

DEPARTMENT OF BIOLOGICAL SCIENCES

MASTER'S IN BIOLOGICAL
SCIENCES
2022-2024

.....
**PLACEMENT
BROCHURE**
.....



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SUNANDAN DIVATIA SCHOOL OF SCIENCE



Dedicated to academic excellence, offering undergraduate and postgraduate programs in scientific disciplines like chemistry, psychology, mathematics and biological sciences

Rigorous curriculum and state-of-the-art facilities, cutting edge research and experimentation, collaborations with industry partners and research institutions, vibrant culture of Innovation and discovery

Promoting scientific literacy through outreach initiatives, workshops, seminars, and public lectures, collaborating with local schools, government agencies, and fostering an environment of curiosity and purpose

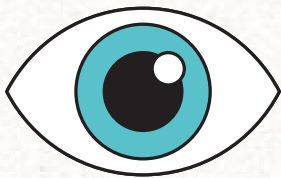
The Sunandan Divatia School of Science (SDSOS) is a prominent institution in Mumbai, India, a beacon of scientific education and research excellence. Established in honor of the late philanthropist and visionary leader, Mr. Sunandan Divatia. SDSOS aims to foster a culture of scientific inquiry and critical thinking. Its mission is to equip young minds with the skills and knowledge needed to tackle the modern world's complex challenges.

ABOUT US



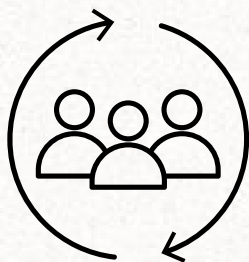
Our mission

- Quality education
- Extensive research training
- Translate research outcomes
- Collaboration with Science and Technology Institutions



Our vision

- Global recognition as premier institution
- Publications in reputed journals



Our values

- Transparency
- Integrity & Ethics
- Interdisciplinarity
- Collaboration
- Inclusivity

FROM THE DEAN'S DESK



The SVKM's NMIMS Sunandan Divatia School of Science, was born out of the foresight of the University with a view to provide undergraduate and postgraduate students an opportunity to venture into the fascinating world of Science. The School aspires to be Centre of Excellence by creating a conducive student-centric environment that supports high quality teaching and research in niche areas of Science and Technology.

The UG and PG programs in Biomedical/ Biological Sciences are designed to develop student's scientific, experimental and analytical skills. Further, the research-intensive and laboratory-based curriculum covers contemporary subjects and is intended to meet the needs of the ever-evolving chemical and pharmaceutical industry,

medical diagnostics industry, clinical research organizations and research institutions. Our students have been trained by excellent faculty who have a strong academic research background. Besides, the students are exposed to state-of-the-art infrastructure and equipment to enhance their hands on skills. Moreover, the compulsory research project as part of the curriculum, develops their technical skills and makes them ready to face the industry. To ensure a holistic development of the student, besides academics, students are a part of various committees/cells to hone their creative, social, cultural and interpersonal skills.

I take the pleasure in inviting companies to our school, for placements. Our effort is to enable interaction between students and companies to find the best match between their aspirations and requirements.



**DR. JAYAKUMAR
SINGH BONDILI**
- DEAN, SDSOS

DEPARTMENT OF BIOLOGICAL SCIENCES

COURSES OFFERED



M.Sc. Biological
Sciences



Integrated M.Sc.-Ph.D.
Biological Sciences



Ph.D. Biological
Sciences



5- Year Integrated
M.Sc.in Biomedical
Sciences



BATCH PROFILE



SMERA PATNAIK

- B.Sc. Zoology, Gujarat University
- **Summer Internship:** Haystacks Analytics, IIT-Bombay
- **Dissertation:** CSIR IICT, Hyderabad



SHREEYA MUJUMDAR

- B.Sc. Life Science, Mumbai University
- **Summer Internship:** Bhabha Atomic Research Centre, Mumbai
- **Dissertation:** Epigeneres Biotech Pvt. Ltd., Mumbai



SHARDUL RATHOD

- B.Sc. Microbiology, Mumbai University; PGPM in Operations
- **Dissertation:** Kokilaben Dhirubhai Ambani Hospital, Mumbai

BATCH PROFILE



HELLUSKA GOYAL

- B.Sc. Biochemistry, Mumbai University
- **Summer Internship:** Calantha Biotech, Mumbai
- **Dissertation:** Kokilaben Dhirubhai Ambani Hospital, Mumbai



