

**M S RAMAIAH COLLEGE OF ARTS, SCIENCE AND  
COMMERCE-AUTONOMOUS**

**MICROBIOLOGY INSIGHTS**

**JULY-SEPTEMBER 2024**

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**Vice Principal**

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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 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

# 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.

## 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

## HOD'S MESSAGE

### HOD- PG Department of Microbiology

"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



Dr. Prasanna Srinivas R,  
Head (PG)

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".

### **HOD- UG Department of Microbiology**

Welcome to the Department of Microbiology at MSRCASC-AUTONOMOUS. It is my pleasure to extend a warm greeting to all our BSc students.

Our department is dedicated to fostering a dynamic and supportive learning environment. As you embark on your academic journey in microbiology, you will have the opportunity to explore the fascinating world of microorganisms and their impact on health, environment, and industry. Our curriculum is designed to provide you with a comprehensive understanding of microbiological principles, combined with practical skills through laboratory sessions and research projects.



Mrs. Soumya S Shanbhag,  
Head (UG)

We pride ourselves on our distinguished faculty, who are not only passionate educators but also active researchers contributing to advancements in various fields of microbiology. You will have the chance to engage with cutting-edge research and benefit from their expertise and mentorship.

I encourage you to take full advantage of the resources and opportunities available to you. Participate in seminars, workshops, and departmental activities to enhance your learning experience. Your journey here will be challenging yet rewarding, and we are here to support you every step of the way.

We are committed to your success and to helping you achieve your academic and professional goals. Let us work together to make your time in the Microbiology Department both enriching and enjoyable.



## FACULTY MEMBERS

<p><b>Dr. Pushpa H</b> Professor and Principal Qualification: M.Sc, M.Phil, Ph.D Area of Specialisation: Mycology, Biodiversity, Bioremediation, Molecular taxonomy, Bioprospecting</p>		<p><b>Dr. Prasanna Srinivas R</b> Assistant Professor and Head (PG) Qualification: M.Sc, M.Phil, Ph.D Area of Specialisation: Medical Microbiology, Immunology and Enzymology</p>	
<p><b>Dr. Savitha J</b> Research Advisor, R&amp;D Cell Qualification: M.Sc, Ph.D Area of Specialisation: Environmental Microbiology, Microbial Biotechnology</p>		<p><b>Dr. Snehalatha V</b> Associate Professor Qualification: Msc(Ag), Ph D, NET Area of Specialisation: Agriculture Microbiology</p>	
<p><b>Mrs. Soumya Satyanand Shanbhag</b> Assistant Professor &amp; Head (UG) Qualification: MSc Microbiology, SET, (Ph.D) VTU Area of Specialisation: Environmental Microbiology</p>		<p><b>Dr. Vemula Vani</b> Associate Professor Qualification: M. Tech., PhD Area of Specialisation: Drug Discovery</p>	
<p><b>Dr. Juliya Rani Francis</b> Assistant Professor Qualification: M. Sc., Ph. D. Area of Specialisation: Microbial Ecology, Host-pathogen interaction</p>		<p><b>Dr. Nimita Venugopal C</b> Assistant Professor Qualification: M.Sc., Ph.D Microbiology Area of Specialization: Microbiology (Antimicrobial Resistance)</p>	
<p><b>Dr. Bhanupriya C.H</b> Assistant Professor Qualification: MSc Microbiology, PhD Plant Biotechnology, Indian Institute of Technology Kharagpur Area of Specialisation: Plant Biotechnology</p>		<p><b>Dr. Swathi D</b> Assistant Professor Qualification: MSc, PhD Microbiology Area of Specialization: Medical Microbiology &amp; Immun</p>	
<p><b>Dr. Vishal M</b> Assistant Professor Qualification: MSc, Ph.D. Area of Specialisation: Medical Microbiology, Enzymology, Phytochemistry</p>		<p><b>Dr. Arvindganth</b> Assistant Professor Qualification: MSc, PhD Biotechnology Area of Specialization: Nanotechnology in drug delivery systems</p>	
<p><b>Dr. Prashanthi Rajaram</b> Assistant Professor Qualification: MSc, Ph.D Area of Specialisation: Environmental Biotechnology, Phytochemistry</p>		<p><b>Dr. Vidya Jagadeeshan</b> Assistant Professor Qualification: MSc, Ph.D Area of Specialisation: Plant Biotechnology &amp; Plant Metabolomics</p>	

