

# **Department of Microbiology**

## **Association Activities (2015-16)**

### **1. Association Inauguration and World Environment Day Celebrations (5/06/2015)**

As part of World Environment Day Celebrations, 2015, Department of Microbiology, St. Mary's College, Thrissur conducted a one week Awareness Programme on Monsoon Diseases - Prevention and Treatment which was financially supported by Kerala State Council for Science, Technology and Environment (KSCSTE). The Microbiology Association as well as the awareness programme was officially inaugurated on 5<sup>th</sup> June 2015, by Dr. Uma Maheswari Thankachi, Epidemiologist, District Medical Office, Thrissur who delivered a talk on the topic 'Monsoon Diseases: Prevention and Treatment'.



**Awareness Talk on the topic 'Monsoon Diseases: Prevention and Treatment'**

Dr. Uma Maheswari Thankachi, shared, from her prolific experience in the medical sciences area, the general symptoms, trends, prevention measures and treatment for the communicable diseases especially spread during monsoon time. This was followed by a brief session where the audience could clear their doubts regarding the topic.

### **2. Power point presentation/ Essay writing/ Poster making competition (10/June/2015)**

Power point presentation/ Essay writing/ Poster making competition on the theme microbial diseases during monsoon were conducted on June 10, 2015. The competitions provided a platform for the students to share their knowledge and enhance the same so as to make themselves and those around aware and healthy. There was good participation of students from different disciplines and the winners were judged by a panel of three judges each, were awarded certificate and prize.

In power point presentation, Chandini Nandilath and team, I<sup>st</sup> MSc Microbiology bagged first prize, Anjali Variar and team, III<sup>rd</sup> BSc Microbiology won second prize and Sameena and team of II<sup>nd</sup> BSc Microbiology got third prize. Anjana Chandran, II<sup>nd</sup> BSc Chemistry, Sabha Kottayil, III<sup>rd</sup> BSc Microbiology and Keerthy E R, III<sup>rd</sup> BSc Microbiology won the first, second and third prizes in Poster making competition. The first, second and third positions for Essay Writing competitions were bagged by Ashly Thomas, III<sup>rd</sup> BCA, Eleena Antony, III<sup>rd</sup> BSc Microbiology, Jimsy Johnson, III<sup>rd</sup> BSc Microbiology, respectively.



**Power point presentation competition**



**Essay writing competition**



**Poster making competition**

**3. Exhibition on prevention and treatment of Monsoon diseases (12/June/2015)**

An **Exhibition** to generate awareness on prevention and treatment of Monsoon diseases (including various water borne, air borne and vector borne monsoon diseases and proper safeguards to keep the diseases and infections at bay) was conducted for the general public on June 12, 2015. The exhibition aimed at spreading knowledge and caution against the various diseases prevalent during the rainy season, had a good response with over 300 visitors.



**Exhibition on 'Monsoon Diseases: Prevention and Treatment'**

**4. Awareness Classes for school students on the topic Monsoon diseases (15 and 18/June/2015)**

**Awareness Classes** for school students in the nearby schools on the topic Monsoon diseases were held on June 15, 2015 in Holy Family Higher Secondary School, Chembukkavu and June 18, 2015 in Sacred Heart School, Thrissur. The Ayurvedic tips regarding general hygiene to be followed during monsoon season and the precautions to be taken to have a disease free season were enthusiastically received by the school students with a promise to follow and share with their peers.



**Awareness Class on ‘Monsoon Diseases: Prevention and Treatment’**

A Pamphlet on ‘Precautions during Monsoon Season’ detailing the various precautionary measures to be taken during monsoon season to avoid and prevent disease spread was prepared and distributed among the student community. The Pamphlet described common monsoon diseases, their cause, symptoms, preventive measures and general hygiene to be followed.