APARNA MENON

- B.Sc. Microbiology, Mumbai University
- **Dissertation:** Epigeneres Biotech Pvt. Ltd., Mumbai



THANISHTA KUMAR

- B.Sc. Life Science, Mumbai University
- **Summer Internship:** CSIR-CCMB, Hyderabad
- **Dissertation:** CSIR-CCMB, Hyderabad



SHARANYA PURANDARE

- B.Sc. Microbiology, Mumbai University
- **Summer Internship:** Bhabha Atomic Research Centre, Mumbai
- **Dissertation:** Kokilaben Dhirubhai Ambani Hospital, Mumbai

BATCH PROFILE



VANSHIKA MOHINDROO

- B.Sc. Life Science, Delhi University
- **Summer Internship:** INMAS, DRDO
- **Dissertation:** Institute of Nuclear Medicine & Allied Sciences (INMAS), DRDO, New Delhi



NIYATI SHROFF

- B.Sc. Botany, Mumbai University
- **Summer Internship:** Rapture Biotech,
- **Dissertation:** Epigeneres Biotech Pvt. Ltd., Mumbai



SANA BEMAT

- B.Sc. Zoology, Mumbai University
- **Summer Internship:** Epigeneres Biotech Pvt. Ltd., Mumbai
- **Dissertation:** Kokilaben Dhirubhai Ambani Hospital, Mumbai

WHY RECRUIT US ?



ROBUST ACADEMIC FRAMEWORK

- Innovative Practical Pedagogies
- Strong technical literacy



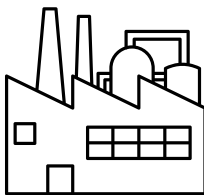
GLOBAL EDUCATION APPROACH

- Global perspective on problem solving skills
- Global level of practical training



STRONG INDUSTRY CONNECT

- NMIMS's Centre of Scientific Excellence
- Industry Connect Initiatives



VIBRANT LEARNING ECO SYSTEM

- Multilateral development
- Industry Projects

M.Sc. Biological Sciences Curriculum

SEMESTER 1

- Cell Biology
- Research Methodology
- Molecular Biology
- Biostatistics
- Human Evolutionary Genetics
- Analytical Techniques
- Soft Skills

SEMESTER 2

- Recombinant DNA Technology
- Omics
- Bioinformatics
- IPR and Patenting, Entrepreneurship
- Introduction to Organizational Structure and Function

SEMESTER 3

- Molecular Oncology
- Immunology
- Computational Tools in Biology- LaTeX
- Research Proposal Presentation
- Employability Skills
- Research Ethics

SEMESTER 4

- Dissertation

ELECTIVES - SEM 2

- Stem Cell Biology
- Biomaterials and Tissue Engg.
- Nanobiology

ELECTIVES - SEM 3

- Introduction to Pharmacology
- Molecular Medicine
- Introduction to Programming- R and Python Programming

