SWAMI VIVEKANANDA UNIVERSITY,
BARRACKPORE

SCHOOL OF LIFE SCIENCES

DEPARTMENT OF MICROBIOLOGY

APRIL- MAY NEWSLETTER 2024

SWAMI VIVEKANANDA UNIVERSITY,
BARRACKPORE

CONTENT

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ABOUT THE DEPARTMENT

Department of Microbiology under the School of Life Sciences, Swami Vivekananda University aims in serving bunch of aspirants heading towards excellence, just in need of a perfect platform to redefine themselves. The department hosts a high bucket of Postgraduate students, Bachelor's students and also PhD scholars, along with academic staff, including newly independent researchers.

Aiming at sailing high, the department offers a high specialized lab infrastructure comprising of 4 laboratories on Microbiology, Molecular Biology & Biochemistry, Plant Biotechnology, Bio-engineering.

The library comes with a head set of rich informed books on relevant fields, serving an all-time space for the students to explore what's new and emerging. The perfect blend of theory with practical knowledge occurs with the provision of classes in spacious classrooms along with well-equipped labs. It gives the students a much-needed environment to experience learning, grooming as well as placement in reputed industries, with a high noted exposure of internships, hands on trainings and industry visits.

MISSION

Our mission is to keep the department regarded as an example to any, in terms of its relevance of all areas, including teaching and research, quality of facilities and support, and learning opportunities and working experience.

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VISION

The Microbiology Department at Swami Vivekananda University envisions itself as a globally recognized center of excellence in microbiological sciences, where academic brilliance and innovative research converge. Our vision is anchored in a commitment to providing students with a transformative educational experience, instilling in them a profound curiosity, critical thinking skills, and a fervor for exploration. We aspire to lead pioneering research initiatives that address global challenges and contribute to societal betterment. Through interdisciplinary collaborations, both within the university and beyond, we seek to create synergies that drive transformative research. Our student-centric approach prioritizes holistic development, ensuring that graduates are equipped not only with comprehensive theoretical and practical knowledge but also essential skills, ethical values, and a global perspective. By continuously upgrading state-of-the-art facilities, fostering community engagement, and promoting leadership in industry, we aim to achieve global recognition as a hub for microbiological excellence. Through a commitment to continuous improvement and a dynamic curriculum, we envision shaping a future where the Microbiology Department plays a pivotal role in influencing the trajectory of microbiological sciences worldwide, inspiring generations of scientists and researchers.

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OBJECTIVE

1. **Academic Excellence:** Deliver high-quality education and training at various academic levels.
2. **Cutting-Edge Research:** Cultivate a culture of innovative and impactful research in microbiological sciences.State-of-the-Art Facilities: Maintain and upgrade specialized laboratories for practical learning experiences.
3. **Interdisciplinary Collaboration:** Foster collaborations with other departments, research institutions, and industries.
4. **Holistic Learning:** Integrate theoretical knowledge with hands-on practical experiences.
5. **Library Resources:** Maintain a comprehensive library with a rich collection of microbiology-related resources.
6. **Industry Exposure:** Facilitate internships, hands-on training, and industry visits for real-world applications.
7. **Ethical Practices:** Instill a strong sense of ethical conduct and responsibility in research and professional practices.
8. **Global Perspective:** Prepare students for success in a diverse and interconnected professional landscape.
9. **Community Engagement:** Engage with the community through outreach programs and collaborative initiatives.
10. **Continuous Improvement:** Adapt to evolving trends and challenges in microbiology, maintaining a dynamic curriculum.

