



MAR AUGUSTHONOSE COLLEGE RAMAPURAM

Affiliated to M.G. University Kottayam
UGC Recognized 2(f) & ISO 9001:2015 Certified



Antibiotic Stewardship and Prevention of Infection in Communities

(Under the department of Biotechnology)

ASPIC clubs are formed under the patronage of the head of the institution. The head of the institution is the final authority to decide on the composition of the club; and also, selection of office-bearers. The club is headed by a faculty-nodal officer and a student-president. The faculty- nodal officer is appointed by the head of the institution, from among the teaching faculty of the institution. The faculty-nodal officer is responsible for the daily activities of the project, on a supervisory role. The student-president is selected or elected from among the student members of the club. The student-president leads the club, and also liaise with ReAct Asia Pacific, when needed. The tenure of the faculty-nodal officer is 3 years; and that of the student-president is 1 year. The club also has a Secretary and a Treasurer, who are in-charge of any project undertaken by the club. The secretary is responsible for implementation of the projects; and treasurer is the person in-charge of book keeping and finances. The tenure of the secretary and treasurer is for one year; however, they can be reappointed or re-elected if the patron and faculty nodal officer give the necessary directions. The club has a committee comprising of at least 4 members, apart from the office bearers. The committee meets once in a quarter, and give necessary guidance to the office bearers. The decisions of the committee is always democratic and the faculty-nodal officer will have the power of casting vote, in case of a dispute. The tenure of the committee members is also for one year.

Objectives of ASPIC Clubs

- a) Rallies or Booths at strategic places during the 'World Antibiotic Awareness Week'.
- b) Awareness classes for fellow students on issues of antibiotic abuse and antibiotic resistance.
- c) Awareness sessions for the community, on the need to use antibiotics rationally
- d) Function as a pressure group to prescribers and dispensers, to ensure that there is no misuse.

- e) Introduce environmental hygiene practices in the school, like safe disposal of waste and destruction of vector breeding sites.
- f) Increase awareness about other locally relevant communicable diseases like Dengue, Chikungunya, Filariasis and Scrub Typhus.
- g) Increase awareness of personal hygiene and menstrual hygiene among fellow students and the broader community.
- h) Organize medical camps and other initiatives like blood donation drives, in aid of the society.

ASPIC Coordinators:

Dr Philip Mathew, MD, Assistant Professor of Community Medicine at PIMS Thiruvalla, India and Public Health Consultant of ReAct Asia Pacific

Mr. Lijo Cyril: MPH, MBA Junior Consultant in Social Sciences of ReAct Asia Pacific

Faculty Nodal officer: Ms Sheena john



Annual Report 2018-19

The first meeting of ASPIC Club was conducted on 20th October, 2018.

Mr. Jissmon Thomas of MSc Biotechnology was selected as the president and Ms. Aleena Shaji of BSc Biotechnology as Secretary of ASPIC Club. Around 110 students actively participated in all the activities of the club throughout the year. ASPIC Club conducted the following activities during the academic year 2018-19.

Inauguration of ASPIC Club

ASPIC club was inaugurated, in Mar Augusthinose College, Ramapuram, Kottayam with an inaugural ceremony held on 24th October 2018 at the institution's campus. The inaugural ceremony was accompanied by a seminar on Antimicrobial Resistance, for the benefit of all bioscience students of the college.

The audience was welcomed by Mrs. Sheena John and she gave an introduction about the relevance of the subject. She promised all the support for the implementation of ASPIC club initiative at the institution. Dr Sajesh Kumar NK, Professor and Head of Biotechnology at the college, presided over the function and remarked that such kind of initiatives generate great influence on the society to follow good health habits. He also highlighted the importance of antibiotics and the significance of creating awareness on antibiotic resistance among general public and youngsters. Dr Joseph VJ, Principal of Mar Augusthinose College, formally inaugurated the ASPIC Club initiative at the college. He encouraged the students to participate in such kind of initiatives as it promotes community-based intervention to overcome issues facing the society. He also congratulated ReAct Asia Pacific on launching such efforts and hoped that the students will utilize the ASPIC club platform effectively. Dr Philip Mathew, Consultant, ReAct Asia Pacific, gave an introduction to ASPIC club initiative and its concept to participants. Dr Philip also outlined the reasons behind antibiotic resistance and its impact on the society. He emphasized that establishment of ASPIC clubs in educational institutions should increase the awareness level of infection prevention, antibiotic abuse, antibiotics in food and antibiotic resistance among students as well as general public. Lijo Cyril thanked all the participants and delegates for their time and interest. He said that ASPIC Club initiative has a significant role in the society for limiting

antibiotic resistance. He also mentioned the role of students in generating awareness on antibiotic abuse and infection prevention methods in the broader society.



