Department of Microbiology

2016 marks the march of the Department into its 37th year after its establishment in 1979.

Achievements

- Our T. Y. B.Sc. student Ms. Zeenath Mustafa stood first in the subject of Microbiology at the University level. She was felicitated by the Hon. Vice-Chancellor of Mumbai University for the same.
- The department was conferred with the award for ‘Department with highest research output in 2015-16’ by the college
- 13 SYBSc and 30 TYBSc students participated in the 15th State Level MicrobiOlympiad organized at Shirpur. In the final round held on 27th Jan 2016, our T.Y. Students bagged the 2nd position while our S.Y. students stood at 4th position
- Ms. Dona Joseph was felicitated for her innovative teaching methods by Aadharshila, Innovative & collaborative group of VES, on 27th June, 2015

Best practices:

- Our teachers employ innovative and participative teaching methods such as POGIL, group activities, student seminars, video screenings, etc to make learning more effective and interesting for the students
- Our department has a very active association in collaboration with the Biotechnology department, which conducts subject based competitions throughout the year in order to develop student interest in Microbiology and facilitate better understanding of the subject. Academic toppers and prize winners of competitions are felicitated annually
- Our alumni are actively involved in guiding our students regarding their career and helping in their placement
- We conduct a hands-on training course on ‘Bio-informatics’ every year for our T.Y.B.Sc students
- Our department has started giving additional coaching to advanced learners, in order to prepare them for competitive exams like NET,SET,PET, IIT,UGC-CSIR etc.

Association activities:

- The annual inaugural function of the Microbiology and Biotechnology association was held on 4th September 2015. The highlight of the event was the prize distribution function during which the students were felicitated for their academic achievements and performance in extra-curricular activities in the year 2014-2015. Dr Ashok Londhe, Senior Microbiologist, Hi-Media, was the Chief Guest for the function. He gave a very informative talk on “Role of Microbiologist in Diagnostic Company” to the students. Dr Nagesh Malik, President of the association and Head of the Microbiology Department, briefed the gathering about the overall progress of the department and gave an overview of the association activities.
A Microbiology based Quiz competition was conducted for FYBSc students by Mrs. Shweta Patil. A preliminary written test was followed by an oral quiz competition on 9th Feb 2016, which consisted of Picture round, Spell Bee, Dumb Charades and Rapid fire rounds.

A poster competition for SYBSc students was conducted by Mrs. Shweta Patil on 20th Feb 2016.

An essay competition for S.Y.B.Sc and F.Y.B.Sc students was conducted by Mrs. Shweta Patil on 20th Feb 2016.

Oral power point presentations of research papers were organized by Mr. Suman Ganger and Ms. Shweta Patil for the T. Y.B.Sc students from July to Dec 2016. The winners of this competition were sent for the intercollegiate paper presentation competition organised by the Dept. of Biotechnology in association with Marathi Vidyan Parishad.

Seminar competitions were organized for SYBSc students by Prof. Santhini Nair and Ms. Dona Joseph over the entire year.

Collaboration activities:

SYBSc students attended a talk by Mr. Ganesh Bhatt on ‘Financial literacy – How to be a smart investor’ organized by LLLE in collaboration with Consumer Guidance Society of India on 1st August 2015.

A one day seminar on “How to prepare for various competitive exams (IIT, JAM, GATE, CSIR-NET, etc) after B.Sc” was organized for TYBSc (Microbiology and Biotechnology) students. The seminar was conducted in collaboration with Ziska group Management team Mr. Aarif Quraishi (IIT-B) and Mr. Lokesh Sachdeva (NITJ) in the week of September 2015. This was followed by a three month’s lecture series for the interested students.

From 3rd to 6th November 2015, a hands-on training workshop on ‘Bioinformatics, Databases, Its Tools and Applications’ was organized for TYBSc students by Dept of Microbiology in collaboration with Cistron Integrated Systems.

Seminars/Guest lectures organized

The Microbiology department, in collaboration with BOS (Microbiology), organized an S.Y.B.Sc revised syllabus workshop on 13th June 2015. It was attended by 60 participants from 28 colleges.

