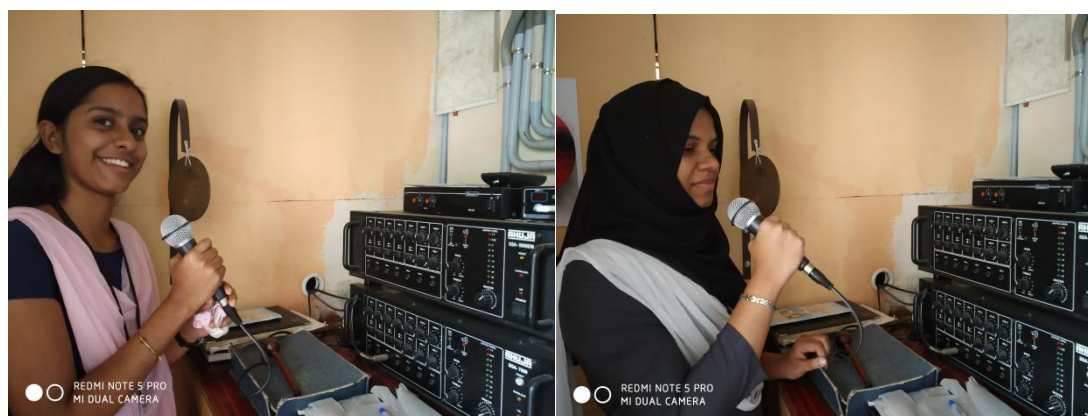


## **Department of Microbiology**

### **Association Activities (2018-2019)**

Association activity of Department of Microbiology commenced on World environment day, June 5<sup>th</sup> with the announcement of Monsoon Tips as a measure to prevent the spread of monsoon related diseases. Announcements were done during lunch break about the signs, symptoms, identification tests, preventive measures, routes of transmission of various diseases including Dengue, Chikungunya, Malaria, Dysentery, Typhoid, Cholera, etc. General measures of hygiene and food safety habits were also the part of announcement. Announcements were continued till 12/06/2018



### **Monsoon hygiene tips announcement in connection with World Environment Day Celebrations**

Action plan presentation of Department of Microbiology was done by Dr. CR Meera on 6<sup>th</sup> June, 2018.

Department of Microbiology in association with Trichur Corporation and UBA (Unnath Bharath Abhiyaan) conducted various cleaning activities and surveys in different Parts of Trichur. On 7<sup>th</sup> June an awareness talk was conducted for students of Microbiology on Monsoon Diseases- Preventive and treatment measures at 8.30 am in the Chavara Seminar Hall. Invited talk was delivered by Mr Mohammed Iqbal, Health Inspector and Mr Nazar, Junior Health Inspector, TCR Corporation, Thrissur. The invited talks gave a detailed information about the prevailing monsoon diseases, symptoms, diagnosis and also on preventive measures. Also clear instructions were given to students about how to conduct the survey in different wards of Thrissur in the coming days.



**Invited talk on “Monsoon diseases prevention and treatment”**



**“Monsoon diseases prevention and treatment”- survey in association with TCR Corporation.**

On 7/ 6/2018 survey and awareness on Monsoon diseases was conducted in Pallikkulam ward (Ward 35), in association with Thrissur Corporation. 20 students from III UG Microbiology were active volunteers in this survey. On 28<sup>th</sup> June 2018, 3<sup>rd</sup> UG students and Dr. Jimtha John C (Faculty member) conducted the same survey at Mayilipadam 12<sup>th</sup> Ward of Trichur corporation.

On 8<sup>th</sup> June 2018, 12 PG students from our department participated in Cleaning programme in association in UBA, at Madakkathara Gramapanchayath. On 22<sup>nd</sup> June, 2018, cleaning and Monsoon disease survey was also conducted in Madakkathara Gramapanchayath. 2<sup>nd</sup> year UG and 1<sup>st</sup> PG Students, Dr. Meera CR and Dr. Dhanya KC (Faculty members) participated in the programme.



### **Cleaning and Survey at Madakkathara gramapanchayath in association wt UBA**

On 29<sup>th</sup> June 2018, In association with Alumnae, Candle making Demonstration was conducted for 2<sup>nd</sup> UG students by Ms. Soja KK, Alumnae Executive Member.



### **Candle making demonstration for students in association with Alumni**

On 3/7/2018, an orientation class was given to I B Sc Microbiology students and their parents regarding the syllabus, topics and Calicut University Choice based Credit Semester System (CUCBCSS) followed in UG Course.

