



THE FRONTIER

SDU MONTHLY RESEARCH ROUND-UP

• EDITORIAL BOARD & ADVISORY COUNCIL •



Patrons

Dr P Mahalingam
Founder Chairman

Dr Santosh Mahalingam
Vice Chairman



Editor-in-chief & Issue Editor

Dr V.N. Mahalakshmi
Vice Chancellor, SDU



Executive Director

Dr Akshay Bhargava
Director Research, SDU



Managing Editor

Dr Jyoti Batra
Dean Research, SDU



Associate Editor

Dr Shuvojit Moulik
HOD, Dept. of Biomedical Research



Technical & Review Editors

• **Dr. Sayantani Karmakar**
Assistant Prof., DBMR

• **Dr Abhisek Pandeya**
Assistant Prof., DBMR

• **Dr Sanchaita Mishra**
Assistant Prof., DBMR

• **Dr Gunjan Uttam**
Assistant Prof., DBMR

• **Dr Surbhi Kumari**
Assistant Prof., DBMR

• **Dr Kriti Aggarwal**
Faculty, Dept. of Periodontics



Student Editor

Ms. Mamta Bishnoi
Medical



Creative Director

Ms Akansha Chandel
Institutional Design Lead



Circulation & Media Relations

The SDU Institutional Branding Team

• JULY 2026 | VOLUME 1 | ISSUE 1 •

The Executive Desk

Welcome to the very first issue of The Frontier—our brand-new backstage pass to all things innovation, discovery, and breakthrough thinking across the Santosh campus!

Let's be honest: science shouldn't feel hidden away in a sterile lab or buried under heavy jargon. That is why we are launching this monthly space. Beyond tracking our expanding research footprint, The Frontier is here to connect and bond our incredible community under one digital roof. Consider this our collective high-five to celebrate your hard-earned successes, spark the creative curiosity, and enthusiastically fuel our inner innovators.

Our goal is to make science accessible and exciting. Every month, we are serving up the coolest breakthroughs—both from our own labs and hubs to around the globe—cooked down into simple, exciting language. Plus, we will keep a sharp eye on the horizon to map out fresh extramural funding opportunities to give your next big idea a massive head start.

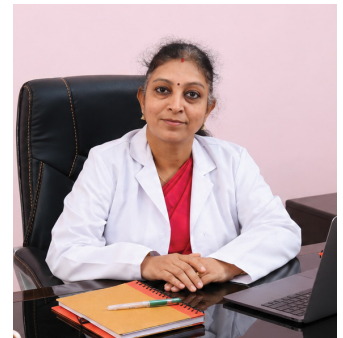
To keep this engine running smoothly, our core institutional framework and dedicated editorial squad are all-in for the long haul. But let's be real: the true lifeblood of this initiative is you. We are throwin' open the doors and warmly welcoming your wildest ideas, contributions, and proudest milestones.

Let's collaborate, break the mold, and make some serious waves in healthcare innovation together!

Happy reading!

Catch you in the next issue,

Prof. Dr. V. N. Mahalakshmi
Vice Chancellor, SDU



Prof. Dr. V. N. Mahalakshmi
Vice Chancellor, SDU



SANTOSH
MEDICAL COLLEGE & HOSPITALS



SANTOSH
DENTAL COLLEGE & HOSPITALS



SANTOSH
Faculty of Allied Health Sciences

The Global Narrative

The Regeneration Frontier: Are We One Step Closer to Regrowing Human Limbs?

SOURCE: Wake Forest University | May 9, 2026

Imagine a future where losing a limb doesn't mean a lifetime of prosthetics – but instead, the possibility of growing a new one.

For decades, this idea belonged more to science fiction than science. Researchers studied remarkable creatures like axolotls and zebrafish, capable of regenerating entire limbs, while mammals – including humans – appeared to lack this extraordinary ability.

A groundbreaking study from Wake Forest University is now changing that narrative.