Science week was celebrated with a popular science lecture organized by IWSA and sponsored by BRNS on 23rd Feb 2016. The lecture on ‘Proteomics today’ was delivered by Dr. Surekha Zingde, Former Deputy Director at ACTREC, Kharghar. 145 students from various Mumbai colleges attended the lecture.
Alumni interactions:

- Our alumnus Dr. Prajakta Oak (Post Doctoral Scientist from Germany) gave a talk titled ‘Present effectively’ as a soft skill development program for students of TYBSc (Microbiology and Biotechnology) and M. Sc (Microbiology).
- In the first week of February, Ms. Kshama Kamath, who is currently a Ph.D. scholar at IIT, Mumbai, addressed students of B.Sc and M.Sc classes from Microbiology & Biotechnology Departments on Career prospects in the field, especially regarding preparation required to face entrance exams and interviews for pursuing Doctoral programs in IIT.
- Dr. Aniruddha Deshpande, our prominent alumnus, who is at present a Principal Investigator, Sanford Burnham Prebys Medical Discovery Institute, California, gave a talk on “Does everyone develop covert cancer? An evolutionary perspective to an ancient disease”, on 14th January 2016. It was attended by Microbiology & Biotechnology students from our college as well as other colleges affiliated to Mumbai University. The event was coordinated by Prof. Santhini Nair.
- Mr. Manish Kumar, currently pursuing his Ph.D at Institute of Bioinformatics, Bengaluru, addressed all the PG students about the thrust areas and recent developments in Genomics and Proteomics. He also gave an insight into his research findings and latest publications.

Educational Visits:

- On 8th Aug 2016, 10 TYBSc students, accompanied by Ms. Dona Joseph, visited the National Burns Centre at Airoli, to get acquainted with the skin bank and other hospital facilities for burns patients. There was an awareness talk on ‘Skin donation’ which inspired many of the students to pledge their skin for donation.
- On 5th Dec 2015, 10 TYBSc students, accompanied by Ms. Dona Joseph, attended the Open Day of School of Science, NMIMS. During the event, students of the institute conducted hands-on demonstrations and showcased some of the interesting and innovative research taking place at the institute in the areas of Microbiology & Biotechnology, Stem cell research, Neuroscience, Translational cancer research, Medicinal plant research, nanotechnology, Translational phytochemistry and Analytical Chemistry. It was an excellent learning opportunity for our students.
- On 22nd and 23rd January 2016, 22 students of TYBSc (Microbiology), accompanied by Prof. Suman Ganger & Prof. Malay Shah, visited the Horticulture Training Centre and Institute of Bioinformatics and Biotechnology, Pune

VESLARC Activities:

- Mr. Suman Ganger attended an Induction program organized by VESLARC on 8th July 2015. The programme was co-ordinated by Ms. Piya Mukherjee.
• 36 students of SYBSc (Microbiology) and M.Sc (Microbiology) attended the ‘Jigyasa’ program conducted at VESLARC by Ms. Preeti Vasudevan on 17th Feb 2016. Two sessions were held on ‘How to study effectively’ and ‘How to handle stress before exams’

• 36 students of SYBSc Microbiology underwent a training program on the topic of ‘Goal planning’ conducted by Ms. Piya Mukherjee, Director, VESLARC in their campus on 18th Feb 2016. All the students were highly appreciative of the learning and gave a very positive feedback of the outcome of the session.

Parent teachers meet:

• A parent-teachers’ meet was conducted for FYBSc class on 11th June 2015 at the Forum Hall from 3.00-5.00 p.m. The parents were briefed about their wards’ attendance and the department association and extension activities.

• Interaction between class coordinators and parents of SYBSc attendance defaulters was conducted on 12th December 2015.

Participation in inter-collegiate activities/training programs

• 10 students from SYBSc participated in ‘Gaia’ an environmental awareness program organized by Wilson College on 17th Aug 2016. They performed a street play titled ‘Paani na milega dobara!’ on the theme of ‘Water conservation’ and won the second prize for the same.

• 9 students of M.Sc (II) attended a workshop on Animal Tissue Culture at School of Biotechnology & Bioinformatics, D.Y.Patil University, Navi Mumbai on 28th September 2015. The co-ordination with the institute was done by Prof. Santhini Nair.

• SYBSc (Microbiology) students attended a program at Ramakrishna Mission, Khar to commemorate Swami Vivekanand’s birth anniversary on 12th Jan 2016, on the occasion of National Youth Day.