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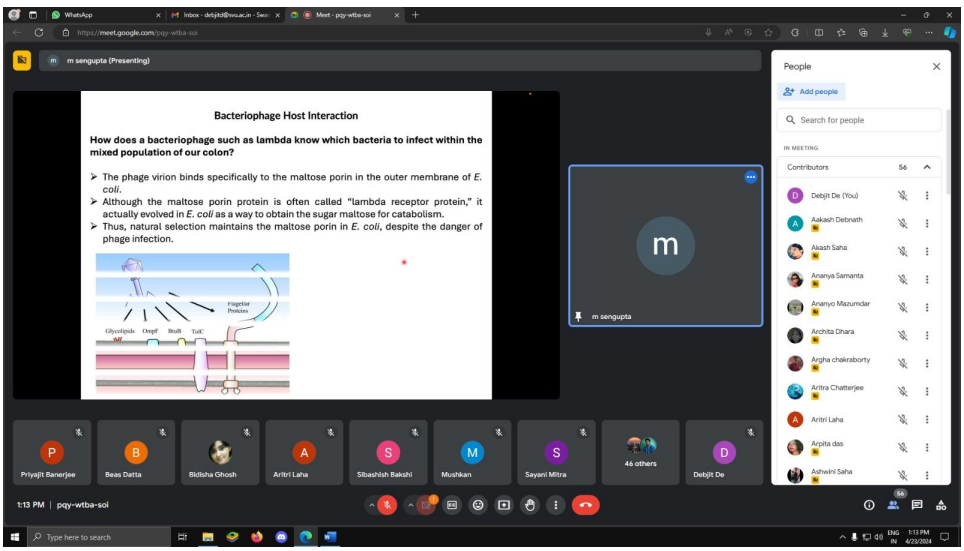
PROGRESS REPORT

APRIL - 2024

World Earth Day Celebration

On World Earth Day, the Departments of Microbiology and Biotechnology jointly hosted an online event emphasizing the planet's significance and the need for sustainability. The event featured Dr. Mrittika Sengupta, Associate Professor at the Centre of Life Sciences, Mahindra University, who delivered an insightful presentation on environmental conservation, human impact on ecosystems, and innovative approaches to sustainability. Key topics included the state of the Earth's environment, the role of microorganisms, biotechnology's contributions, and strategies for reducing environmental footprints. Interactive sessions allowed participants to engage with Dr. Sengupta, discussing practical steps to protect our planet. The event successfully united students, faculty, and experts, fostering a deeper understanding of sustainability. The departments expressed gratitude to Dr. Sengupta and participants, and plan to continue organizing such events to promote environmental awareness and research initiatives.



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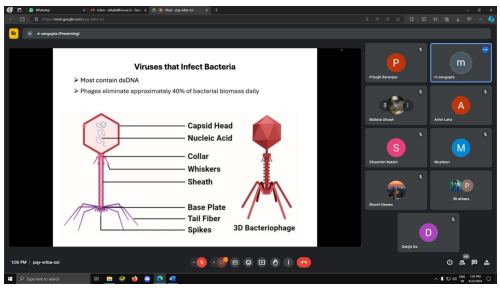
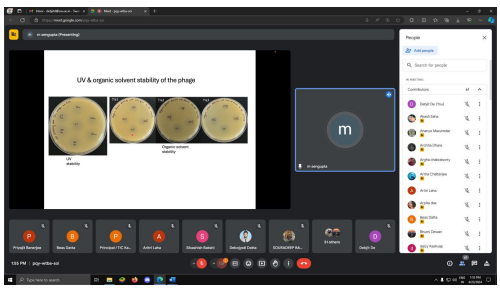
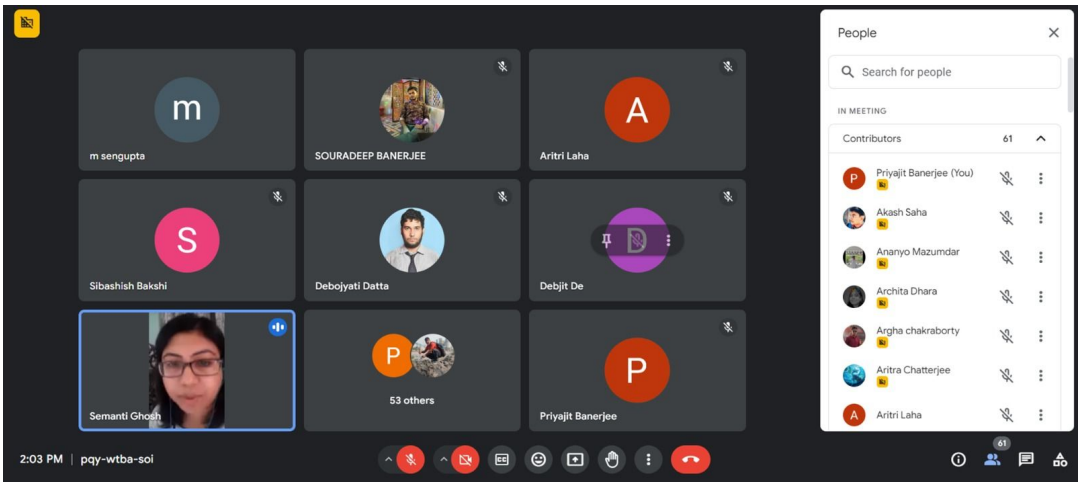
PROGRESS REPORT