Scientists identified a family of genes known as 'SP genes' that function as master switches for regeneration. These genes were found not only in highly regenerative species such as axolotls and zebrafish but also in mice. *The surprise? When researchers disabled these genes, regeneration stopped completely.* In other words, these genes appear to hold the biological instructions for tissue and bone regrowth across very different species.

The question is no longer: 'Can mammals regenerate?' The question is now: 'How can we activate the regenerative potential they already possess?'

The Breakthrough

Using a gene-therapy strategy inspired by zebrafish biology, researchers were able to partially restore regenerative capabilities in mice. That may sound modest—but in regenerative medicine, it's a giant leap. Why? Because mice are mammals. For the first time, scientists have demonstrated that the genetic machinery required for regeneration is not exclusive to 'super-regenerator' species. The blueprint exists within mammals too.

Why the World Is Paying Attention

This discovery shifts one of the most important assumptions in modern medicine. The question is no longer: 'Can mammals regenerate?' The question is now: 'How can we activate the regenerative potential they already possess?'

If future studies translate these findings into humans, the implications could be transformative for trauma care, orthopedics, rehabilitation medicine, and tissue engineering.



Looking Ahead

We're not regrowing human arms tomorrow—but the door has been opened. The future of medicine may move beyond replacing damaged tissues with artificial substitutes and toward helping the body rebuild itself. From laboratory benches to clinical breakthroughs, the regeneration frontier is rapidly becoming one of the most exciting stories in global biomedical science.

Journal Showcase

BREATHING EASY: Dr. Deepanshi Saxena Takes on Diabetes Needs!

Q1 Journal | Allied Health Sciences

Dr. Deepanshi Saxena
Assistant Professor
Department of Community Medicine
Santosh Medical College, Ghaziabad

contributed to this important field through her publication in a Q1 journal:

"Efficacy and Safety of Inhalational Insulin Compared with Rapid-Acting Insulin Analogs: A Systematic Review and Meta-Analysis."

For many people living with diabetes, insulin injections are as routine as morning tea – but that doesn't mean they're loved!

Breathe In, Sugar Down! The study found that inhaled insulin performs comparably to rapid-acting insulin injections in managing post-meal blood sugar levels. For patients who dread daily injections, inhaled insulin could be a welcome alternative, potentially improving treatment adherence and overall quality of life.

A Small Catch—Keep an Eye on the Lungs: While it avoids the discomfort of repeated injections, inhaled insulin requires periodic monitoring of lung function to ensure safe use.



Scan this QR code to read the full article.

Research Open House is Coming This August!

Step into a world of ideas, innovation and discovery!

- Research scholars showcasing their work
- Opportunities to ask questions and exchange ideas
- Fresh perspectives across diverse research domains
- Interactive poster and presentation sessions
- Inspiring academic conversations and networking

What to expect?

- Bigger ideas
- Sharper questions
- Meaningful discussions
- Innovative research displays
- New connections and collaborations

Whether you are...

- Presenting your latest findings
- Exploring emerging research trends
- Seeking feedback on your work
- Looking for inspiration for your next project



SAVE THE DATE

2nd WEEK OF AUGUST

Peek into groundbreaking ideas, connect with researchers and discover where curiosity can lead.

Altmetric Highlight

MEDCAST CORNER: Science is Trending!

Who says research can't steal the spotlight? This June, Santosh MedCast - Healing Power Within proved that science and YouTube are a winning combination, bringing cutting-edge biomedical research to audiences in an engaging and accessible way.

Stem Cells & Regenerative Medicine Explained, featuring **Dr. Abhishek Pandeya**, simplified the science behind stem cells and regenerative medicine while showcasing their transformative potential in modern healthcare. With 336 views and 9 likes, the episode demonstrated that regenerative medicine is also regenerating audience interest!



STEM CELL



Power of T-Cells & Future Research, featuring **Dr. Sanchaita Mishra**, took viewers into the fascinating world of T-cells, highlighting their critical role in immunity, disease treatment, and the future of biomedical research. The episode received 326 views and 19 likes, proving that our immune system has quite a fan club!



