientific knowledge and contribute to the field of microbiology. As the event photographer for our magazine, I love capturing moments that bring stories to life. I believe every photograph holds a story worth preserving.



Hi, I'm Meenakshi Goswami, I am little like a gene, full of thoughts and emotions, waiting to be translated into something meaningful.



Hey! Beauty Kakati this side, one of the editors of Srijan. By day I'm busy growing cultures in the lab, and by night I grow sentences, which, I promise, are far less likely to get contaminated. I love writing, and I'm the one who tweaks a background until it looks just right and turns messy thoughts into words that actually make sense. Still hoping my best sentence hasn't been written yet!



Hi, I'm Bhumika Martolia supporting the tech team. I find joy in the art of crochet and love turning little moments into aesthetic videos.



Hi, I'm Medini Pant, a creative soul who finds joy in little adventures and the comfort of her own world. Whether I'm travelling to new places, painting my thoughts on a canvas, or baking something sweet, I love finding beauty in the little things and creating moments that feel uniquely mine.



Hi, I'm Harshita Kholia, someone who loves weaving creativity into every little thing. Whether I'm discovering fashion trends, dancing to my favourite beats, or getting lost in music, I find my happiness in the things that let me be unapologetically myself.



Hi, I'm Vani Saini, an aspiring scientist betting on plants to fix the environmental mess we made.



Hi, I'm Priyanshi, the editor of Srijan and an aspiring biotechnologist with a love for writing, reading, and getting lost in movies. I enjoy stories in all their forms—whether they're written in books, captured on screen, or waiting to be told in my own words. Somewhere between science and storytelling, I find my little world.



Rakshit Negi, Leading the tech team. They say pen down the thoughts and process them with a mic—that's how art is created



Hey, Im Jiwisha Digari, a creative soul behind the lens, capturing little moments, embracing the camera, and finding beauty in life's simplest details.



Hi, I'm Ishita Chandra, Quiet by nature, a reader by choice, and endlessly curious about the microscopic world.



Hi, I'm Vitasta Bora, and listening, observing and writing my thoughts into words is just my way of learning from the world around me.



Hi, I'm Jigyasa Sharma, a thoughtful soul with a curious mind and a love for words. As one of the writers of this magazine, I enjoy turning thoughts into stories, crocheting little creations, and finding comfort in my own quiet nook, where imagination has room to wander.



Hi, I'm Maanvi, an aspiring biotechnologist. I love art and craft, getting lost in movies and music, and travelling to new places with my favourite people. I find joy in new experiences and believe life is all about learning, growing, and making memories along the way.

You are not alone

Sometimes, talking is the first step.

Your feelings matter.

It's okay to ask for help.

Tele-MANAS
Mental Health Support

14416

or **1-800-891-4416**

24x7 mental health support and assistance across India.

Talk.
Be heard.
Find support.



AASRA
(Emotional Support)

9820466726

24x7 support for anyone in emotional distress.



iCALL
(TISS)

9152987821

24x7 counselling and emotional support (in multiple languages).



Vandrevala Foundation

1860 266 2345

24x7 mental health support and suicide prevention.



Emergency
(India)

112

For immediate assistance in case of danger to life or safety.



Child Helpline

1098

For children and adolescents who need help, protection or support.



Women Helpline

181

For women seeking support and assistance.



Senior Citizens Helpline

14567

Support for senior citizens in need.



National Suicide Prevention Helpline (KIRAN)

1800-599-0019

24x7 support for people in suicidal distress.

Asking for help is a sign of strength,
and there is always someone who will listen.