Inauguration of ASPIC Club and Seminar on Antibiotic Resistance, at Mar Augusthinose College Ramapuram

First annual meeting

ReAct Asia Pacific launched the ASPIC club initiative in 2018, to create a template to engage with university students on the issue of antimicrobial resistance. Since then, a number of colleges/universities from the state of Kerala has signed up for the venture; and the interest levels are going up. The first ever annual meeting of APSIC Clubs was conducted on 21st February 2019 at Hotel Aida, Kottayam, India, with an aim to bring together representatives from all the ASPIC clubs. The idea was to have a platform to share experiences and also create a sense of camaraderie among the club members from various institutions. The one-day meeting was attended by members of ASPIC clubs from different colleges and universities across the state of Kerala, India. The members consisted of both students and faculties of respective clubs from different institutions.

The context and sessions were introduced by Dr Philip Mathew, Consultant, React Asia Pacific. He explained the need to publicize the issues related to AMR and public health; and the role of students in the whole exercise. Prof Thomas Mathew, Director of School of Biosciences, Mar Thoma College, Thiruvalla, gave an inspiring session on linking science and society. He explained the evolution of science and the importance of de-jargonizing science for public consumption. Dr Keerthi TR, Professor and Former Director, School of Biosciences, MG University, sensitized the audience on the

need to understand the concept of antimicrobial resistance and the ever-evolving nature of drug-resistant infections. She explained about the various models of antimicrobial resistance and its drivers in the community settings. George Varghese, Virologist at Pushpagiri Centre for Virology, also gave an invigorating talk, motivating the students to aspire for higher career opportunities in the field of biomedical research. Mr George explained the various career options available to students and outlined the paths which they can take to launch their careers. Dr Prasanth Rathinam of Pushpagiri Research Centre also encouraged the students to push the frontiers of biomedical research to explore newer possibilities in the field of AMR. The afternoon session was handled by Harish Radhakrishnan Asst Professor, School of Biosciences, Mar Thoma College; and he explained about the various strategies that can be adopted by the clubs for further addressing the issue of AMR at policy and implementation levels. The session was concluded with feedback session from all the participants, stressing on the urgency to take action on issues related to AMR.

The annual meeting was a great platform to engage students and understand their perceptions of antimicrobial resistance. Also, ReAct Asia Pacific needed a self-appraisal on progress of the student engagement initiatives. It was found that the level of understanding of students was quite good, but they needed a helping hand in translating the understanding into definite community-based actions. All the students expressed the need for more robust communication mechanisms which can enable the various clubs to stay in touch. The participants wanted more programmes which can improve the capacity of the students in taking action on antimicrobial resistance.



First Annual Meeting of ASPIC Clubs held at Kottayam, on 21st February 2019



Annual Report 2019-2020

The meeting of ASPIC Club was conducted on 19th August, 2019. Mr. Ephrem v Thomas of B Sc Biotechnology was selected as the president and MS. Parvathy Prakash of M Sc Biotechnology as Secretary of ASPIC Club. Around 120 students actively participated in all the activities of the club throughout the year. ASPIC Club conducted the following activities during the academic year 2019-2020.