T-CELL

Every view, like, and share helps extend the reach of Santosh's research beyond the laboratory, making scientific discoveries more accessible to students, researchers, healthcare professionals & the wider community. One episode at a time, Santosh MedCast continues to prove that great science isn't just worth publishing—it's worth watching too.

Extramural Funding Opportunity: ICMR Invites Applications for Centre for Advanced Research (CAR) - 2026

Looking to secure a prestigious extramural research grant? Here's an opportunity to take your research to the next level!

The **Indian Council of Medical Research (ICMR)** has announced the **Call for Centre for Advanced Research (CAR) - 2026** under its **Extramural Research Programme**. The scheme supports multidisciplinary research teams working on innovative, high-impact biomedical research aligned with national health

priorities. Selected Centres receive funding to establish advanced research facilities and generate translational outcomes with long-term societal impact.

Last Date for Submission:
31st August 2026 (5:00 PM)

Faculty members planning to apply for extramural research funding are encouraged to take advantage of this prestigious opportunity and prepare strong collaborative proposals.



Great research deserves great support—let your next breakthrough begin with an ICMR Extramural Grant!

Author Spotlight

RESEARCH ROYALTY ALERT: When Citations Speak Louder Than Words!

Ever wondered what separates a good university from a great one? Here's a clue: it's not just classrooms, exams, or endless cups of coffee during deadlines – it's research that creates real-world impact. This month, we shine the spotlight on someone who proves that curiosity, dedication, and a passion for discovery can take Santosh to the global stage.



Prof. (Dr.) Moattar Raza Rizvi
Dean - Allied Health Sciences

While most of us are counting steps on our fitness trackers, Dr Rizvi's research is making strides worldwide in Exercise Physiology, Physical Therapy, and Diabetes Research.

Every research question asked today could become tomorrow's breakthrough in patient care. Big discoveries often begin with a simple question: 'What if?'

Keep asking. Keep exploring. Keep elevating Santosh.
Because the next citation story could be yours.



*Every citation adds to the
reputation of our institution.
Every publication strengthens
our academic community.*

ICMR Short-Term Studentship (STS) Launchpad and Orientation Programme

The Office of Research successfully organised the ICMR Short-Term Studentship (STS) Launchpad and Orientation Programme 2026, aimed at inspiring undergraduate dental students to explore the world of research and innovation. The session featured insightful

addresses by esteemed academic leaders, guidance on the ICMR-STS application process and inspiring experiences shared by past STS awardees. From understanding research fundamentals to learning how to develop impactful proposals, students gained valuable direction and

motivation for their academic journey.

The programme reflected the institution's strong commitment towards nurturing young researchers and encouraging evidence-based learning in dental education.



Capacity Building

LEVELING UP: Because Great Researchers Aren't Born... They're Trained!



This month, our university rolled out a power-packed **Capacity Building & Mentoring Excellence Program** for doctoral guides, where learning took center stage and experience met innovation.

From exploring the **360° Skills Framework** to learning the art of mentoring, pushing research boundaries, tackling publication ethics, and solving real-world supervisor-scholar challenges, the sessions were packed with insights, discussions, and plenty of "Why didn't I know this earlier?" moments.

The message was loud and clear:

Better mentors create better researchers, and better researchers create a brighter future.

SANTOSH Deemed to be University (Established on 7 of the UGC Act, 1956)



Mentoring Excellence

A Comprehensive One-Day
Orientation for PhD Supervisors

Program Overview

By the end of this one-day program, supervisors will be able to:

1. **Define** the boundaries of "high-impact" research that aligns with national initiatives like Viksit Bharat.
2. **Navigate** complex regulatory frameworks (UGC) with zero-error compliance.
3. **Implement** advanced mentorship models to optimize scholar productivity and mental well-being.
4. **Uphold** the highest standards of scientific integrity and ethical conduct.

The 360-Degree Skills Framework for PhD Supervisors

This framework ensures that supervisors are equipped to handle the multifaceted demands of modern academia, moving beyond simple oversight to high-impact leadership.



