M.S RAMAIAH COLLEGE OF ARTS, SCIENCE AND COMMERCE

# MICROBIOLOGY INSIGHTS

Department of Microbiology, MSR College of Arts, Science and Commerce, Gate Number: 8, MSR Nagar, MSRIT Post, Bangalore-54

#### www.msrcasc.edu.in

E-mail: microbiology@msracasc.edu.in



Principal

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#### Vice Principal

Dr. Pushpa H

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#### Vision of the Department

To Prepare Men and Women For the Service of the Country

### **Mission of the Department**

Ramaiah College of Arts, Science and Commerce shall deliver global quality educations by nurturing a conductive learning environment for a better tomorrow through continuous improvement and customization

#### **Objectives of the Department**

- To Provide Skill based Scientific and Technical Knowledge to Students.
- To Train Students in the Field of Microbiology, Provide Value-based Education with Innovative Research.
- To Undertake Research Activities Relevant to Present Day Needs.

### ABOUT THE DEPARTMENT



The Department of Microbiology was established in 1999, offers a wide range of undergraduate and postgraduate courses, ensuring comprehensive education and research opportunities in this field. The department boasts a faculty of highly qualified experts who bring with them vast experience and expertise in various domains of Microbiology. Their commitment to teaching and research is reflected in their active involvement in cutting-edge research projects and their contributions to scientific publications and conferences. The department is equipped with state-of-the-art infrastructural facilities, including modern laboratories and research equipment, creating an ideal environment for teaching, experimentation, and innovation. Additionally, the department maintains strong collaborations with industry partners, providing students with valuable industry exposure and internship opportunities. The emphasis on research, professional development workshops, and a collaborative atmosphere nurtures the overall growth of students, preparing them for successful careers in academia, research, or the industry.

### VICE PRINCIPAL'S MESSAGE

Greetings from M.S. Ramaiah College of Arts, Science and Commerce, Bengaluru, an institution with excellence in the field of education. The college has a State-of-the-art infrastructure, with well-equipped laboratories and smart classrooms. We have dedicated experienced and well-qualified faculty members who give their best to curricular, co-curricular, and extra-curricular activities in the college.

To bridge the gap between industry and academia the college has collaborated with various industries, research institutes, and corporates to train and make the students industry ready. The syllabus prescribed by the university is enriched with add-on courses, workshops, training programs, additional practical, outreach activities, Industrial visits, and cutting-edge research, internships, soft skills training makes MSRCASC unique.



DR. PUSHPA H VICE PRINCIPAL, MSRCASC

### HOD'S MESSAGE

"I would like to highlight that our theory and practical classes place a strong emphasis on problem-based learning, ensuring that students gain knowledge that holds utility value and can be applied in real-life scenarios, keeping them updated with the latest developments in the field. Moreover, the department is actively engaged in research projects in the major thrust areas of microbiology, and we have successfully secured funds from various agencies to support our research endeavors.

I take great pride in our dedicated faculty, who not only conduct multidisciplinary research programs but also foster a culture of research among our students. We encourage them to undertake in-house research projects, present papers and publish their research work. Additionally, we encourage students to actively participate in co-curricular and extracurricular activities, creating a well-rounded and enriched learning experience for all".



DR.PRASANNA SRINIVAS HOD, MSRCASC

### FACULTY MEMBERS

#### Dr. Pushpa H

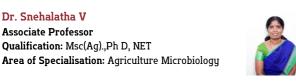
Dr. Snehalatha V

Associate Professor

Qualification: Msc(Ag)., Ph D, NET

**Professor and Vice Principal** Qualification: M.Sc, M.Phil, Ph.D Area of Specialisation: Mycology, Biodiversity, Bioremediation, Molecular taxonomy, Bioprospecting





Mrs. Soumya Satyanand Shanbhag Assistant Professor Qualification: MSc Microbiology, SET, (Ph.D) VTU Area of Specialisation:





Qualification: M. Sc., Ph. D. Area of Specialisation: Microbial Ecology, Host-pathogen interaction

#### Dr. Bhanupriya C.H

Assistant Professor Qualification: MSc Microbiology, PhD Plant Biotechnology, Indian Institute of Technology Kharagdur Area of Specialisation: Plant Biotechnology

#### Dr. Vishal M

Assistant Professor Qualification: MSc, Ph.D. Area of Specialisation: Medical Microbiology, Enzymology, Phytochemistry

#### Dr. Vidya Jagadeeshan

Assistant Professor Qualification: MSc, M. Phill, Ph.D. Area of Specialisation: Plant bitechnology and **Plant Metabolomics** 







#### Dr. Prasanna Srinivas

Assistant Professor and HOD Qualification: M.Sc, M.Phil, Ph.D Area of Specialisation: Medical Microbiology, Immunology and enzymology