Antibiotic Awareness Seminar

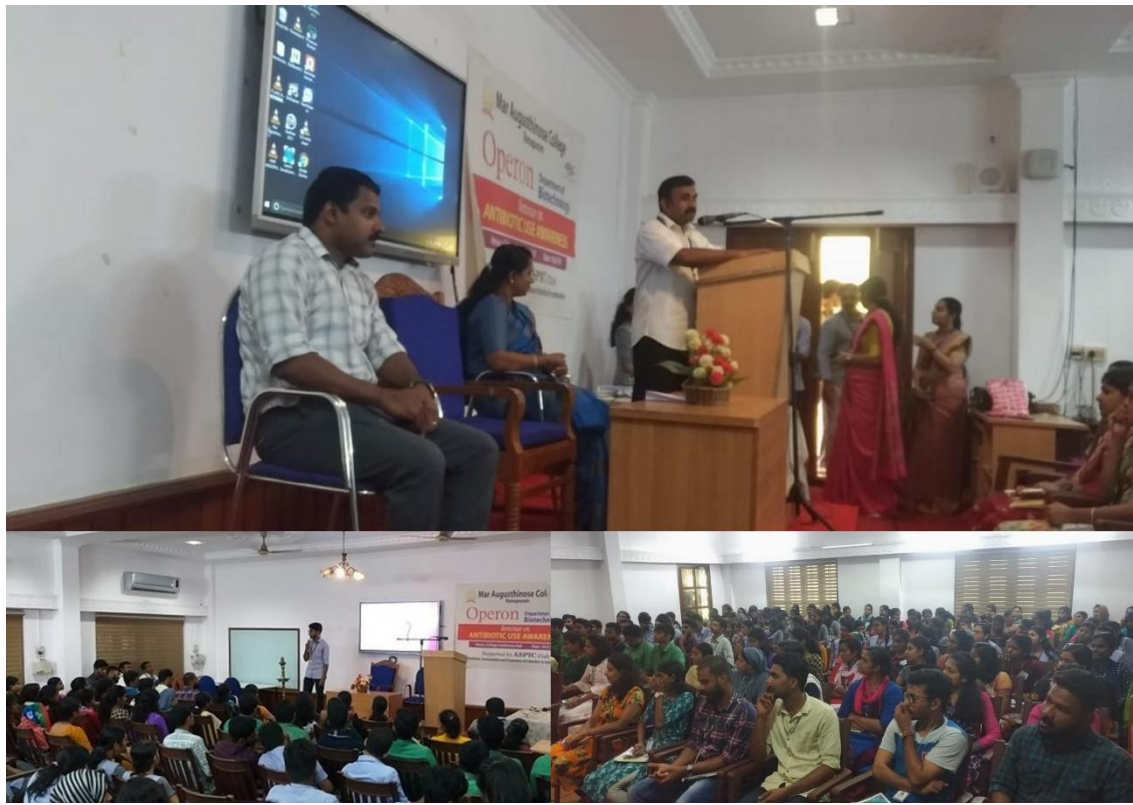
The ASPIC club of Mar Augusthinose college, Ramapuram organised a seminar on Antibiotic Awareness for fellow students on 20th August 2019. The awareness programme was organised by ASPIC club members of Department of Biotechnology in association with Department of Social Work.

Dr. Sajeshkumar N.K. Professor and Head of Biotechnology at the college, presided over the function and commented on the efforts taken by ReAct Asia Pacific in providing such opportunities for students. Mrs Sheena John, Faculty Adviser, ASPIC club, also spoke at the event on the importance of the proper usage of antibiotic and encouraged the students for further taking up such initiatives.

The student President of the club Mr. Jismon Thomas and Mr. Ephrem V, ASPIC club member led the seminar on Antibiotic Use Awareness and issues of Antibiotic abuse for the fellow students at the college. The students discussed the need for proper usage of antibiotics and how abuse of antibiotics adds to the problem of antibiotic resistance. The talk also covered information on different classes of antibiotics, the discovery void, issue of self-medication and importance of prescription from a certified medical practitioner in using antibiotics. The students also talked on the importance of personal hygiene in infection prevention and control of communicable diseases, thereby conserving antibiotics. The talk also involved ideas such as taking back of unused antibiotics for further reduction of antibiotic resistance.

Mr. Lijo Cyril, Junior Consultant, ReAct Asia Pacific felicitated the programme and appreciated club members of Mar Augusthinose college for such an initiative. The

public health relevance and importance of the topic was benefited by all students and staff who attended the programme.



Antibiotic Awareness seminar organized by ASPIC Club MAC on 20th August 2019

Awareness Programme on Life Style Diseases

We conducted an awareness program on Life style diseases by Dr. Manoj Johnson, St Ann's Hospital Pala in 20th November 2019 and discuss its complications and solutions of various life style diseases.



Awareness program on Life style diseases lead by Dr. Manoj Johnson, St Ann's Hospital Pala.


Online competition

ASPIC Club conducted online competition for best researcher proposals in Antibiotic Resistance- Students best researcher champions for AMR in 2019 and 2020. More than thousands of proposals, our student Gopika S Kumar of final B SC biotechnology get short listed into final project proposal round. Our students also participated in photography competition which has a theme of Antibiotic use in production of poultry.