19th June 2026 | 09:30 AM to 04:00 PM

Extramural Engine

Nanoparticles, Cancer & a Big Win for Santosh! | Department of Biomedical Research | CRF

While most people dream of attracting attention, cancer cells definitely shouldn't. Fortunately, Dr. Shuvojit Moulik from the Department of Biomedical Research is working on exactly that problem – and the scientific community has taken notice

ICMR-DHR Extramural Grant (IIRPSG-2025)

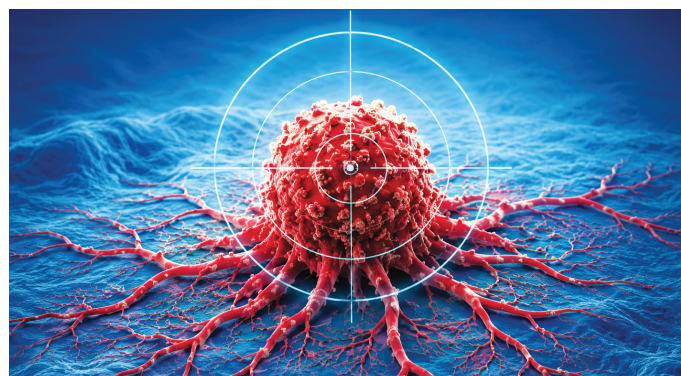
Project: Effective anticancer therapeutics induction by SPION-based thermosensitive drug eluting gels/hydrothermal scaffold.



Dr. Shuvojit Moulik

Professor & HOD
Department of Biomedical Research

Indian Council of Medical Research (ICMR) and the Department of Health Research (DHR), Government of India, highlight the growing research strength of the Department of Biomedical Research and CRF.



*At Santosh, we're not just
thinking outside the box – we're
thinking at the nanoscale.*

IPR Portfolio

INNOVATION SPOTLIGHT: Patent Granted to Dr. Abhishek Pandya for Cancer Nanotechnology Innovation

Congratulations to Dr. Abhishek Pandya, Department of Biomedical Research (DBMR), Central Research Forum (CRF) on the successful grant of a patent for the invention, "Medical Apparatus for Preparation of Nano Formulation for Cancer Treatment."

This innovative technology supports the development of **nanotechnology-based cancer therapeutics** and targeted drug delivery systems, marking an important milestone in translational healthcare research. The achievement further strengthens Santosh Deemed to be University's growing intellectual property portfolio and culture of innovation.

Congratulations to the inventor and the entire DBMR team on this remarkable milestone. We look forward to many more innovations shaping the future of healthcare!



Certificate of Registration for a UK Design

Design number: 6502513

Grant date: 13 February 2026

Registration date: 29 January 2026

This is to certify that,

in pursuance of and subject to the provision of Registered Designs Act 1949, the design of which a representation or specimen is attached, had been registered as of the date of registration shown above in the name of

Vinay Bharadwaj Tatipamula, Mrs Apurva Shelar Pawar, Dr. Raman Yadav,

Venkateswarlu Samunooru, Dr. Abhishek Pandeya, Dr. Ashwin Kumar Saxena,

Dr Rajalakshmi Ganesan Rajamma, Dr. Banu Gnanavel, Ananya Bhowmick,

Ayan Goswami, Dr. Gaurav Tiwari

in respect of the application of such design to:

Medical Apparatus for Preparation of Nano-formulation for treatment of cancer

International Design Classification:

Version: 15-2025

Class: 24 MEDICAL AND LABORATORY EQUIPMENT

Subclass: 01 APPARATUS AND EQUIPMENT FOR DOCTORS, HOSPITALS AND LABORATORIES

Adam Williams

Comptroller-General of Patents, Designs and Trade Marks

Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.

Intellectual Property Office is an operating name of the Patent Office

www.gov.uk/ipo



Bridging Beyond Boundaries: Building Bonds Beyond Work

Last month, our team briefly traded meetings for memories! From friendly challenges and endless laughter to discovering hidden talents (and a few surprisingly competitive colleagues), the Team Building Activity brought everyone closer. The result? Stronger bonds, brighter smiles, and a reminder that the best teamwork begins with enjoying the journey together.