## DEPARTMENTAL ACTIVITIES

### 1. Dengue Awareness Program:

The awareness program on Dengue and Malaria aimed to educate participants about the prevention, symptoms, and management of these vector-borne diseases. It sought to enrich the localities and



shopkeepers, shop vendors with knowledge to combat the spread of these diseases in the community. 35 students of second semester M.Sc Microbiology, faculty members of M.S. Ramaiah College of Arts, Science and Commerce-Autonomous, Bengaluru. The faculty coordinators for the program were Dr. Prasanna Srinivas, Dr Nimita Venugopal C. The students had distributed various pamphlets to public in the residential streets of Mathi Kare and market area and created awareness among the public by making attractive charts on causes of dengue



and malaria, transmission modes, prevention control strategies. Various slogans related to dengue and malaria control and prevention in Kannada language were also read aloud by students as a part of awareness.



## 2. Student Orientation Program:

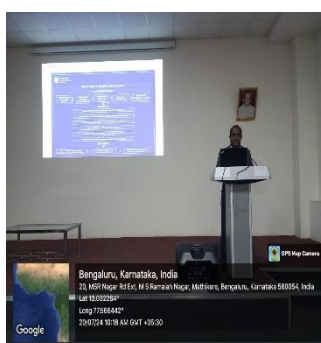
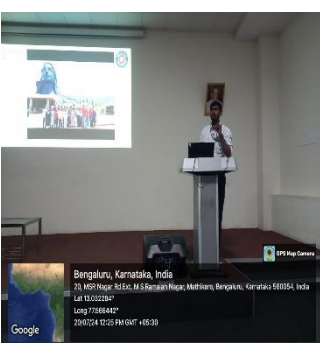
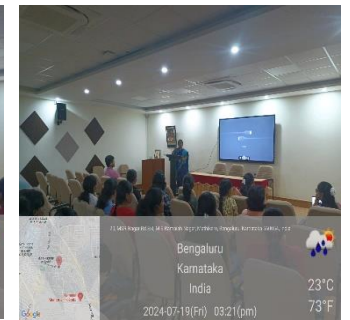
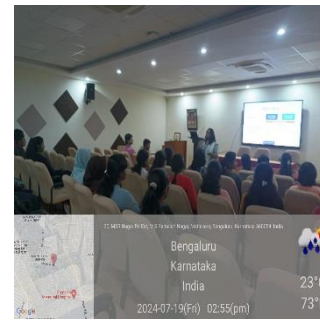
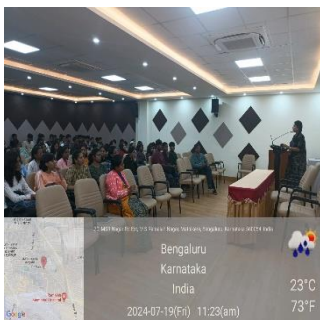
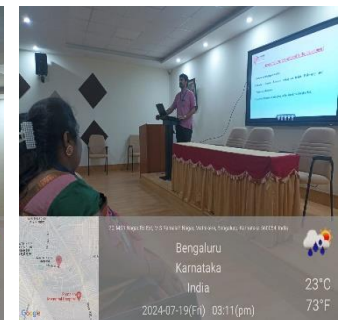
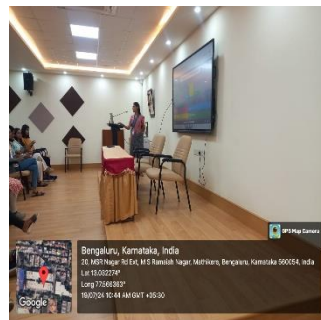
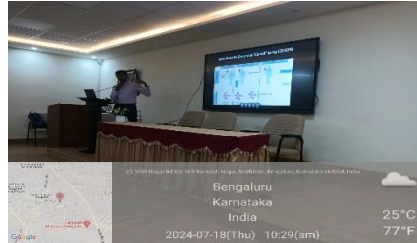
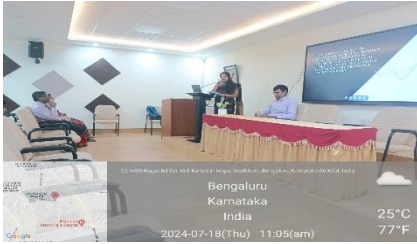
Orientation program was conducted for I semester BSc students from 15<sup>th</sup> July 2024 to 20<sup>th</sup> July 2024. The inauguration ceremony for the 1<sup>st</sup> year UG autonomous batch was held on 15<sup>th</sup> July 2024. The event aimed to welcome the new batch of students and provide them with essential information and inspiration as they embark on their academic journey.

