



# MICROBIOLOGY INSIGHTS

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

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Dr. Pushpa H

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Dr. Vishal M

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Dr. Bhanupriya CH

DR. Nimitha Venugopal C

Dr. Akshata G Athreya

## 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 conducive 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.

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## ABOUT THE DEPARTMENT

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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.

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## VICE PRINCIPAL'S MESSAGE

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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

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## HOD'S MESSAGE

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"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 extra-curricular activities, creating a well-rounded and enriched learning experience for all".



**DR. PRASANNA SRINIVAS**  
HOD MSRCASC

# FACULTY MEMBERS

## Dr. Pushpa H

Professor and Vice Principal

Qualification: M.Sc, M.Phil, Ph.D

Area of Specialisation: Mycology, Biodiversity, Bioremediation, Molecular taxonomy, Bioprospecting



## Dr. Prasanna Srinivas

Assistant Professor and HOD

Qualification: M.Sc, M.Phil, Ph.D

Area of Specialisation: Medical Microbiology, Immunology and enzymology



## Dr. Snehalatha V

Associate Professor

Qualification: Msc(Ag), Ph D, NET

Area of Specialisation: Agriculture Microbiology



## Dr. Vemula Vani

Associate Professor

Qualification: M. Tech., PhD

Area of Specialisation: Drug Discovery



## Mrs. Soumya Satyanand Shanbhag

Assistant Professor

Qualification: MSc Microbiology, SET, (Ph.D) VTU

Area of Specialisation:



## Dr. Yogesh D

Assistant Professor

Qualification: M.Sc, Ph.D, CSIR-NET, ASRB-NET

Area of Specialisation: Microbiology



## Dr. Juliya Rani Francis

Assistant Professor

Qualification: M. Sc., Ph. D.

Area of Specialisation: Microbial Ecology, Host-pathogen interaction



## Dr. Ramesha A

Assistant Professor

Qualification: M.Sc., PhD., KSET

Area of Specialisation: Microbiology



## Dr. Manikandan A

Assistant Professor

Qualification: MSc, M.Tech, Ph.D. Microbiology

Area of Specialisation: Drug discovery



## Dr. Bhanupriya C.H

Assistant Professor

Qualification: MSc Microbiology, PhD

Plant Biotechnology, Indian Institute of Technology Kharagpur

Area of Specialisation: Plant Biotechnology



## Dr. Nimita Venugopal C

Assistant Professor

Qualification: M.Sc., Ph.D

Microbiology

Area of Specialisation: Microbiology (Antimicrobial Resistance)



## Dr. Akshata G Athreya

Assistant Professor

Qualification: M.Tech, Ph.D. Biotechnology

Area of Specialisation: Nanotechnology, Biotechnology, Microbiology



## Mr. Vishal M

Assistant Professor

Qualification: MSc, Ph.D.

Area of Specialisation: Medical Microbiology, Enzymology, Phytochemistry





# DEPARTMENT ACTIVITIES

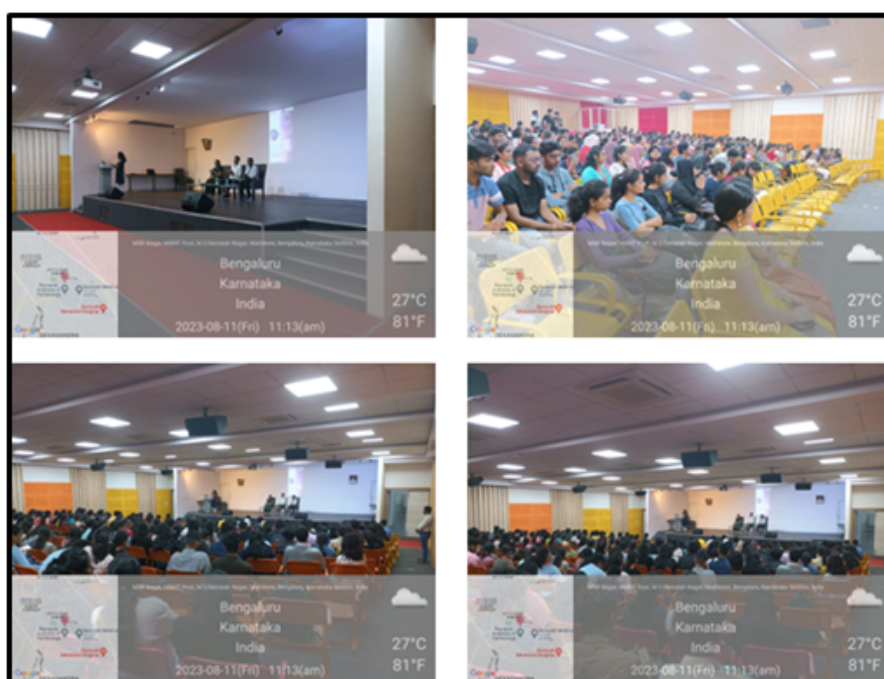
## GUEST LECTURE/ ALUMINI CONTRIBUTION ON “WHY DO WE BEHAVE THE WAY WE DO?: FROM THE PERSPECTIVE OF NEUROSCIENCE”

The alumni speaker for the event, Mr. Suchith C M, a successful graduate of the Department of Life Sciences at MSRASC in 2016-19, delivered an engaging talk. He has achieved notable success in the field of Neuroscience and is currently pursuing a Ph.D. in the Department of Biological Sciences at the Tata Institute of Fundamental Research (TIFR) in Mumbai. His expertise lent credibility to the discussion.