Mission accomplished: Better teamwork, happier hearts, and plenty of stories to laugh about at the next coffee break!

Academic Integrity Corner

Because in the Age of AI, Integrity Is the One Thing You Can’t Automate!

1. Research Integrity in the AI Era

Smart Research Begins with Ethical Research.

Research is more than publishing results—it is a commitment to honesty, transparency, and original thinking. As artificial intelligence becomes a part of everyday academic writing, maintaining research integrity has never been more important.

Let technology support your work—but let your intellect remain at the heart of every thesis, dissertation, and publication.

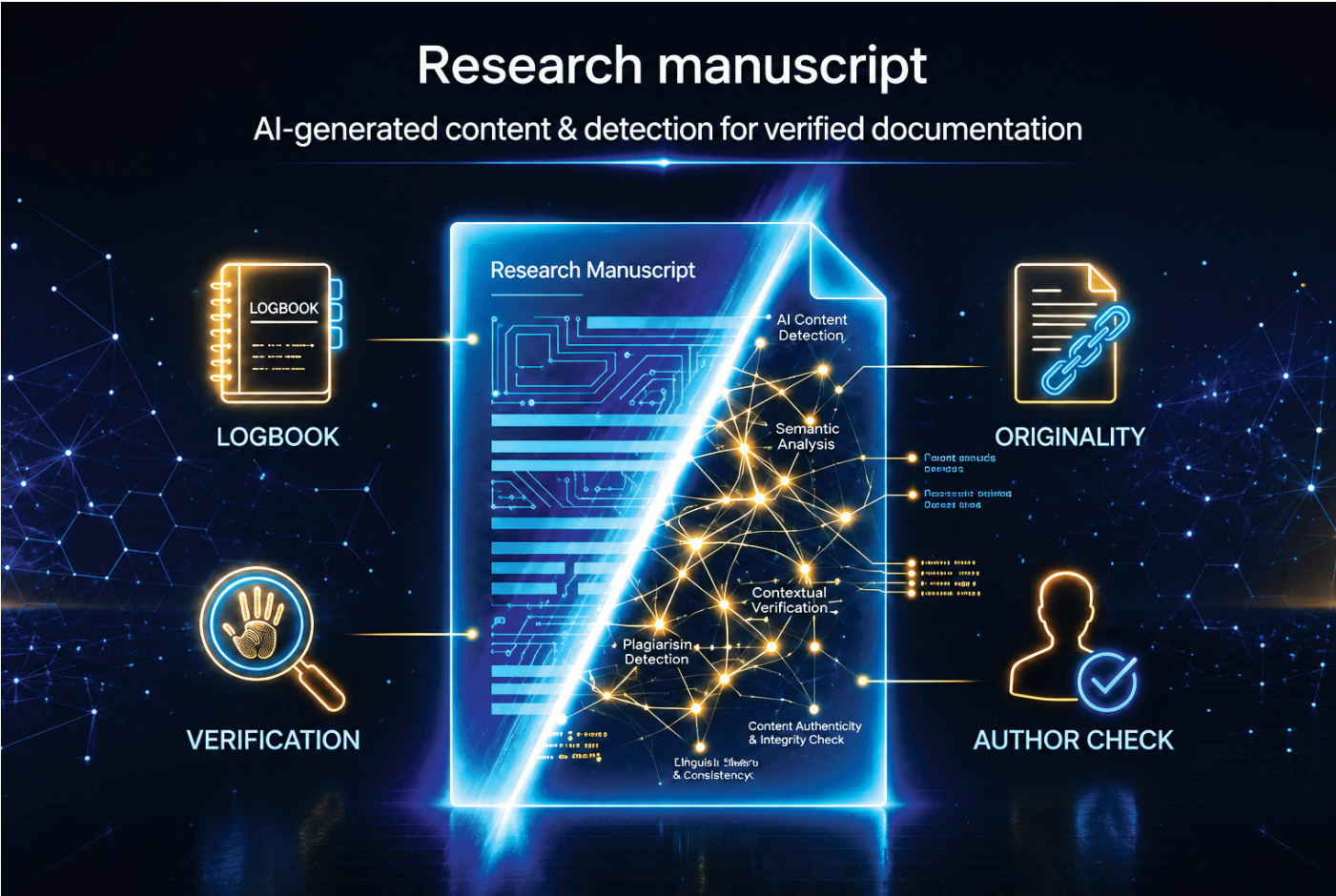


Image Source: Enago.com

UGC & AI Plagiarism: What Every PhD Scholar Should Know (2026)

AI tools such as ChatGPT, Gemini, and Grammarly AI can be valuable research assistants—but they are not a substitute for original scholarship.