### Outcome of the program:

By establishing clear attendance criteria and promoting a culture of responsibility and accountability, institutions can support the academic success and holistic development of students while maintaining discipline within the academic environment.









### 3. Industrial Visit (PG) GKVK:

As a part of institutional visit, students of both first and second year M.Sc Microbiology visited GKVK, Bangalore on 30<sup>th</sup> July 2024. The students visited department of Soil Science and Agriculture Chemistry where they got exposure to understand the role of different types of soils kept in a museum of paedology. Students were also shown Atomic Absorption Spectrometer (AAS)



and other soil testing related instruments in lab. Department of Entomology had a museum with all life cycle of various preserved insects that were beautifully displayed and the beneficial role of insects in agriculture were also well explained by the scientist of the department. Visit to department of sericulture was very enlightening with display of different types of silk worms, where students learnt about mulberry cultivation, life cycle of silk worms, types of silk like Muga silk, Eri silk and Mulberry silk. Various handicraft materials were displayed in sericulture museum. Visit to department of microbiology gave insight about various ongoing research in the department. Also, students visited biofertilizer unit where students gained knowledge on different types of bioinoculants, their production



and application. The cultivation of azolla motivated students to enter into entrepreneurship. A visit to department of mycology helped the students in learning about various steps involved in mushroom cultivation. The final visit to GKVK museum gave the complete idea about the institution.

#### 4. Industrial Visit (PG) IIHR

Students of both first and second year M.Sc Microbiology visited Indian Institute of Horticulture Research (IIHR), Hesserghata, Bangalore as a part of institutional visit on 25<sup>th</sup> July 2024. The students got the knowledge of all scientific inventions happening at the institute which motivated the students to plan their future related to research in horticulture field. Visit to department of Biotechnology gave the practical exposure to plant tissue culture starting from media

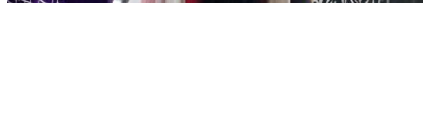


preparation to callus culture and tissue culture plants which were explained by the scientist of the department. Visit to department of pathology, and mushroom cultivation were also made. Also visit to nursery helped the students to view different saplings of plantation crops.

## 5. Wine Making Workshop

Department of Microbiology, MSRCASC organized a 2 days workshop on Wine Making-Research innovation & marketing strategies for Advancement towards Entrepreneurship. The workshop was designed to be both informative and interactive, ensuring that you not only understand the theory behind winemaking but also get hands-on experience in each stage of the process. The resource person for workshop was Dr. Shivakumar M C, who was having over 2 decades of industrial experience at Biocon industry and Dr. Savitha J, Research advisor, MSRCASC. MSc. Microbiology students worked as a volunteer during entire workshop and helped students to prepare wine. The workshop started on 3<sup>rd</sup> September 2024 and ended on 24<sup>th</sup> September 2024.

170 students of I year BSc attended the workshop.





## 6. Microfest-2K24

Department of Microbiology in collaboration with the Sukshmanika Club. The event aimed to foster creativity, knowledge, and skill development among students in various microbiology-themed activities. With a diverse range of competitions, “Microfest 2024” witnessed enthusiastic participation from students across different disciplines.