**Newspaper Report on World Environment Day celebrations**

**5. Open Course Orientation (9/June/ 2015)**

Department of Microbiology offers an open course on the topic Environmental Microbiology for the students of other departments during the Vth Semester of U G Course. A detailed orientation regarding the relevance of the paper, syllabus covered and credit awarded was given by Ms Ruveena T N, Asst. Professor on Contract, to the students of other UG departments.

**6. Microbiology Association Election (29/June/2015)**

Microbiology Association Election for the academic year 2015-16 was conducted during the tutorial hour. Following students were elected as the Association representatives.

Association Representatives	Name	Class
President	Rose Meldril John	II PG
Vice- President	Asha P Antony	III UG
Secretary	Rosemol Jose	II UG

Joint Secretary	Nanditha Viswanathan	I UG
Treasurer	Rithu	II UG
Committee Members	Jimsi Johnson	III UG
	Neena Sivaramdas	II UG
	Likha P	I UG

7. **Industrial visit to CMFRI, Cochin (30/June/2015)**

The students and teachers of the Department of Microbiology, St. Mary's College, Thrissur visited the Central Marine Fisheries Research Institute, Cochin (CMFRI), as a part of the curriculum activities on 30<sup>th</sup> of June, 2015, Tuesday. There were 35 students from III DC and 12 students from II PG and 3 teachers, Dr. Meera C.R., Dr. Dhanya K.C. and Smt. Elizabeth Thomas accompanied them. The first visit was to the Marine Biodiversity Referral Museum which contained 2034 specimens belonging to 22 holotypes. The varied and rich collection consisted of herbarium, preserved specimens from *Phylum Chordata*, *Phylum Arthropoda*, *Phylum Porifera*, marine algae etc. Then the next department visited was Marine Research Aquarium. The live, colourful and mesmerizing fishes were displayed along with information such as their scientific names, common names both in Hindi and Malayalam, family, maximum size, environment, suitable climate, biology and whether the organism is dangerous or not. Next, Agricultural Technology Information Centre was visited. The centre had information on different fishing devices and technologies in common use such as cage culturing. Miniature models of the same were also displayed. The Molecular Diagnosis Lab was also visited. The chief scientist explained the techniques employed to preserve the larvae of fish species facing the threat of extinction from over exploitation. Some of the techniques used, including Polymerase Chain Reaction (PCR), Gel Electrophoresis etc. were demonstrated.



8. **Industrial visit to Milma Dairy, Ramavarmapuram (1/July/2015)**

On July 1<sup>st</sup> 2015, II BSc students of Microbiology department of St Mary's College, Thrissur were taken for the industrial dairy study to Milma Dairy Farm in Ramavarmapuram, Thrissur, under the guidance of Dr. Mabel Merlen Jacob and Smt. Elizabeth Thomas. Miss Vincy gave us a brief

outline about Milma, the popular name given to Kerala Co-operative Milk Marketing Federation (KCMMF) and explained the motto of Milma - ‘Your health is our concern’.

First visited the production section of Milma, and given a detailed description about pasteurization, which is the scientific method of destroying the pathogenic bacteria in the milk without destroying the nutrients. Then she pointed out HTST (Higher Temperature/ Short Time) pasteurization in the dairy industry. Miss Vincy gave detailed description of the cleaning schedule of the farm, the pipeline/tank which carry milk is cleansed completely using hot water, alkali and acids. Finally, we were taken to the waste water treatment section, including Wet Well Agitator ET/o, Aeration Tank and Second Classifiers where the effluent was treated using anaerobic bacteria, and treated water is used to replenish the ground water.



9. **Induction Course for 1<sup>st</sup> BSc. Microbiology students (10/August/ 2015 – 20/ August/ 2015)**

To familiarize the students with the subject, the Department used to conduct induction course for I B Sc students. Classes were taken from 10/August/ 2015 – 20/ August/ 2015.