On 25/7/2018 an invited talk and yoga training was conducted in association with Alumni. The invited talk on the topic “Sthree arogyam naturopathiyiloodde” was delivered by Dr Anjana, Govt: Homeopathy Hospital, TCR. The talk was followed by a yoga training session by Mrs Supriya, Registered Yoga Trainer, TCR. The programme was organised in Chavara Seminar Hall, St.Mary’s College, Thrissur at 1.30 pm.



### **Invited talk and yoga training in association with Alumni**

An awareness programme on Monsoon diseases was conducted at Sacred Heart School, TCR on 26/7/2018 at 11 am. A detailed class was given to LP and UP students about different monsoon diseases, symptoms and treatment. An awareness was generated among young ones about the healthy habits to be followed in life to keep these diseases at bay. Awareness class was taken by Ms Swathy Nair and Ms Sandra, III UG Microbiology students of our department. The class was followed by a skit on the same theme by II PG and II UG students of our department. The skit was very interesting and informative which conveyed the need of following healthy habits to prevent the monsoon diseases in a humorous way. Also pamphlet was distributed among students.



### **Awareness class and skit on monsoon diseases at Sacred Heart's College, TCR**

On 3<sup>rd</sup> August 2018, Department of Microbiology conducted exhibition on Monsoon diseases prevention and treatment to generate awareness. Monsoon diseases was conducted for the general public. The exhibition included charts and still models about various water borne, air borne and vector borne monsoon diseases and proper safeguards to keep the diseases and infections at bay. The exhibition aimed at spreading knowledge and caution against the various diseases prevalent during the rainy season, had a good response with over 100 visitors. Also students performed a skit related to

prevention of Monsoon diseases on 4<sup>th</sup> Aug 2018. The skit offered good health tips to stay healthy during monsoon season in a very interesting and humorous way.



### **Exhibition on Monsoon diseases prevention and treatment**

On 15<sup>th</sup> August 2018, in association with UBA, Department of Microbiology conducted independence day celebrations at Punnamparambu village of Thekkumkara panchayat. The students were accompanied by Dr. Meera CR, head of the microbiology department; Dr Mabel Merlen Jacob, assistant professor, microbiology department. the second year students of the microbiology department performed a short skit which highlighted the necessity to be vigilant during the monsoon season. It also put forward some safety measures to be followed during the rainy season, like, keeping the surroundings clean, using mosquito nets and to not let water collect in any stray containers. After the skit, the microbiology department gifted the anganvadi children with umbrellas and toffees, making the children smile with joy. After the distribution of umbrellas and toffees, the students and faculty members returned to the college.





### **Independence day celebrations at Punnamparambu village of Thekkumkara panchayat**

Staff members and students of Department of Microbiology were active volunteers in different Flood relief related activities. On 14/8/2018, III DC students and Staff members Ruveena T N, participated in sorting and packing various food items, grossery, stationary and cloths collected from whole college students and staff members to distribute among flood affected areas in Trichur. Ms Jyothis K Timothy (III DC Student) and Dr C R Meera (Faculty) participated in the cleaning mission conducted in association with UBA in flooded regions of Mulankunnathkavu on 20/8/2018. Flood affected houses and premises were cleaned as part of the mission. Also wells in houses were chlorinated to prevent water borne diseases. On 22/8/2018, Anju P R and Niva Inasu (II M Sc Microbiology students), Najiya Noushad, Thrithy Thilakan, Hanna Abdul Kader, Ayana Raj and Bini Benny (I M Sc Microbiology students), Atly T A and Swathy B Nair, (III B Sc Microbiology students), Athira V P and Sree Lakshmi E M (Microbiology Alumni) and Dr C R Meera (Faculty) had also participated in UBA cleaning mission carried out at Ayinikkad Gramapanchayath. Several houses and premises were cleaned, cleaning materials and disinfectants were distributed, and also chlorination of wells were done. During flood, chemical fertilizer leakage had happened in Panamukku ward of Thrissur Corporation which had made the water in nearby wells non- portable. So drinking water was supplied to these regions on 29/ 8/2018. 100 cans each of 10 litres were provided. I DC students, Mrs Elizabeth P Thomas and Dr Mabel Merlen Jacob (Faculty members) volunteered the packing, transportation and supply of drinking water in Panamukku area.



### **Flood related activities**

II DC students, Dr C R Meera and Mrs Ruveena T N (Faculty members) attended a seminar on “Challenge Cancer- Awareness Programme” initiated by Asianet News and Supported by YMCA, TCR, on 8/8/2018.

The inauguration ceremony of the 18th Association of the Microbiology department of St.Mary’s College, Thrissur, was conducted on 30th August, 2018 at 10:30 am in the St. Joseph’s AC Seminar Hall. Dr. Pradeep Chaluvally-Raghavan, assistant professor, Department of Obstetrics and Gynaecology, Medical College of Wisconsin, USA. Dr Pradeep Raghavan completed his Ph.D from the Calicut University and his postdoctoral research from Weizmann Institute of Science inaugurated the association and delivered a talk on “Three Dimensional Cell Culture Model to Mimic Ductal Carcinoma In-situ and Invasive Cancer”.