#### Dr. Vemula Vani

Associate Professor Qualification: M. Tech., PhD Area of Specialisation: Drug Discovery

Dr.Yogesh D Assistant Professor Qualification: M.Sc, Ph.D, CSIR-NET, ASRB-NET Area of Specialisation: Microbiology





### Dr. Manikandan A

Assistant Professor Qualification: MSc, M.Tech, Ph.D. Microbiology Area of Specialisation: Drug discovery

#### Dr. Nimita Venugopal C

Assistant Professor Qualification: M.Sc., Ph.D Microbiology Area of Specialisation: Microbiology (Antimicrobial Resistance)

#### Dr. Prashanthi Rajaram

Assistant Professor Qualification: MSc, Ph.D. Area of Specialisation: Environmental Biotechnology, Phytochemistry



"WORLD FOOD DAY CELEBRATION AT M S RAMAIAH COLLEGE: INSPIRING STUDENTS AND WOMEN TO EMBARK ON ENTREPRENEURIAL JOURNEYS THROUGH AN EDIBLE MUSHROOM FARMING ENTREPRENEURSHIP PROGRAM FOR WOMEN EMPOWERMENT"





The World Food Day celebration on October 16th, 2023, at Ramaiah College focused on empowering women through an edible mushroom farming entrepreneurship program. Hosted at the APJ Abdul Kalam Auditorium, the event commenced at 10:00 a.m. with an invocation song and the lighting of the lamp. Prof. Pushpa H, welcomed the resource person, Mr. Puneeth Kumar, the owner of Science Farmers Company, who shared insights on edible mushroom farming. The event aimed to equip participants, including students and women employees, with skills for sustainable farming, contributing to food security and economic growth. Following an engaging presentation by Mr. Puneeth Kumar, a hands-on training session provided practical experience. A culinary competition showcased mushroom-based dishes, with winners recognized as follows:

- First Prize Winners: Lida Mary George, Prabhu Deva D, Prakash K from Vsem BSc C sec
- Second Prize Winner: Charitha P from V sem BSc A sec
- Third Prize Winners: DM Lavanya, Supritha, Vaibhavi Lakshmi N from V sem BSc C sec
- Consolation Prize Winners: Laya N from III Sem C sec, Sarah Shaik, and Prakruthi from V Sem B sec.

A documentary highlighted sustainable farming and mushrooms' role in food security. The event concluded with Dr. Sowbhagya R delivering a vote of thanks.



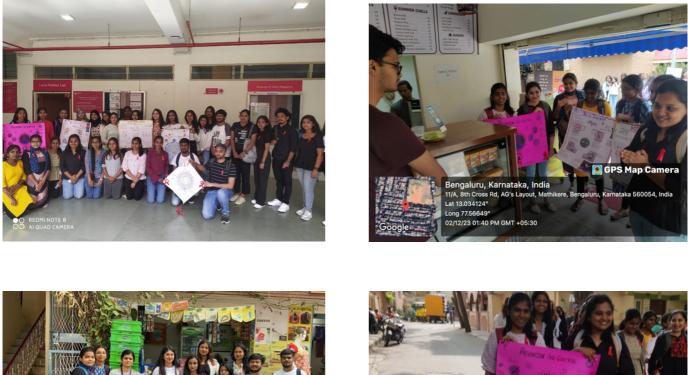








"EXTENSION ACTIVITY: WORLD AIDS DAY AWARENESS CAMPAIGN IN M S RAMAIAH COLLEGE, EXTENDED TO RESIDENTS AND SHOPS IN MATHIKERE, BANGALORE"







The Microbiology Department, in collaboration with NCC and NSS students, conducted an extension activity on December 2, 2023, to educate the public about AIDS. Undergraduate and postgraduate Microbiology students, along with NSS students, created multilingual posters on HIV awareness.

Held at the Mathikere market area, the event involved 45 participants showcasing posters on HIV infection, pathogenicity, medication, and control. Aligned with "World AIDS Day," the initiative raised awareness in Kannada, Telugu, Tamil, Malayalam, and Hindi, emphasizing symptoms, reduced immunity, and control.

A total of 150 individuals were educated using placards and posters, emphasizing the importance of AIDS awareness, diagnosis, NGOs, and medication as a public health issue. The program successfully heightened awareness among the general public about AIDS infection and its control.