Faculty	Topics	Class	Date
Dr C R Meera	General introduction to Microbiology	1st Sem B.Sc	12/8/2015
Dr Dhanya K C	Prokaryotes	1st Sem B.Sc	10/8/2015
Dr Mabel Merlen Jacob	Introduction to Industrial Microbiology	1st Sem B.Sc	17/8/2015
Smt Ruveena T N	Introduction to Environmental Microbiology	1st Sem B.Sc	19/8/2015
Smt Elizabeth P Thomas	Introduction to Medical Microbiology	1st Sem B.Sc	17/8/2015
Smt Geenat Paul	Introduction to Lab	1st Sem B.Sc	20/8/2015

#### **10. Cleaning of Chembukkavu locality (12/ August/ 2015)**

Department of Microbiology participated in various cleaning activities. I DC and III DC students of our department cleaned the premises of Chembukkavu, a Corporation area 1 meter away from campus on 12/ August/2015. Around 35 students and two faculty members participated in the activity. Equipments and gloves were kindly provided by the Botany department of St Mary's College.



**Cleaning of Chembukkavu locality by students**

#### **11. Workshop sponsored by KSCSTE on Advances in Fermentation technology and Downstream Processing (17-21 August 2015)**

II Semester MSc students participated in Workshop sponsored KSCSTE on Advances in Fermentation technology and Downstream Processing conducted by Sahrdaya College of Engineering and Technology, Kodakara on 17-21 August 2015

#### **12. Invited talk by Dr Jose Pulicken (7/September/2015)**

An invited talk was conducted in collaboration with the Department of Biotechnology on 7<sup>th</sup> September, 2015, in the Jubilee hall. The talk was delivered by Dr John Anto Pulicken, Post-Doctoral Associate, Massachusetts Medical School, United States. The talk was on “Basic science to drug discovery: Development of small molecule inhibitor in blood cancer” and “Academic opportunities abroad”. He elaborated about the development of blood cancer, interaction between CBF-  $\beta$  and Runt-related transcription factor 1 (RUNX1) in the development of leukaemia, in detail. Also discussed about the opportunities for higher education and career abroad.



### 13. M. Sc. Dissertation Presentation (11/ September/ 2015)

All students of IV Semester M Sc presented the dissertation. All P G students and III DC students attended the programme.

### 14. III DC Tour (19 to 23/ September/ 2015)

The students of III year Microbiology (28 students) went for a study tour of three days to Mysore, Coorg and Wayanad along with three faculty members (Ms Reshma, Biochemistry department; Ms Anu G Kalliath and Ms Meera Mohanan, Psychology department). On the first day, they visited the places like Mysore Palace, Mysore zoo, Brindavan Garden, Srirangapatnam and Thriveni Sangamam. On 21<sup>st</sup> September early morning, Chamundeshwary Temple was visited and moved to Coorg. On 22<sup>nd</sup> September, started to Wayanad and visited the spots like Edakkal Caves and Soochipara waterfalls and reached back on 23<sup>rd</sup> September, early morning.



### 15. Cleaning of Public library, Trichur (8 & 28/ October/ 2015)

Our students also participated in the cleaning of Public Library, Trichur. 33 students of II DC along with two faculty members cleaned the Public Library on 8/ October/ 2015. 35 students of III DC along with two faculty members also cleaned the Public library on 28/ October/ 2015.





### **Cleaning of Public library by II DC & III DC students**

#### **16. Invited talk (12/ October/ 2015)**

Another invited talk was conducted on 12-10-2015 at 1.30 pm in the AC Seminar Hall. Dr. K.E.Usha, Professor, Central Nursery, Kerala Agricultural University, Vellanikkara delivered the talk on “Family Organic Farming”. Parents as well the students attended the programme.



#### **17. Orientation for I B Sc students and their parents (12/ October/ 2015)**

An orientation class was conducted for I B Sc students and their parents on 12<sup>th</sup> October, 2015. The orientation was given by Dr Dhanya K C, Assistant Professor of our department. She explained about the Choice Based Credit Semester System followed in UG, the papers covered in each semester and also about the scope as well as career opportunities of the course.