**The list of Event Conducted were:** Micro-relay, Ferment Dine, Treasure Hunt, Quiz



Microfest 2024 was a resounding success, bringing together creativity, knowledge, and competition. The diverse range of events allowed participants to showcase their talents in various aspects of microbiology, from art and design to problem-solving and scientific knowledge. The event was not only an opportunity for learning but also fostered a sense of community and collaboration among students.

The Department of Microbiology and Sukshmanika Club extend their heartfelt thanks to all participants, volunteers, and winners for making Microfest 2024 a memorable and enriching experience. We look forward to continuing this tradition of excellence in the years to come.



## 7. International Microorganisms Day 2K24

This day commemorates the discovery of microorganisms by Antonie van Leeuwenhoek in 1676, a key milestone in the history of science. International Microorganisms Day 2K24 is an initiative taken by the department of microbiology, MSRCASC, to ignite awareness about recent trends in Microbiology and to encourage experiential and participative learning among students. This program aims to raise awareness and appreciation for the importance of microorganisms in various aspects of life and the environment. International Microorganisms Day was marked by various educational and interactive events. These include:

- Petri art,
- Biorangoli,
- Biocarving and
- Biosketch.

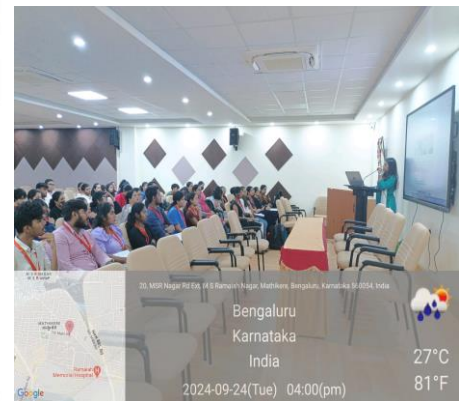
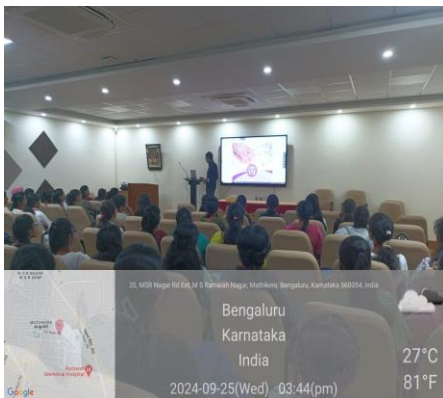
The events were successfully completed from 9<sup>th</sup> September to 17<sup>th</sup> September 2024.





## 8. FoSTac- Food Safety Training Program

The Food Safety Training and Certification (FoSTaC) program is an initiative by the Food Safety and Standards Authority of India (FSSAI) aimed at improving food safety standards across India. The program was developed to ensure that food handlers in various sectors are trained in proper food safety practices, contributing to a safer food supply chain. The training program is mandatory for food businesses and is designed to ensure compliance with food safety regulations through education and certification. This FoSTaC training program was organized by department of microbiology in association with Narayana Training Services. The program aimed to train food handlers and professionals on the best practices in food safety, hygiene, and sanitation in line with FSSAI's regulations. The training was organized on 24<sup>th</sup> and 25<sup>th</sup> of September 2024.



## CENTUM SCORERS IN UG MICROBIOLOGY

**These students have achieved remarkable academic excellence by securing a centum in their I, III and VI Semester B.Sc.**

### CENTUM SCORERS-I SEMESTER

SL. NO.	Name of the Student	Registration No.
1	Alfin B George	U18EV23S0005
2	K P Pavani	U18EV23S0138
3	Megholina Saha	U18EV23S0007
4	Seerat Aziz	U18EV23S0124
5	Riddhi R Chandraghatgi	U18EV23S0137
6	Shriya Gejjehalli	U18EV23S0084