APRIL - 2024

World Earth Day Celebration







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PROGRESS REPORT

MAY- 2024

Faculty Skill Development Programme

A Faculty Skill Development Programme was jointly organized by the E-Yuva Centre at Adamas University and Swami Vivekananda University, with support from the Biotechnology Industry Research Assistance Council (BIRAC). The programme centered on themes including translational research, innovation, entrepreneurship, industry-academic collaboration, and intellectual property rights (IPR).

The primary objective of the programme was to equip faculty members with industry-relevant skills, empowering students to diversify their career opportunities beyond academia and research, with a focus on practical implementation and job creation. Over the course of 30 hours, the programme engaged participants in extensive brainstorming activities aimed at nurturing critical thinking and collaborative problem-solving.

Dr. Srijan Haldar, Associate Professor in the Department of Biotechnology, School of Life Sciences at Swami Vivekananda University, served as the convenor. Dr. Aritri Laha, Assistant Professor in the Department of Microbiology, School of Life Sciences at Swami Vivekananda University, played a pivotal role as one of the key resource persons. Their expertise significantly enriched the programme, enhancing participants' comprehension and application of the discussed themes.

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PROGRESS REPORT

MAY- 2024

Faculty Skill Development Programme

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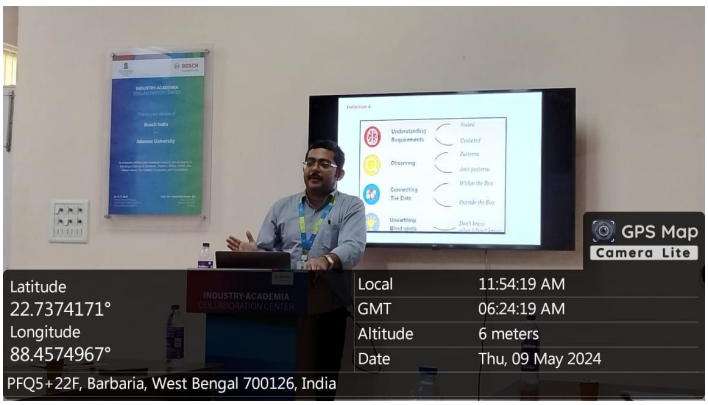

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Planning (June-2024)

Commemoration of World Environment Day

Under the esteemed guidance of Shri Saurabh Adhikari, Chief Operating Officer of Swami Vivekananda University, the Departments of Microbiology and Biotechnology, within the prestigious School of Life Sciences, are gearing up to commemorate World Environment Day on June 5th. This significant event will serve as an opportunity for the academic community to come together and reaffirm their commitment to environmental stewardship and sustainability. Through a series of educational initiatives, discussions, and awareness campaigns, the departments aim to raise consciousness about environmental issues and promote responsible actions to protect our planet.