Practical Skills

Molecular Biology & Recombinant DNA Techniques



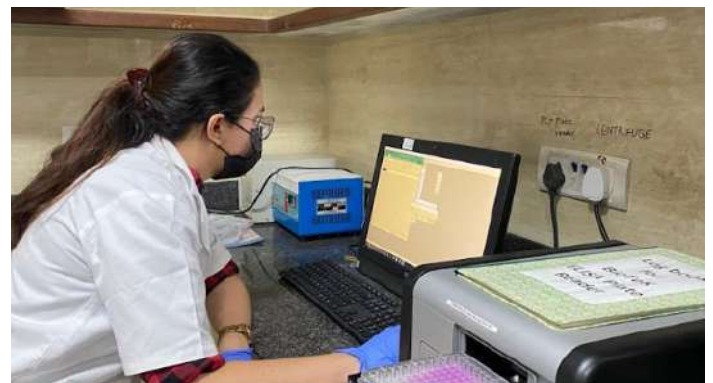
Agarose Gel Electrophoresis



Non-refrigerated Centrifuge



Incubator-shaker



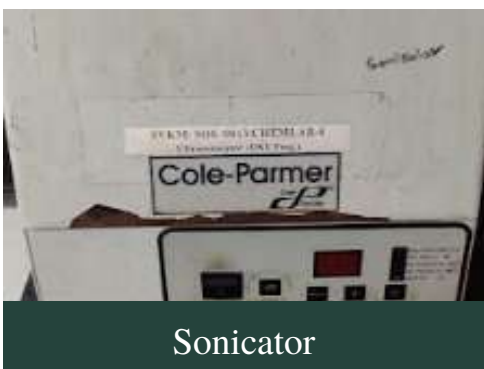
ELISA Plate Reader



Gel Documentation System



Water Bath



Sonicator



Microbial Culture



Quick-spin Centrifuge

Practical Skills

Animal Tissue & Stem Cell Culture Techniques



Cell Culturing



Inverted Phase Contrast Microscope



Biosafety Cabinet



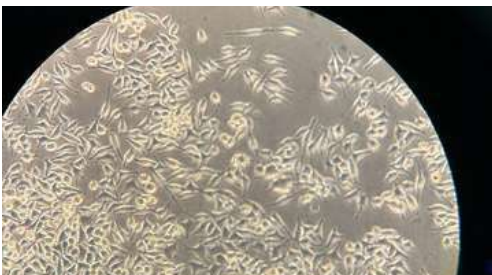
Cryopreservation Tank



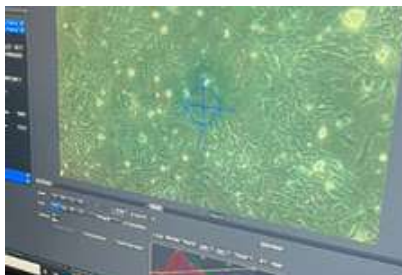
-20°C Deep Freezer



Real-Time PCR and Thermal Cycler



Cell Culturing



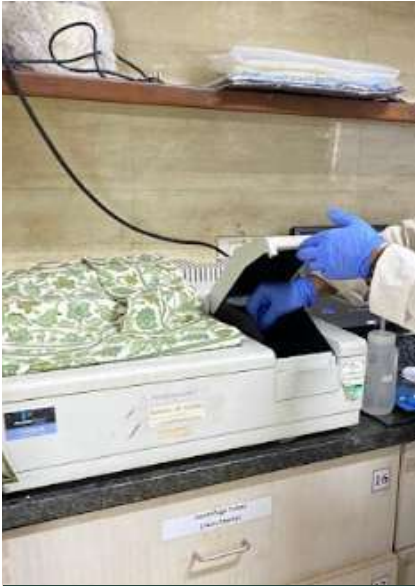
Cell Growth Analysis



PCR

Practical Skills

Analytical Techniques



UV-Vis
Spectrophotometer



HPLC



Infrared Spectroscopy
(FTIR)

IPR and Patenting- Moot Court



We delved into IPR and patents academically, complementing our studies with a dynamic moot court experience, fostering deeper understanding and enjoyment of the subject.

Internships

STUDENT	PROJECT TASK AND INSTITUTE	TENURE
Shreeya Mujumdar	Preparation of Peptide Encoded Liposomal System for Targeted Drug Delivery at BARC (Chemistry Division)	2 months
Sharanya Purandare	Development of Carbon Dot decorated Fe ₃ O ₄ Nanohybrids for Drug Delivery and Cellular Imaging Application at BARC (Chemistry Division)	2 months
Sana Bemat	Epigeneres	2 months
Vanshika Mohidroo	To learn Molecular Biology techniques and Animal Experimentation at INMAS, DRDO (Stem Cell and Tissue Engineering)	2 months

Internships

STUDENT	PROJECT TASK AND INSTITUTE	TENURE
Helluska Goyal	Industrial Microbiology Training Programme at Calantha Biotech	1 month
Smera Patnaik	Basic microbiology and molecular biology techniques at HaystackAnalytics, IIT-B	2 months
Niyati Shroff	Hands- on daily experiments performed at Rapture Biotech	1 month
Thanishta Kumar	Probing genes underlying myo-syncytial homeostasis through <i>Drosophila</i> flight at CCMB, Hyderabad	2 months