### CENTUM SCORERS-III SEMESTER

SL. NO.	Name of the Student	Registration No.
1	Snigdha Amarnath	U18EV22S0097
2	Rekha Kumari	U18EV22S0135
3	Nihaarika S N	U18EV22S0167
4	Manasa V	U18EV22S0222
5	Mahee Prabhu	U18EV22S0229
6	Tanya Chiripal S	U18EV22S0264
7	Stuti Jatin Parekh	U18EV22S0266
8	Ashissa Bedamatta	U18EV22S0343
9	Saman Tahniat	U18EV22S0351

**CENTUM SCORERS-VI SEMESTER**

SL. NO.	Name of the Student	Registration No.
1	Sneha G	U18EV21S0003
2	Sneha Varadaraj	U18EV21S0004
3	Abishek S	U18EV21S0006
4	Mohammed Faizan R V	U18EV21S0007
5	P L Sai Nireeksha	U18EV21S0009
6	Shilpy Chandra	U18EV21S0010
7	D M Laavanya	U18EV21S0011
8	Bindu Vaishnavi M	U18EV21S0012
9	Shweta V Bhat	U18EV21S0013
10	Vasavi H	U18EV21S0017
11	Aarushi K P	U18EV21S0020
12	Shivani B N	U18EV21S0023
13	Chirali Urs C M	U18EV21S0024
14	Suchita Kumari	U18EV21S0028
15	Nidhi Verma	U18EV21S0031
16	C H Roopa	U18EV21S0034
17	Shreya K	U18EV21S0047
18	Kavya M	U18EV21S0139
19	Archana M	U18EV21S0141
20	Dhanushree Nk	U18EV21S0145
21	Shakthi Kumar M	U18EV21S0150
22	Prajwal M	U18EV21S0151
23	Shreya J M	U18EV21S0157
24	Nellore Lakshmi Bhavani	U18EV21S0173
25	Michelle Sarah Roy	U18EV21S0177
26	Lekshmi Gopal	U18EV21S0192
27	Sheetal K	U18EV21S0201
28	Sony S Varghese	U18EV21S0215
29	Shaik Fahed Hussain	U18EV21S0219
30	Sanchita Singh	U18EV21S0224
31	Gopika G	U18EV21S0230
32	Rahul M	U18EV21S0245

33	Yashaswini K N	U18EV21S0246
34	Amoghavarsha B S	U18EV21S0249
35	Afran Pasha	U18EV21S0260
36	Karthik U	U18EV21S0263
37	Kondaraju Meghana	U18EV21S0271
38	Nayana Shree S N	U18EV21S0272
39	Nisarga B	U18EV21S0275
40	Trupti M Hugge Patil	U18EV21S0280
41	Mythri M	U18EV21S0282
42	Gaurav Singh R	U18EV21S0286
43	Chahat Singh	U18EV21S0287
44	Tejaswini	U18EV21S0290
45	Varsha S R	U18EV21S0291
46	Yashaswini C R	U18EV21S0293
47	Jahnvi T A	U18EV21S0297
48	Chethan G	U18EV21S0302
49	Vasudha K	U18EV21S0304
50	Ananya G	U18EV21S0306
51	Sushma N	U18EV21S0310
52	Chaitanya M	U18EV21S0316
53	Shalini S	U18EV21S0317
54	Gowthami M	U18EV21S0325
55	Arpitha S Dandin	U18EV21S0326
56	Roopa Shree G	U18EV21S0327
57	Muktha Shree K R	U18EV21S0334
58	Dasari Venkata Pujitha	U18EV21S0335
59	Govardhana V	U18EV21S0341
60	Megha H R	U18EV21S0342
61	Ujjwal	U18EV21S0346
62	Ritika Gupta	U18EV21S0354