### STUDENTS ACHIEVEMENTS

- Lida Mary George, Prabhu Deva D, and Prakash K from BSc Microbiology, V Semester, clinched the first prize in the Culinary Skill Competition held as part of the World Food Day celebration at Ramaiah College of Arts on October 16th, 2023.
- Charitha P from BSc Microbiology, V Semester, secured the second prize in the Culinary Skill Competition held as part of the World Food Day celebration at Ramaiah College of Arts on October 16th, 2023.
- DM Lavanya, Supritha, Vaibhavi Lakshmi N from BSc Microbiology, V Semester, secured the third prize in the Culinary Skill Competition held as part of the World Food Day celebration at Ramaiah College of Arts on October 16th, 2023.
- Laya N from BSc Microbiology, III Semester, along with Sarah Shaik and Prakruthi from V Semester, secured a consolation prize in the Culinary Skill Competition held as part of the World Food Day celebration at Ramaiah College of Arts on October 16th, 2023.
- Ms. Poorvitha R and Vasavi H from BSc Fifth Semester Microbiology exhibited a model titled "Carbon Dioxide Reduction and Sediment Water Pollution Control" and secured the Second Prize in the three-day National Conference on "Climate Resilience and Sustainable Development," held on November 22-24, 2023. The event was organized by Karnataka Science and Technology Academy (IKSTAI), Department of Science and Technology, Government of Karnataka, in Bengaluru.
- Ms. Lavanya A K from BSc Fifth Semester and Ms. Simra Fathima Ali from BSc Third Semester in the Microbiology Department won the first and second prizes in the Indian Round Girls category at 30 meters and 50 meters in the Inter-Collegiate Archery Competition organized by Seshadripuram Evening College on November 25th, 2023.
- Kavya U, Sayantanee Seal, Yashshwini N, Madhu Shree, and Srushti B presented at the "National Symposium on 'Current Developments in Antibiotic Discovery and Future Perspectives." They won first, second, and third prizes for Best Oral and Poster Presentations.
- Anushka Y.S from BSc Fifth Semester Microbiology, walked for Avantha by trends and for celebrity designer Rajesh Shetty during Ms International super queen pageant.
- Vasavi H from BSc Fifth Semester Microbiology, won first place in 'Biohackathon'- Pot painting.
- Isha Raj from BSc Fifth Semester Microbiology, won first place in 'Biohackathon'- Bio brush.
- Lekhana V from BSc Fifth Semester Microbiology, won first place in 'Biohackathon'- Bio brush.
- Sidharth from BSc Fifth Semester Microbiology, won second place in 'Biohackathon'- Bio cartooning.
- Yashaswini C R from BSc Fifth Semester Microbiology, won third place in 'Biohackathon'- Bio cartooning.
- T Niharika from BSc Fifth Semester Microbiology, won consolation in 'Biohackathon'- Bio cartooning.
- Shravya MV and Queency from BSc Fifth Semester Microbiology, won consolation prize in 'Biohackathon'- Veg chiseling.
- Nachiketa and Saion from BSc Fifth Semester Microbiology, won first prize in 'Biohackathon'- Veg chiseling.