Dissertations

STUDENT**PROJECT TITLE AND INSTITUTE****TENURE**

Shreeya Mujumdar M.Sc. Biological Science (2nd Year)	To investigate the role of carotenoids and retinol across multiple cancers: A pilot study at Epigeneres Biotech Pvt. Ltd.	6 months
Shardul Rathod M.Sc. Biological Science (2nd Year)	Reference Interval of Vitamin D levels in apparently healthy individuals at Kokilaben Dhirubhai Ambani Hosnital	4 months
Helluska Goyal M.Sc. Biological Science (2nd Year)	Clinical Implications of Methylenetetrahydrofolate Reductase Mutations in Patients with Thromboembolic Occlusion at Kokilaben Dhirubhai Ambani Hospital	6 months
Aparna Menon M.Sc. Biological Science (2nd Year)	Analytical validation of the whole transcriptome pipeline for clinical application at Epigeneres Biotech Pvt. Ltd.	6 months
Thanishta Kumar M.Sc. Biological Science (2nd Year)	Understanding the role of mitochondria and endoplasmic reticulum involved in regulating myo-syncytial homeostasis CSIR-CCMB, Hyderabad	6 months

Dissertations

STUDENT**PROJECT TITLE AND INSTITUTE****TENURE****Sharanya Purandare**

M.Sc. Biological Science
(2nd Year)

Unveiling the Autoimmune Landscape:
A Retrospective study of ANA-Positive
Patients in India at **Kokilaben
Dhirubhai Ambani Hospital**

4 months**Vanshika Mohindroo**

M.Sc. Biological Science
(2nd Year)

Optimisation of biomaterial for corneal
regeneration at **INMAS, DRDO**

4 months**Niyati Shroff**

M.Sc. Biological Science
(2nd Year)

Comparative analysis of blood and tissue
whole transcriptome data in solid tumors
at **Epigeneres Biotech Pvt. Ltd.**

6 months**Sana Bemat**

M.Sc. Biological Science
(2nd Year)

JAK2 V617F Mutation in Chronic
Myeloproliferative Disorders at
**Kokilaben Dhirubhai Ambani
Hospital**

6 months**Smera Patnaik**

M.Sc. Biological Science
(2nd Year)

Evaluation of neurotrophic potentials of
GQD and N-GQD and exploring their in
vivo applications using zebrafish model
at **CSIR IICT, Hyderabad**

6 months



The visit began with a lecture on proteomics by Dr. Sanjeeva Srivastava, a renowned professor and scientist in clinical proteomics, followed by a hands-on workshop for proteomics data analysis by Dr. Arghya Banerjee and a comprehensive lab tour. The students also visited Haystack Analytics, an IIT Bombay startup, where they gained insights into utilizing genomics in healthcare from Dr. Anirvan Chatterjee and the team.



IIT BOMBAY

INDUSTRIAL VISIT - 1

EPIGENERES BIOTECH PVT. LTD.

INDUSTRIAL VISIT - 2

The students were enlightened by a lecture on the HrC test for early detection of cancer, delivered by Dr. Anish Tripathi, the Managing Director.

HrC
TEST

SMALL GROUP DISCUSSION

As part of our research-led effort towards moving cancer from a "late-stage" to an "early-stage" disease, we are hosting a session at our office in Lower Parel, Mumbai to explain our HrC test and the science behind it.

SGD

Lower
Parel

**AWARENESS
MATTERS.**

Join the Movement for
Early Detection of Cancer

date

03
Aug

time

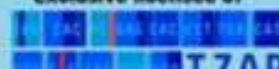
03 - 05 PM

DETECT CANCER EARLY

Brought to you by:



Exclusive licensee of



Campus Engagement

Dr. Kalpana Joshi
Principal Consultant, Cipla

Topic: "Discovery and Development of New Drugs: A real-time experience."

A modern approach to drug development was discussed, focusing on drug repurposing.



Dr. Gautam Das
Founder of miBiome Therapeutics

Topic: "The Role of Human and Microbial Genomes in Health and Disease"

A data analysis session elucidated the construction of a sequencing data analysis pipeline for student's comprehension.



Dr. Maithili Athavale
Assistant General Manager, Sathgen
Biotech

Topic: "The Journey of a Drug from Bench to Bedside"

The talk detailed the entire journey of a drug, spanning from preclinical studies to Stage 4 clinical trials conducted in humans.



Campus Engagement

Mr. Nilesh Ambre
DGM & Head HR, Godrej Security

Topic: “Academic to corporate”

The talk highlighted interview readiness, organizational behavior, and self-awareness for academia-to-corporate transitions.