While the UGC Academic Integrity and Prevention of Plagiarism Regulations, 2018 remain the governing framework, universities are increasingly using AI-detection tools alongside plagiarism software. Undisclosed AI-generated content may be treated as plagiarism, even if the similarity score falls within the acceptable range.

SIMILARITY INDEX	UGC STATUS
Below 10%	Safe
10-40%	Revise & Resubmit
40-60%	Debarred for 1 Year
Above 60%	Registration May Be Cancelled

Researcher’s Reminder

Think. Write. Verify. Then use AI to polish—not to create your research.

Original ideas, transparent reporting, and ethical use of AI are the cornerstones of responsible research.

Op-Ed from Issue Editor

Because Trust in Research Is Earned, Not Generated!

2. AI Can Write a Paper... But Can It Defend It?

"Why should researchers still learn academic writing when AI can write an entire paper in seconds?"

It's a question many researchers are asking—and one that deserves careful thought.

Yes, AI can generate abstracts, summarize literature, improve language, suggest titles, and even produce a manuscript that looks publication-ready. But **good research has never been about writing words—it has always been about communicating truth.**

*AI can generate text.
Only a researcher can
generate knowledge. And
only integrity can turn
knowledge into trusted
science.*



A research paper is not judged by how fluent it sounds, but by **the quality of its questions, the strength of its evidence, the logic of its arguments, and the integrity of its conclusions.** AI can arrange sentences, but it cannot accept responsibility for scientific accuracy, ethical decisions, or the impact of the findings.

In the age of AI, researchers must focus not only on what they write, but on why and how they communicate science. Every research output—whether a journal article, grant proposal, conference presentation, policy brief, social media post, or AI-assisted manuscript—should be:

- **Visible** - Reach the right audience.
- **Accessible** - Be clear and understandable.
- **Meaningful** - Explain why the research matters.
- **Credible** - Earn trust through evidence and transparency.
- **Valid** - Faithfully represent the research without exaggeration or distortion.

AI is transforming the way we write, but it should never replace the judgment, ethics, and critical thinking that define a responsible researcher.

Source: Tress Academic. Research Communication in the Age of AI. Available at: **Research Communication in the Age of AI** (Accessed: 09 July 2026).

Research Matchmaking

Seeking the Perfect Research Partner!



Dr. Manisha Mona

**Seeks
Partner**
→



Research Project

Effect of Yoga Nidra on Flourishing Among Medical Students: A Parallel-Arm Randomised Controlled Trial – an interdisciplinary collaborative study that explores the impact of Yoga Nidra on psychological well-being, resilience and flourishing among medical students, using rigorous clinical research methods.

Research Leads

Dr. Manisha Mona (Faculty of Yoga, Allied Health Sciences, Santosh Deemed to be University) & Mr. Rahul Garg, Professor, NRCVEE, IIT Delhi (Principal Investigator).

Looking For

Faculty members and researchers from Medical Education, Psychiatry, Psychology, Physiology, Community Medicine, Public Health Dentistry and Allied Health Sciences to collaborate in this innovative research initiative focused on mental health promotion and evidence-based integrative healthcare.

Desired Qualities

- Passion for research
- Commitment to evidence-based practice
- Interest in mental health promotion
- Ability to work harmoniously in multidisciplinary teams
- Willingness to co-create impactful scientific outcomes

Interested?

Eligible researchers are invited to express their interest and join this promising academic alliance that aims to create meaningful impact in student mental health and integrative healthcare research.