**18th Associationin iauguration ceremony of the department of Microbiology**

Association Election was conducted on 29/8/2018 and representatives for the Academic year 2018-19 were elected. Elected members are as follows:

Association Members	Name & Class
President	Aswathy K Jayaram (II PG)
Vice -President	Raina Mary Shaju (IPG)
Treasurer	Atly T A (III DC)
Association Representatives	Niva Inasu (II PG) Jismi T A (I PG) Jyothis K Timothy (III DC) Swathy B Nair(III DC) Maghna Jom (II DC) Ameena Sherin (II DC) Unnimaya (I DC) Shahla (I DC)





### **Microbiology Association members of academic year 2018-2019**

An Induction course was conducted for I B Sc Microbiology students to familiarise them with different fields in Microbiology and also to give an outline about the papers covered in the syllabus. The below mentioned classes were given to the students by faculty members.

<b>SI No.</b>	<b>Name of Faculty</b>	<b>Date</b>	<b>Topic taken</b>
1	Dr C R Meera	30-8-2018	Discovery of Microorganisms- History at a glimpse
2	Ms Elizabeth P Thomas	30-8-2018	Medical Microbiology-Beware of villains around us
3	Dr Dhanya K C	31-8-2018	Microbes in everyday life
4	Ms Ruveena T N	31-8-2018	Introduction to Environmental & Agricultural Microbiology
5	Dr Deepa G Muricken	3-9-2018	Biochemistry- "Knowing the Chemistry of Life"
6	Dr Mabel Merlen Jacob	4-9-2018	Introduction to Industrial Microbiology

On 30/8/2018, I and II PG students were taken to visit an exhibition "Millenium Expo" at St Thomas College, TCR. Mrs Ruveena T N and Dr Jimtha John, Faculty members of the Department accompanied the students.

On 25<sup>th</sup> September 2018, An awareness class was conducted in connection with Alzheimer's day by Dr. Sureshkumar, Social Worker Cum Administrator: Alzheimer's and Related Disorders Society of India (SMRUTHIPADHAM Guruvayur ,2015 – Still continuing, a joint venture of State Govt. of Kerala).

On 11<sup>th</sup> October 2018, Department of Microbiology in association with Eldermarian's Association and Department of Botany organised a free eye camp in collaboration with Malabar eye hospital, Thrissur. The programme was conducted at Pattikkad GLP School. Free consultation was done by Dr. Ambili (MBBS, DO) and Assistants, Malabar eye hospital, Thrissur, Kerala for the students and parents. Those who diagnosed with eye vision issues were redirected to Malabar eye hospital for further consultation.



### **Free Eye camp at Pattikkad GLP School, Thrissur.**

On 15/10/2018, Department of Microbiology, carried out consultancy for Pollution Control Board, TCR. Analysis of coliforms in the drinking water collected from flood affected areas of Kerala was carried out. Around 100 samples were analysed and results were handed over to Pollution Control Board, TCR. I PG students, Dr C R Meera and Dr Dhanya K C (Assistant Professors), carried out the analysis.

A one day industrial visit was held to the Banana Research Station, Kannara for the II , III DC, I & II PG students of the Microbiology department, St.Mary's College Thrissur, on 31<sup>st</sup> January, 2019. The first laboratory shown was the place where microorganism used as biofertilisers were cultured. The culture plates of different microbes like, *Pseudomonas fluorescence* and *Beauvaria bassiana* were shown and their uses specified. These were cultured in broth and mixed with talc to make bio-fertilisers in the talc form. The laboratory also housed the various instruments required for the successful completion of this process, like, incubators and autoclaves of large capacity. About 500ml of the culture is added to 1 kilogram of the talc and spread out to dry in the sun and then packed. The molecular biology lab had instruments like PCR for DNA

studies. As various microorganisms are being cultured in the lab; it is kept very clean and neat. Next, the students were led to the field where arbuscular mycorrhizae were cultured with the help of corn plants. The mycorrhizae are isolated from the roots of the corn plants because it's difficult to obtain their pure culture without the help of a host plant. Mycorrhizae enables plants to resist stresses like flooding and drought, so this property can be applied in flood prone areas. Mycorrhizae serve as a biofertiliser, since they provide host plants with water, nutrients and pathogen protection.