Dr. Shraddha Pandit
Visiting Faculty of Law at SVKM's Kirit
P. Mehta School of Law

Topic: “Basics of IPR and Trademarks”

Discussed intellectual property rights, trademarks, and the importance of efficient trademark registration.

Dr. Sanjeev Gupta
Vice President, IPCA Laboratories Ltd

Topic: “Biologics Development Approaches and Future Perspective”

The session covered biologics production workflows, strategies for development, and future therapeutic advancements.



More Than Acedemics

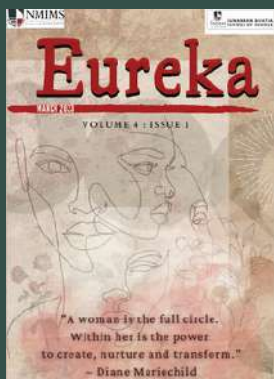
Making Science Fun

Students of biological sciences have actively participated in content writing during 2023 portraying scientific writing skills.



The Monthly Science Newsletter

On National science day Students of biological sciences have actively participated in competitions like sci art, debate, and mentored students during the lab tour.



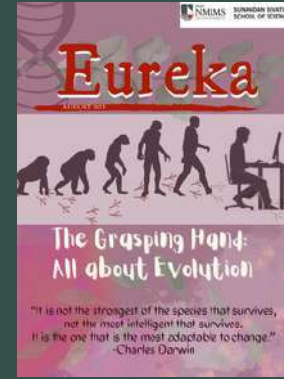
April 2023



August 2023



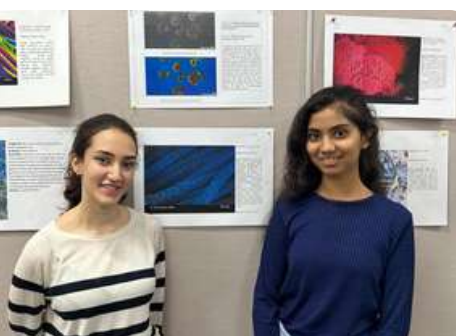
July 2023



August 2023

Bringing Ideas To Life

On World conservation day, students of biological sciences have actively participated in scientific model making, portraying the ability to bring their ideas to life.



TESTIMONIALS

Srushti Karkhanis

The coursework is really interesting and got to learn subjects which are relevant in the field of research. Along with the regular coursework a lot of co-curricular and extra-curricular activities were also organised. Overall it was a great experience and the faculty was also very helpful and interactive.



Sakshi Waikar

The course curriculum was well designed which helped me excel in the research field. The subjects like Python and R programming will be very applicable in my research career. Overall the journey with SDSOS NMIMS was full of joy along with exposure of research and extracurricular activities



Farza Khan

SDSOS (Master's in Biological Sciences Program) profoundly impacted my academic journey. The structured curriculum, hands-on learning, and supportive faculty allowed me to explore diverse areas of biology and gain valuable research knowledge. Collaboration with research centers and industries through the dissertation project was actively encouraged.



HIRING ORGANIZATIONS

Industry →

33%

HIGHER EDUCATION

25%

BIOTECHNOLOGY

16%

BIOPHARMACEUTICALS

8%

HEALTHCARE

8%

MARKETING



Every Life Matters



Author First, Quality First



Inspiring Research

PLACEMENT COMMITTEE



Final Placement advisor- Dr. Purvi Bhatt

Email: Purvi.Bhatt@nmims.edu

Tel: +91 22 4235 5956



Internship placements – Dr. Ekta Khattar

Email: Ekta.Khattar@nmims.edu

Tel: +91 22 4233 2247



Final placements - Dr. Pamela Jha

Email: pamela.jha@nmims.edu

Tel: +91 22 4235 5956 / 22 42355953



Placement Coordinator - Mrs. Priyanka Patil

Email: priyanka.patil@nmims.edu

Tel: +91 9764466180

Contact Us



Placement President- Miss Shreeya
Mujumdar (Left)

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Placement Coordinator- Miss Thanishta
Kumar (Right)

Email: thanishtakumar@gmail.com

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**SVKM's Narsee Monjee Institute of Management Studies
Deemed to be University (as per UGC Norms)**

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Website: <https://nmims.edu/science-lp/>