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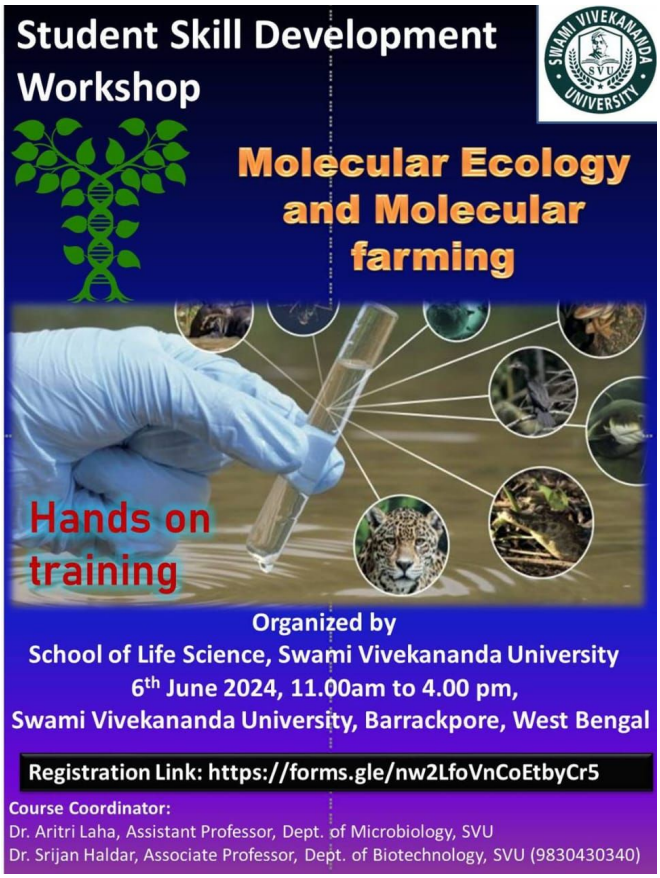
Planning (June-2024)

Student Skill Development Workshop



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Planning (June-2024)

Student Skill Development Workshop

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Planning (June-2024)

Student Skill Development Workshop - Molecular Ecology and Molecular Farming

Throughout the month of June, the Departments of Microbiology and Biotechnology at the School of Life Sciences, aligned with the vision of honorable Shri Saurabh Adhikari sir, Chief Operating Officer, Swami Vivekananda University, will jointly organize a series of Student Skill Development Workshops. These workshops, aimed at enhancing technical skills and extending the university's institutional reach, will be open primarily to external students.

Commencing from June 6th, a sequence of three workshops centered on Molecular Ecology and Molecular Farming will initiate at the university campus. Guided by Dr. Srijan Haldar, an Associate Professor in the Department of Biotechnology, and Dr. Aritri Laha, an Assistant Professor in the Department of Microbiology, these workshops aim to deliver a thorough understanding of these specialized domains. The curriculum has been meticulously designed to provide participants with practical experience and profound insights, customized to align with industry requirements. Through a blend of theoretical lectures, hands-on demonstrations, and interactive sessions, participants will not only enrich their academic knowledge but also acquire vital practical skills essential for professional advancement. This endeavor underscores the university's dedication to nurturing a cohort of adept professionals poised to make impactful contributions in the realms of molecular ecology and farming.

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Planning (June-2024)

Student Skill Development Workshop - Next-Gen Sequencing (NGS) & Computational Biology

On June 13th, the Departments will host a specialized workshop on Next-Gen Sequencing (NGS) and Computational Biology. This workshop will be led by Dr. Semanti Ghosh and Dr. Debjit De, both Assistant Professors in the Department of Biotechnology, and coordinated by Dr. Srijan Haldar, Associate Professor, Department of Biotechnology, School of Life Sciences. The primary objective is to provide hands-on training in the digitization of biological data and the application of algorithms, essential skills for the current and future job market. NGS and computational biology are at the forefront of modern biological research and are critical for advancements in genomics, personalized medicine, and biotechnology.