### STUDENT'S ACHIEVEMENTS



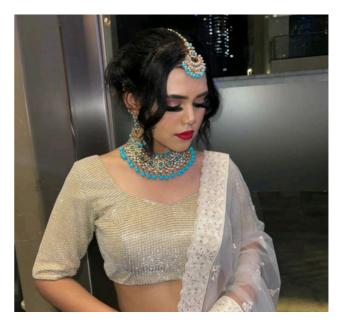












## CENTUM SCORERS IN UG MICROBIOLOGY FOR BCU II & IV SEMESTER, AUGUST/SEPTEMBER EXAM 2023



LAVANYA DM UI8EV2ISOOII IV SEM B.SC - MB/GEN



SHILPY CHANDRA UI8EV2IS00I0 IV SEM B.SC - MB/GEN



CHIRALI URS C M UI8EV2IS0024 IV SEM B.SC - MB/GEN



SAMREEN A PATEL UI8EV2IS0032 IV SEM B.SC - MB/GEN



MICHELLE SARAH ROY UI8EV2IS0177 IV SEM B.SC - MB/BT



RIA RAGHU U18EV21S0283 IV SEM B.SC - MB/BT



LEKSHMI GOPAL U18EV21S0192 IV SEM B.SC - MB/CHE



SHALINI S U18EV21S0317 IV SEM B.SC - MB/BT



RAHUL M U18EV21S0245 IV SEM B.SC - MB/CHE



SHREYA K U18EV21S0047 IV SEM B.SC - MB/BC



MYTHRI M UI8EV2IS0282 IV SEM B.SC - MB/BT



DEEPTANGI MANGSULI UI8EV2ISO322 IV SEM B.SC - MB/BT



ROOPA SHREE G UI8EV2IS0327 IV SEM B.SC - MB/BT



ABISHEK S U18EV21S0006 IV SEM B.SC - MB/BC



REKHA KUMARI UI8EV22SOI35 II SEM B.SC - MB/BT



TANYA CHIRIPAL S UI8EV22S0264 II SEM B.SC - MB/GN



SNIGDHA AMARNATH UI8EV22S0097 II SEM B.SC - MB/GN



NIKITHA B M UI8EV22S0226 II SEM B.SC - MB/GN



J SHINY ROBERTA UI8EV2ISOOIO II SEM B.SC - MB/BT



SAMAN TAHNIET UI8EV22S035I II SEM B.SC - MB/BT

### FACULTIES ACHIEVEMENTS

- Approval for the Seed Money Project on "Development of Durable, Biodegradable, and Sustainable Materials with Fungal Mycelium Immobilized on Agricultural Wastes" led by Dr. Pushpa H, Prof. Savitha J, and Dr. Vishal M.
- Approval of Seed Money Project on "Secondary Metabolites and Synthetic Medicinal Products for Atherosclerosis" led by Dr. Manikandan A.
- Approval of Seed Money Project for "Screening and Identification of Potential Endophytes from Medicinal Plants for Bioactive Compounds" led by Dr. Vidya Jagadeeshan and Dr. Vemula Vani.
- Approval of Seed Money Project for the "Evaluation of Plant Extracts against Dental Cariogenic Bacteria" led by Dr. Vishal M and Dr. Prashanthi Rajaram.

### PUBLICATIONS

- Dr. Bhanupriya Ch presented a poster at the 3rd International Conference on GTSTAAS-2023. The presentation focused on "In silico Molecular Interactive Screening of Anti-coagulants from Bioactive Polyphenolic Compounds from Seaweeds."
- Dr. Vishal M's Book Chapter Publication on "An In Vitro Investigation of the Antibacterial Activity of Selected Plants Against *Streptococcus mutans*."
- Dr. Manikandan A, presented a paper titled "Apoptosis Inducible Natural Metabolites from Streptomyces rochei" at the GSK London, UK, during the ELRIG Conference-2023. The oral presentation focused on "Flow cytometry-guided antimicrobial effects of bio-inspired silver nanoparticles."
- **Dr. Prasanna Srinivas. R** presented a paper titled "Isolation of Fungal Endophytes from Chaemaecostos cuspidatus and its Antibacterial Activity" at the International E-Conference on Natural Sciences and Environmental Awareness towards Sustainable Development. The research was subsequently published in the Indian Journal of Natural Sciences, Vol.14, Issue 80, Oct 2023, ISSN: 0976-0997, featuring authors Amrita Nigam and Aruna Jampani.

### "MEMORABLE MOMENTS: IN PICTURES"









### "OUR NEWSLETTER TEAM"



DR. PRASANNA SRINIVAS R HEAD, DEPARTMENT OF MICROBIOLOGY. MSRCASC



DR. VEMULA VANI ASSOCIATE PROFESSOR, DEPARTMENT OF MICROBIOLOGY, MSRCASC



DR. VISHAL M ASSISTANT PROFESSOR, DEPARTMENT OF MICROBIOLOGY, MSRCASC



MR. KARTHIK. U V SEM BSC 'A SEC' DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.KAVYA. M V SEM BSC 'A SEC' DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.TEJASWINI V SEM BSC 'B SEC' DEPARTMENT OF MICROBIOLOGY, DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.VASAVI V SEM BSC 'C SEC' MSRCASC



MS.HASTHA D III SEM BSC 'A SEC' DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.NIHARIKA III SEM BSC 'A SEC' MSRCASC



MS.SWAPNA III SEM BSC 'B SEC' DEPARTMENT OF MICROBIOLOGY, DEPARTMENT OF MICROBIOLOGY, DEPARTMENT OF MICROBIOLOGY, MSRCASC



LAYA III SEM BSC 'C SEC' MSRCASC



MS.MANASA III SEM BSC 'C SEC' DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.MANASA.S I SEM BSC 'A SEC' DEPARTMENT OF MICROBIOLOGY, DEPARTMENT OF MICROBIOLOGY, MSRCASC



MS.PRIYADARSHINI I SEM BSC 'B SEC' MSRCASC

As the department college newsletter comes to an end, we hope that this edition has provided valuable insights, updates, and highlights from our vibrant academic community. We extend our gratitude to the Management, all the contributors, faculty members, staff, and students who have made this newsletter possible.

We encourage everyone to stay engaged with the department's activities, upcoming events, and research endeavors. Let us continue to foster a culture of collaboration, innovation, and excellence in our pursuit of knowledge and academic growth.

We welcome your suggestions, feedback, and contributions for future editions of the newsletter. Together, let's celebrate our achievements, share our stories, and inspire one another to reach new heights.

Thank you for being a part of our dynamic department and we look forward to the next edition of the newsletter.

Best wishes,

Department of Microbiology, Newsletter Team