<b>CENTUM SCORERS-VI SEMESTER DCMB603-Microbial Genetic Engineering and Industrial Microbiology</b>		
<b>SL. NO.</b>	<b>Name of the Student</b>	<b>Registration No.</b>
1	Sneha G	U18EV21S0003
2	Sneha Varadaraj	U18EV21S0004
3	Abishek S	U18EV21S0006
4	Mohammed Faizan R V	U18EV21S0007
5	P.L.SaiNireeksha	U18EV21S0009
6	Shilpy Chandra	U18EV21S0010
7	D M Laavanya	U18EV21S0011
8	Bindu Vaishnavi M	U18EV21S0012
9	Shweta V Bhat	U18EV21S0013
10	Vasavi H	U18EV21S0017
11	Aditi C Yerekuppi	U18EV21S0019
12	Shivani B N	U18EV21S0023
13	ChiraliUrs C M	U18EV21S0024
14	Suchita Kumari	U18EV21S0028
15	Nidhi Verma	U18EV21S0031
16	C H Roopa	U18EV21S0034
17	Shreya K	U18EV21S0047
18	Kavya M	U18EV21S0139
19	Archana M	U18EV21S0141
20	Dhanushree N K	U18EV21S0145
21	Shakthi kumar M	U18EV21S0150
22	Prajwal M	U18EV21S0151
23	Shreya J M	U18EV21S0157
24	Nellore Lakshmi Bhavani	U18EV21S0173
25	Michelle Sarah Roy	U18EV21S0177
26	Lekshmi Gopal	U18EV21S0192
27	Sheetal K	U18EV21S0201
28	Sony Sosa Varghese	U18EV21S0215
29	Shaik Fahead Hussain	U18EV21S0219
30	Sanchita Singh	U18EV21S0224
31	Gopika G	U18EV21S0230
32	Afran Pasha	U18EV21S0260

33	Karthik U	U18EV21S0263
34	Meghana kondaraju	U18EV21S0271
35	Nayana Shree S N	U18EV21S0272
36	Nisarga B	U18EV21S0275
37	Trupti M Hugge Patil	U18EV21S0280
38	Mythri M	U18EV21S0282
39	Ria Raghu	U18EV21S0283
40	Gaurav Singh	U18EV21S0286
41	Chahat Singh	U18EV21S0287
42	Tejaswini	U18EV21S0290
43	Varsha S R	U18EV21S0291
44	Yashaswini C R	U18EV21S0293
45	Jahnavi T A	U18EV21S0297
46	Chethan G	U18EV21S0302
47	Vasudha K	U18EV21S0304
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52	Deeptangi P Mangsuli	U18EV21S0322
53	GOWTHAMI M	U18EV21S0325
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55	Roopa Shree G	U18EV21S0327
56	Muktha Shree K R	U18EV21S0334
57	Dasari Venkata Pujitha	U18EV21S0335
58	GovardhanaVenkatesappa	U18EV21S0341
59	Megha H R	U18EV21S0342
60	Ujjwal	U18EV21S0346
61	Ritika Gupta	U18EV21S0354
62	Rahul M	U18EV21S0245
63	Yashashwini K N	U18EV21S0246
64	Amoghavarsha B S	U18EV21S0249

## OUR NEWSLETTER TEAM

- **Dr. Prasanna Srinivas R**, Head (PG), Department of Microbiology, MSRCASC
- **Dr. Vemula Vani**, Associate Professor, Department of Microbiology, MSRCASC
- **Mrs. Soumya S Shanbhag**, Head (UG), Department of Microbiology, MSRCASC
- **Dr. Vishal M**, Assistant Professor, Department of Microbiology, MSRCASC

### STUDENTS CO-ORDINATORS:

- **Mr. KARTHIK. U**, V SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Kavya M**, V SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Tejaswini**, V SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Vasavi**, V SEM BSC, Department of Microbiology, MSRCASC
- **Ms. Hastha D**, III SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Nihaarika** III SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Swapna Sahoo**, III SEM BSC, Department of Microbiology, MSRCASC
- **Ms. Laya N**, III SEM BSC, Department of Microbiology, MSRCASC
- **Ms. Manasa V**, III SEM BSC, Department of Microbiology, MSRCASC
- **Ms.Priyadarshini**, I SEM BSC, Department of Microbiology, MSRCASC
- **Ms. Manasa S**, I SEM BSC, Department of Microbiology, 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 endeavours. 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 us 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**  
**MSRCASC-Autonomous, Bangalore.**