These skills are highly sought after in the job market, offering opportunities in research institutions, healthcare, pharmaceuticals, and biotech companies.These workshops are structured to provide attendees with hands-on, industry-applicable skills, nurturing both academic and professional advancement.

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Planning (June-2024)

Student Skill Development Workshop - Nano-Biotechnology & Fourier Transform Infrared (FTIR) Spectroscopy

Concluding the workshop series, on June 19th, participants will have the opportunity to engage in hands-on training focused on Nano-Biotechnology & Fourier Transform Infrared (FTIR) Spectroscopy. Facilitated by Dr. Sabyasachi Ghosh, Assistant Professor in the Department of Biotechnology, and Dr. Priyankar Pal, Assistant Professor in the Department of Microbiology, both esteemed faculty members from the School of Life Sciences at Swami Vivekananda University Campus, this session promises to be enlightening.
Nano-Biotechnology and FTIR Spectroscopy have risen to prominence as indispensable tools in the research domain, with their widespread utilization becoming essential. This workshop is meticulously crafted to not only equip students with the practical skills necessary for their research pursuits but also to ignite a fervent passion for scientific exploration within them.

Through immersive hands-on experiences under the guidance of experienced mentors, participants will delve into the intricacies of Nano-Biotechnology & FTIR Spectroscopy, gaining invaluable insights into their applications and methodologies. This transformative experience aims to instill in students a deep-seated appreciation for research and innovation, empowering them to embark on their academic and professional journeys with confidence and enthusiasm.

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Planning (June-2024)

World Microbiome Day Celebration

The Departments of Microbiology and Biotechnology, within the School of Life Sciences at Swami Vivekananda University, will jointly celebrate the commemoration of World Microbiome Day on June 27th. This event serves as a platform to honor the intricate ecosystems of microorganisms and their profound impact on various facets of our world, ranging from environmental sustainability to human health and beyond. Through a curated program of engaging activities, insightful discussions, and educational initiatives, we aim to elevate awareness surrounding the critical role of microbiomes in shaping our lives and the environment.

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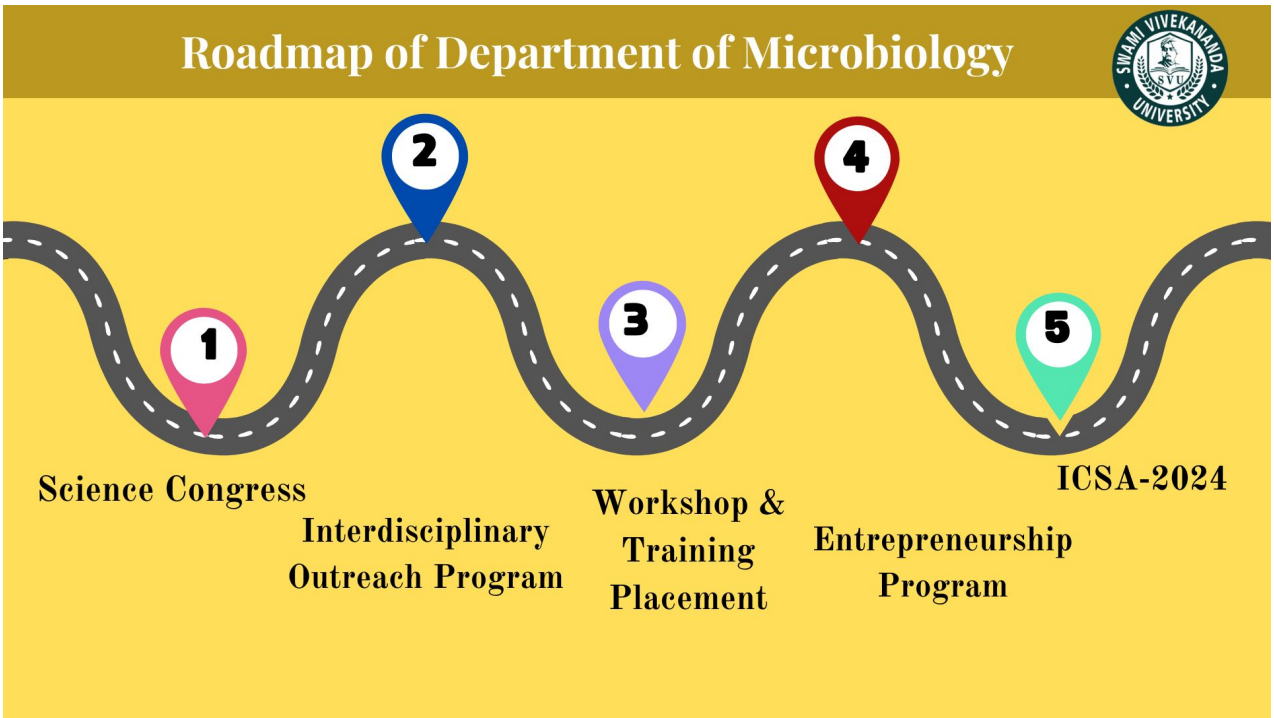
Departmental Roadmap