### **Visit to Banana Research Station, Kannara**

Department of microbiology organised AIDS QUIZ on 3/12/2018 as part of world AIDS day on December 1. A preliminary round was conducted and 8 teams were selected for the competition. The quiz was conducted in three rounds, 5 team were selected after First Round for the second (Choose an area round) and third round (Visual round). From the three finalists in the final rapid fire round, Neena Sivaramadas and Krishnapriya CS, II MSc Microbiology secured first prize. Second prize was won by Ayana Raj and Athira MR, I MSc Microbiology. The results of essay writing competition organised by Department of microbiology as part of world AIDS day 2018 is as follows. First Prize was bagged by Manju M, I MSc Microbiology and second prize was won by Athira MR, I MSc Microbiology.

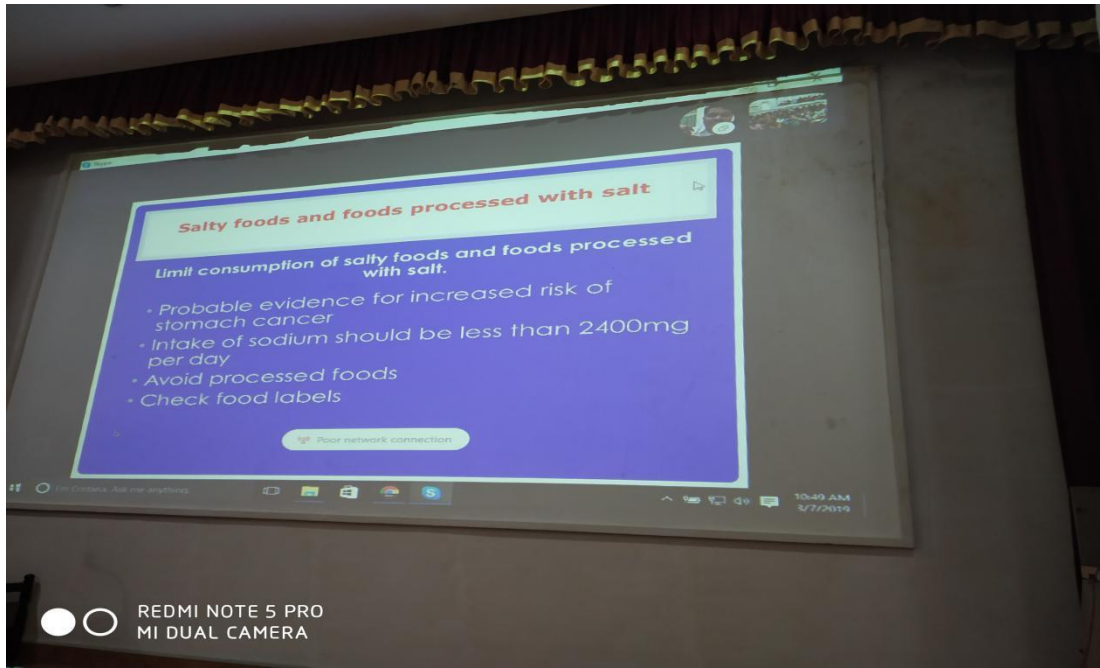
As part of career guidance programme, an interaction session was conducted on 29/1/2019 for 3<sup>rd</sup> DC students with Dr. Finosh G T, Postdoctoral Fellow, Creighton University, Nebraska, United States.



### Interaction session for III DC students as part of career guidance

As part of National science day celebrations, Department of Microbiology organised a cancer awareness programme on the theme "I am & I will-Healthy ways to beat cancer". The programme was sponsored by Kerala State Council for Science, Technology and Environment and supported by Department of Science and Technology, Govt: of India. The following programmes were conducted.

SI No:	Date	Programme	Resource person/ Agency
1	6/2/19	Invited talk:"Cancer:Ttherapeutic role of natural products"	Dr Achuthan C Raghavamenon, Associate Professor, Amala Cancer Research centre, TCR
2	6/2/19	Poster making competition for students on the theme: healthy ways to beat cancer"	
3	7/2/19	Webinar: "Cancer: Causes and Prevention"	Dr Harikumar K B, Scientist E1, Rajiv Gandhi Centre for Biotechnology, TVM
4	7/2/19	Webinar: "Introduction to cancer biology"	Dr Divyasree P, Visiting Scholar, American University of Sharjah, Sharjah.
5	8/2/19	Hair Donation Camp for cancer patients. 24 donors including students and faculty members	Hair bank, TCR



## Webinar: Cancer Awareness Programmes



## Poster making competition in connection with cancer awareness programme

On 8/ March/2018, in connection with International women's day, an invited talk was conducted on "Sthree- yadharthyam". Talk was delivered by Dr Hamamalini, Assistant Professor & HOD, Vimala College, TCR.



Valedictory function of Microbiology association was conducted on 15/ March/2018.