Contact

✉ drmanisha.ahs@santosh.ac.in



Dr. Gunjan Uttam

**Seeks
Partner**
→



Research Project

Development of an Aptamer-Functionalized Superparamagnetic Iron Oxide Nanoparticle (SPION) Platform for Targeted Delivery of PLK1 Inhibitors in Ovarian Cancer—advancing precision oncology through targeted drug delivery, molecular recognition and magnetic hyperthermia.

Research Lead

Dr. Gunjan Uttam, Department of Biomedical Research, Santosh Deemed to be University

Looking For

Collaborators from Pathology, Obstetrics & Gynaecology, Oncology, Radiology and Pharmacology who share a passion for translational cancer research.

Desired Qualities

- Passion for translational cancer research
- Interest in precision oncology and nanomedicine
- Commitment to evidence-based scientific investigation
- Ability to work effectively in multidisciplinary teams
- Enthusiasm for developing innovative therapeutic strategies with real-world clinical impact

Interested?

Eligible researchers are invited to express their interest and join this promising academic alliance aimed at shaping the future of targeted ovarian cancer therapy.

Contact

✉ gunjanuttam.crf@santosh.ac.in

Student Corner

Excellence Beyond the Classroom



Let's take this opportunity to congratulate **Ms. Soni Kumari, Medical Biochemistry, Santosh Deemed University**, who was selected as the best candidate among 39 participants to bag the role of **Research Assistant!** What's more interesting is that the project she will work on is India's first to build a patentable framework for 1000 women athletes with disabilities!



"Great universities are not just built in laboratories and lecture halls – they are built on the energy, enthusiasm and community spirit of their students."



Congratulations to **Ms. Aditi Jaiswal, 1st Year BDS student of Santosh Dental College** on being selected as a **Campus Ambassador for E-Cell, IIT Bombay**.

The role reflects the leadership, initiative and ambition that define the Santosh community – and it's a proud moment to see our students building opportunities and representing excellence beyond academics.

Grant Alert: Extramural Grant Call Open



FUNDING OPPORTUNITY ALERT: ICMR-NMC Extramural Research Grant 2026

Call for Proposals Now Open!

The Indian Council of Medical Research (ICMR), in collaboration with the National Medical Commission (NMC), has announced the 2026 Extramural Research Grant Call under the theme:

"Research for Strengthening and Enhancing Quality of Medical Education."

This joint initiative aims to support innovative, evidence-based research that can improve the quality, effectiveness, and future of medical education in India. Faculty members with research interests in medical education are encouraged to take advantage of this prestigious funding opportunity.

Who Should Apply?

Faculty members, researchers, and medical education professionals with impactful research ideas focused on strengthening undergraduate, postgraduate, competency-based, technology-enabled, assessment, faculty development, or other quality improvement initiatives in medical education.

Don't miss this opportunity to secure national-level extramural funding and contribute towards transforming medical education in India. Interested faculty members are encouraged to begin preparing their proposals well in advance of the submission deadline.

For detailed guidelines and the application process, please refer to the official ICMR-NMC call for proposals.

IMPORTANT DATES

- Online Application Opens: **25 June 2026**
- Proposal Submission Deadline: **21 Aug. 2026 (5 PM)**



Honours & Laurels

Phoenix Health Innovation Awards 2026 | Health AI Con 2026

Santosh Deemed to be University Wins AI Health Innovation Implementation Award!

Some institutions talk about the future of healthcare. Others build it. We are delighted to share that Santosh Deemed to be University has been awarded the prestigious

'AI Health Innovation Implementation Award' at the Phoenix Health Innovation Awards 2026, held during Health AI Con 2026.



In simple terms: while everyone is discussing how Artificial Intelligence might transform healthcare someday, Santosh is already putting it to work today.

Our university was recognised for bridging the gap between innovative technology and real-world patient care—a combination that's easier said than done!

And let's be honest—it's always nice when hard work comes with a trophy! This national recognition reinforces Santosh's growing reputation as a hub of innovation, research excellence and future-ready healthcare education. At Santosh, we're not just keeping up with the future—we're helping design it.