• On 29th and 30th January 2016, Mr. Alok Singh (M.Sc research student) attended a lecture workshop on ‘Emerging trends in Environmental Biotechnology’ organized by D.Y. Patil University School of Biotechnology and Bioinformatics and sponsored by Science Academies

Student placements:

• On 13th June 2015 a campus interview was conducted by our alumnus Mr. Sayantan Barat on behalf of ‘Meril Diagnostic’. 10 students of M.Sc (II) were interviewed. One student, Mr. Aditya Patil was placed.

• On 30th June 2015, our ex-HOD Prof. Hema Varadarajan arranged for placement interviews by Padmaja Aerobiologicals Pvt. Ltd. 9 students of M.Sc (II) were interviewed and two students were placed as trainee Microbiologists.
**Consultancy:**

Mr. Varghese J Thiruvinal, a Master of Engineering student, who is doing a project on "Automatic Blood Cell image identification & classification using simulation software" is being assisted by Mr. Suman Ganger for microscopic validation of his results.

**Staff activities**

- Dr Nagesh Malik attended a Workshop on Flow Cytometry organized by D.Y.Patil University on 11\(^{th}\) and 12\(^{th}\) May 2015
- Mr. Suman Ganger attended a 2 day conference on ‘Smart Cities’ organized by Vijnan Bharti in association with Mahindra and We School on 6th and 7th June 2015
- Mr. Malay Shah attended the Summer CUBE meeting held at HBCSE on 5th July, 2015.
- Dr. Nagesh Malik, Prof. Santhini Nair and 10 M .Sc. (Part II) students on 1\(^{st}\) August 2015 attended an International Conference on ‘Bio-markers for radiation exposure and cancer’ organized by Department of Biotechnology, University of Mumbai in association with Biomarkers International Group.
- Mr. Suman Ganger attended a workshop on ‘Techniques in Molecular Diagnostics’ organized by Department of Biotechnology, SIES College, sponsored by Lady Tata Memorial Trust from 12th - 14th August 2015
- On 22nd August, 2015, Prof. Santhini Nair attended a leadership seminar on the theme ‘Strengthening women’s leadership for a changing world’ organized by Ramakrishna Mission, Khar
- Mr. Suman Ganger attended a two day workshop on Biostatistics at Ruparel College on 4th September 2015
- Prof. Santhini Nair attended a training program on ‘Advances in Application of Nanotechnology’ from 5\(^{th}\) to 9\(^{th}\) October 2015, at ICAR-CIRCOT, Matunga, Mumbai. The program consisted of demonstrations, practical sessions based on the latest developments in Nanotechnology &its Applications in Textiles, Composites, Nanosensors, Filtration & Agriculture.
- Dr. Nagesh Malik, Prof. Santhini Nair and Ms. Dona Joseph attended a workshop on “Undergraduate syllabus discussion in Microbiology” at G. N. Khalsa College on 17\(^{th}\) November 2015.
- Mrs. Shweta Patil attended a workshop on HPLCMS/MS from 10\(^{th}\) – 12\(^{th}\) Dec 2015 organized as a part of ‘Targeted Proteomics workshop and International Symposium’ by IIT- Mumbai
- Prof. Santhini Nair was invited as Chief Guest to inaugurate ‘Consortia 2016’ an Intercollegiate Biotechnology festival organized by Pillai College, Panvel on 16th Jan 2016. She also judged the Debate competition ‘Vaad-Vivaad’
• Dr. Nagesh Malik was invited as Center Observer for the National Olympiad at Chennai Centre by HBCSE from 28th Jan to 1st Feb 2016.

• Our administrative staff member Mr. Tanaji Devgonde attended a 1 day workshop on Laboratory safety Management organized by Mahatma Phule ASC college Panvel on 9th Feb 2016.

• All the teachers of the Microbiology department attended a National level conference on “Evolving as a smart college: Concept, Opportunities and challenges” held at VES College from 17th and 18th Feb 2016.

• Ms. Dona Joseph attended a short term course on ‘Soft Skills’ conducted by UGC-HRDC, University of Mumbai from March 7- March 12, 2016

• Mr. Suman Ganger attended a short term course on ‘Mentoring of students’ conducted by UGC-HRDC, University of Mumbai from March 14 - March 19, 2016