The talk commenced at 11:00 am in the Dr. A P J Abdul Kalam Auditorium, with 250 undergraduate and postgraduate students in attendance. Mr. Suchith's presentation covered various topics and provided valuable insights. He shared his personal journey, including the challenges he faced as a student and the strategies he employed to overcome them, resonating with the audience.

He also discussed his transition from student life to the professional world, stressing the importance of networking, seeking mentorship, and continuous learning to adapt to the evolving industry. Mr. Suchith highlighted his career trajectory, emphasizing the value of setting clear goals, taking calculated risks, and seizing opportunities aligned with one's aspirations. He shared key lessons he had learned, such as the significance of perseverance, embracing failure as a learning opportunity, and maintaining a healthy work-life balance.

Furthermore, he delved into the study of human behavior from a neuroscience perspective, using simple examples from animal behavior studies to illustrate the correlations. The session was both captivating and thought-provoking.



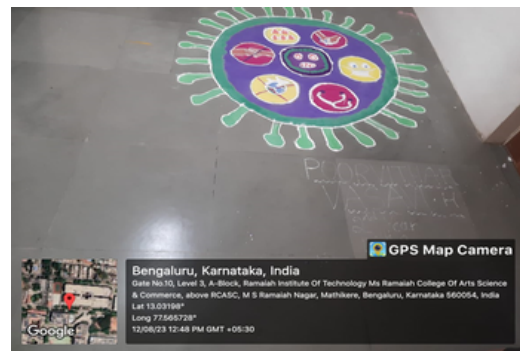
## RANGOLI COMPETITION ON VIRAL DISEASES

The Microbiologists Society, India (MSI), celebrated Independence Day in a unique and educational manner by organizing a captivating Rangoli competition with the theme of "Viral Diseases." This event was specially tailored for B.Sc and M.Sc students.

The competition, conducted on the 12th of August, was a collaborative endeavor involving the Department of Microbiology and MSI, a student unit of MSRASC. It provided students with a platform to express their creativity while deepening their understanding of microbiology.

The event transpired smoothly, with participants' Rangoli designs effectively conveying their knowledge of viral diseases. MSI's initiative, fusing artistry with microbiological insights, received an enthusiastic response.

We extend our commendations to all the participants for their active involvement, which not only celebrated the spirit of Independence Day but also contributed to a better understanding of infectious diseases.



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## FACULTY ACHIEVEMENTS

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- Manikandan A, Vemula Vani, Medha Yadav and Angshumita Mahanta. Peptide to the Rescue: A novel inhibitor for SARS-CoV-2. Poster Presented at One Day National Symposium on "Innovations in Science: A Showcase of Poster and Model Excellence" organized by M S Ramaiah College of Arts, Science and Commerce, on 13th July 2023. (Secured First Prize - POSTER presentation)
- Vemula Vani, Manikandan A, Medha Yadav and Angshumita Mahanta. Peptide therapeutic designing and development for HPV E6-E6AP. State Level Seminar - 2023 On "Current Trends in Science" 12th July, 2023, B.M.S. College for women, Bangalore, India. (Secured First Price - POSTER presentation)
- Manikandan A, Tejaswini L and Shiva Prasanna Bhat. Green synthesis of silver nanoparticles for infection and inflammation. State Level Seminar - 2023 On "Current Trends in Science" 12th July, 2023, B.M.S. College for women, Bangalore, India.
- Manikandan A, Yashashwini N and Mhalasa BR. Green synthesis of fluoroindolines as DNA gyrase inhibition and microbial infections. State Level Seminar - 2023 On "Current Trends in Science" 12th July, 2023, B.M.S. College for women, Bangalore, India. (Secured third Price - ORAL presentation)
- Manikandan A, and Abishek S. Apoptosis inducing metabolites from marine mangrove actinobacteria. International Conference on "Recent Updates in Food and Drugs from Natural Source and its Multiverse Applications" (RUFDNSMA - 2023), 5th - 7th July, 2023, Satyabhama University, Chennai, India.
- Manikandan A and Tejaswini P, Natural medicines from *Myristica fragrans* for predominant uropathogen. International Conference on "Recent Updates in Food and Drugs from Natural Source and its Multiverse Applications" (RUFDNSMA - 2023), 5th - 7th July, 2023, Satyabhama University, Chennai, India.
- Manikandan A and Trupti P, Green discovery of vanillin-based fluoroindolines for microbial infections via DNA gyrase inhibition. International Conference on "Recent Updates in Food and Drugs from Natural Source and its Multiverse Applications" (RUFDNSMA - 2023), 5th - 7th July, 2023, Satyabhama University, Chennai, India. (Secured First Price - ORAL presentation)
- Manikandan A and Anusha Rajkumar. Natural and sustainable medicine development for predominant uropathogen. National Conference On "Environmental Sustainability: New Perspectives and Paradigms" 21st June 2023, Maharani Lakshmi Ammanni College for Women Autonomous, Bengaluru, India.

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"MEMORABLE MOMENTS: A GLIMPSE OF OUR JOURNEY DURING JULY-  
SEPTEMBER 2023"

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## "OUR TEAM"

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**DR. PRASANNA SRINIVAS R**

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MICROBIOLOGY,  
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**MS. SWAPNA**

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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