**18. Medical camp in association with Alumni (16/ October/ 2015)**

The alumni association of St Mary's college, Elder Marians organised a free eye camp in collaboration with the departments of Microbiology and Botany together with Vijayasree eye hospital, Thrissur. The programme was conducted at **HRCLPS, Nadathara on 16<sup>th</sup> October 2015**. The programme was inaugurated by **Sri. Kiran C Lazar**, Standing Committee Chairman & Councilor, Thrissur Corporation. Free consultation was done by **Dr Vijayalakshmi and Assistants, Vijayasree Eye Hospital**, Thrissur, Kerala for the students and parents of HRCLPS, Nadathara. I MSc Microbiology students assisted the Elder Marians as volunteers for smooth functioning of camp. Around two hundred Students and their parents attended the camp and received medical support. Those who diagnosed with eye vision issues were redirected to Vijayasree Eye Hospital for further consultation, free of charge.



**19. Training at Jubilee Mission Medical College and Research Centre, Trichur (19/October/ 2015 to 4/ November/ 2015)**

As per the MOU signed with Jubilee Mission Medical College and Research Centre, Trichur, IV Semester students of our department had undergone 1 week training in the Serology and Microbiology Departments of JMMC, TCR. The training was conducted between 19/ October/ 2015 and 4/November/2015.

20. **Breast cancer Awareness Programme (2/November/ 2015 )**



A “Campaign on Breast Cancer’ was conducted at St Mary’s College, Trichur, on 2/ November/ 2015, by the Department of Microbiology in association with M I Mission Hospital, Thrissur. The Programme was commenced at 10.30 am in the Jubilee Hall of St Mary’s College, Trichur. Sr Dr Jacintha C C (Principal, St Mary’s College, Trichur), Rev Fr Dr Francis Alapatt (Director of M I Mission Hospital, Trichur), Dr Vijayan Nair (Chief Surgeon of M I Mission Hospital, TCR), Sr Cherupushpam (Principal, M I Mission Nursing School, Trichur), ---- & ----- (Nursing tutors, M I Mission Nursing School, Trichur, were present. Around 200 students and staff members of St Mary’s college, attended the programme. Sr Dr Jacintha C C, Principal of St Mary’s College, delivered the welcome address. The programme was formally inaugurated by Sr Dr Jacintha C C, by lighting the lamp. Rev Fr Dr Francis Alapatt (Director of M I Mission Hospital) described the objectives as well as the outline of the campaign. It was followed by an invited talk by Dr Vijayan Nair (Chief Surgeon of M I Mission Hospital, TCR) on “Breast cancer”. The invited talk covered various aspects of breast cancer including its causes, symptoms, early detection, diagnosis and treatment of the disease. The talk also emphasised on the importance of undergoing self examination as well as periodical checkups and about the need of regular physical exercise for better health. The talk was followed by an interactive session.

Sr Cherupushpam (Principal, M I Mission Nursing School, Trichur), delivered an invited lecture about the self examination methods of breast cancer. A video clip regarding the same was also showed. The talk was very informative and was followed by an interactive session. Dr Dhanya K C, Assistant Professor, Department of Microbiology, St Mary’s College, Trichur, delivered the vote of thanks.

Breast cancer detection Campaign was started from 11.30 am onwards in the Sick Room of St Mary's College. Sr. Cherupushpam & two Nursing Tutors (M I Mission Hospital) lead the check up for breast cancer. 45 staff members and 8 students underwent the preliminary screening for breast cancer. Four staff members and one student were advised for further follow up. The campaign was a great success and was winded up at 3.30pm.

**21. AIDs Awareness Programme (1/ December/ 2015)**

In connection with World AIDs Day on Dec 1<sup>st</sup>, an interdepartmental poster making competition was held. Theme of the competition was "Say NO to AIDS, YES to Life". Greeshma Das and Reshma K R of I M Sc Microbiology bagged the I and II prize respectively.