The roadmap of department of Microbiology prioritizes academic excellence through key initiatives. Our participation in science congress events promotes research visibility, while interdisciplinary outreach programs foster collaboration. The upcoming major International Conference - ICSA-2024 stands out as a global platform for knowledge exchange. Additionally, an integrated entrepreneurship program empowers students to apply microbiological innovations practically. This roadmap reflects our commitment to excellence, collaboration, global engagement, and fostering an entrepreneurial mindset among our students.

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Editorial - From HoD's Desk

Dr. Pritha Pal
Head, Department of Microbiology
School of Life Sciences
Swami Vivekananda University

The Department of Microbiology has been actively engaged in organizing events to foster student development despite the sweltering heat waves of May. Even amidst challenging conditions, World Earth Day was celebrated online, underscoring the importance of sustainability. The joint online event hosted by the Departments of Microbiology and Biotechnology featured Dr. Mrittika Sengupta as the guest speaker. Dr. Sengupta, with her extensive experience and research acumen, captivated students, and her presence as a resource person was a great honor for us.

Subsequently, the departmental faculties enthusiastically participated in organizing the Faculty Skill Development Programme, a collaborative effort with the E-Yuva Centre at Adamas University and Swami Vivekananda University, supported by the Biotechnology Industry Research Assistance Council (BIRAC). The programme aimed to equip faculty members with industry-relevant skills, empowering students to explore diverse career opportunities beyond academia and research. Dr. Srijan Haldar and Dr. Aritri Laha played pivotal roles in enriching the programme with their expertise, enhancing participants' understanding and application of key themes. The involvement of faculties from various institutions further enhanced the quality of the event.

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Editorial - From HoD's Desk

Dr. Pritha Pal
Head, Department of Microbiology
School of Life Sciences
Swami Vivekananda University

Despite the exam season in May-June, our department remains committed to sustaining its momentum. We are planning to organize World Environment Day on June 5th and World Microbiome Day on June 27th, ensuring ongoing engagement and involvement of students. Additionally, throughout June, the Departments of Microbiology and Biotechnology will collaborate to conduct a series of Student Skill Development Workshops, focusing on Molecular Ecology, Molecular Farming, Next-Gen Sequencing (NGS) & Computational Biology, and Nano-Biotechnology & Fourier Transform Infrared (FTIR) Spectroscopy. These workshops are designed to enhance technical skills and expand the institutional reach, with a primary focus on external student participation. Our faculty members remain dedicated to advancing research and fostering student development, contributing to the overall excellence of the department.

We extend our heartfelt appreciation to the university's esteemed senior leadership, including the Chancellor, Vice Chancellor, Chief Operating Officer, Registrar, Deputy Registrar, and all esteemed members of the governing body, for their steadfast support. With their invaluable guidance, we remain steadfast in our dedication to upholding the highest standards of academic excellence and nurturing a culture of scientific inquiry and innovation within the School of Life Sciences.