**22. Three day Hands on Training Programme at BRS, Kannara (27-01-2016 to 29-01-2016)**

III DC students of Dept.of Microbiology, St. Mary's college, Thrissur attended a three day Hands on Training on 'Biocontrol agents and Biofertilizers' at Banana Research Station (BRS), Kannara from 27-01-2016 to 29-01-2016. The programme was conducted as a part of the State Plan Network Project on Development of microbial inoculants technology by Kerala Agricultural University. The participants included 35 students of III B. Sc. Microbiology and 3 faculty members including, Dr. C.R.Meera, Smt. Elizabeth P. Thomas and Smt. Geenat Paul.





### **23. Cancer Awareness Week 2016 (1-Feb-2016 to 8- Feb-2016)**

#### **Inauguration & Invited talk (1-Feb-2016)**

Department of Microbiology conducted a Cancer Awareness week -2016 in association with Kerala State Council for Science Technology and Environment (KSCSTE) and DST, Govt: of India, from 1/2/2015 to 8/2/2015. Theme of the programme was “Cancer among Women: Prevention & Treatment Strategies”.

The programme was inaugurated by Dr Chitrathara, MD, M Ch, FAIS; Surgical Oncologist & Urologist, Lakeshore Hospital, Cochin, on 1<sup>st</sup> Feb 2016, in the Jubilee Hall at 10 am. It was followed by an invited talk on General awareness on women cancer.



## **Free Cancer Detection Camp by RCC Palakkad Extension Centre (2-Feb-2016)**



Free Cancer Detection Camp was conducted in association with Regional Cancer Centre (RCC) Extension Centre, Palakkad. 50 members including teaching and non-teaching faculty members as well as public underwent preliminary screening for cancer.

## **Invited talk (3-Feb-2016)**

Department organised an invited talk by Dr Neetha George, Gynaecologist, Jubilee Mission Medical College & Research Centre, Trichur, on the topic “ Uterine and ovarian cancer in Women”.



### **Intercollegiate Competitions (4-Feb-2016)**



Intercollegiate competitions like Power point presentation, Essay writing competition and Poster making competition were conducted.

### **Exhibition (5-Feb-2016)**

An exhibition on “Cancer among Women: Prevention & Treatment Strategies” was conducted on 5-Feb-2015 in Combined class room-1 on 5-Feb-2016. Exhibition was inaugurated by our Principal, Sr Dr Jacintha C C, at 10 am. Aroud 500 people including students from other schools and public visited the stall.



### **Hair Donation Camp (8-Feb-2016)**

Hair Donation Camp was conducted in association with Hair Bank, Trichur Unit on 8-Feb-2016. Malayalam film actress Ms Leona Leshoy inaugurated the programme at 10 am in the Jubilee hall. Around 20 donors including teaching staff and students donated hair (6 inch to 12 inch) for cancer patients.





#### **24. Karunardram ( 26/02/2016)**

As part of Karunardram programme, also in connection with 'Intersection for India', the Department of Microbiology distributed 147 food packets to poor people on 26/02/2016. Food packets were donated by B Sc and M Sc students of our department. Faculty members of Microbiology and Biochemistry departments also donated food packets.



#### **25. Industrial Visit for I DC (22-March-2016)**

#### **26. Workshop on Bioinformatics (1-March-2016 & 2-4-2016)**

For II DC & II PG students by Mr Syam, UC College, Aluva.

#### **27. Three day Hands on Training Programme at BRS, Kannara (6-04-2016 to 8-04-2016)**

II DC students of Dept.of Microbiology, St. Mary's college, Thrissur attended a three day Hands on Training on 'Biocontrol agents and Biofertilizers' at Banana Research Station (BRS), Kannara from 6-04-2016 to 8-04-2016. The programme was conducted as a part of the State Plan Network Project on Development of microbial inoculants technology by Kerala Agricultural University. The participants included 33 students of III B. Sc. Microbiology and 2 faculty members including, Dr. Dhanya K C and Smt. Ruveena T N.

**28. Valedictory function on 31-03-2016**