RESULTS OF

STUDENT RESEARCH CHAMPIONS FOR AMR 2020 EDITION





COMPETITION




SHORT LISTED PROPOSALS FOR THE FINAL ROUND

01- HAMMAD NASIM, DR BABA SAHIB AMBEDKAR MEDICAL COLLEGE AND HOSPITAL, DELHI
 02- GOPIKA S KUMAR, MAR AUGUSTHINOSE COLLEGE, RAMAPURAM, KERALA
 03- MANISH KULSHRESTHA, MEDICAL COLLEGE AND HOSPITAL, KOLKATA, WEST BENGAL
 04- SARANGI R VARMA & TEAM, ANNOOR DENTAL COLLEGE AND HOSPITAL, MUVATTUPUZHA, KERALA
 05- SWETHA SURESH & TEAM, BISHOP KURIALACHERRY COLLEGE FOR WOMEN, AMALAGIRI, KERALA
 06- SHINESHA P RAJU & TEAM, P GEEVARGHESE MEMORIAL COLLEGE, KANGAZHA, KERALA
 07- LIYA XAVIER, ST BERCHMANS COLLEGE, CHANGANACHERRY, KERALA
 08- HAMSAVARDHINI V, CHRISTIAN MEDICAL COLLEGE, VELLORE, TAMIL NADU
 09- SHEENA S RAJ, PUSHPAGIRI COLLEGE OF DENTAL SCIENCES, THIRUVALLA, KERALA
 10- MEENAKSHI R, SRI MANAKULA VINAYAGAR MEDICAL COLLEGE HOSPITAL, PUDUCHERRY
 11- S.KRITHIGAA, CHETTINAD DENTAL COLLEGE & RESEARCH INSTITUTE, KANCHIPURAM, TAMIL NADU
 12- PAWASKAR RACHHANAA SATISH, SETH GS MEDICAL COLLEGE, MUMBAI, MAHARASHTRA

THE SHORT LISTED CANDIDATES AND TEAMS WILL BE CONTACTED, FOR THE DATES FOR ONLINE PRESENTATION BEFORE AN INTERNATIONAL JURY

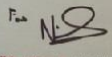


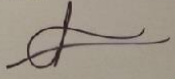
Certificate of participation

This is to certify that

Dr./Mr/Ms. GOPIKA S KUMAR
 of Dept. of Biotechnology, Mar Augusthinose College, Ramapuram
 has participated in the competition

Student Research Champions for AMR;
 an online contest to propose innovative solutions for Antimicrobial Resistance problem. This was held during July-August 2020, and was organised by ReAct Asia Pacific and ASPIC Club Network.


 Dr. Sujith J Chandy, MD, PhD, FRCP (E)
 Head, React Asia Pacific


 Dr. Philip Mathew, MD
 Consultant, React Asia Pacific

Seminar on Antibiotic Resistance

ASPIC Club organize a seminar on Antibiotics resistance for students of various departments of our college. Miss Dona Maria John, Asst. Prof. Department of biotechnology, MA college Ramapuram on 10th January 2020 was the resource person.

Research Laboratory Techniques (SCRLT) (Short Course)

A Short course on Research Laboratory Techniques in association with Pushpagiri Research Centre (PRC) was organized for students from Mar Augusthinose College, Ramapuram, India as part of the ASPIC club initiative on 29th September 2019. The course included sessions on Anti-microbial susceptibility testing and Molecular techniques like PCR and RT-PCR.

Dr. Sherly Antony (Scientist, Microbial Technology and Infectious Disease Laboratory, PRC) highlighted the importance of anti-microbial resistance in health care which warrants proper diagnostic testing and the need to develop newer anti-microbial to phase the global threat. The next talk was by Dr. Prasanth Rathinam (Scientist, Biochemistry and Medical Biotechnology Laboratory, PRC) who gave an overview about the common molecular technique; polymerase chain reaction (PCR).

The first demonstration included DNA, RNA extraction, setting up of both conventional and qRT-PCR, post-PCR gel-documentation and interpretation of results was performed under the supervision of Mr. George Varghese (In-Charge, Centre for Virology, PRC) by the staff of Centre for Virology. An outline of the various anti-microbial susceptibility testing (AST) methods was given by Dr. Sherly Antony followed by the demonstration which included the different AST methods.



Members of ASPIC Club, MAC, Ramapuram attends Short Course on Research Laboratory Techniques (SCRLT) at Pusphagiri Research Centre, Thiruvalla, India

The second annual meeting

The meeting was attended by student and staff representatives from 14 out of the 15 functional ASPIC clubs. The meeting featured an array of expert talks on AMR in relation to various fields and was instrumental in planning activities for the year.

The key note address of the meeting was given by Dr A P Thomas, Visiting Professor and Director of ACCESSD, School of Environmental Sciences, MG University, on Environmental Dimensions of Antimicrobial Resistance. The session was chaired by Dr TJ James, Head, Environmental studies, SH College, Thevara. Dr Thomas mentioned various drivers of AMR with respect to contamination of the environment and explained on the concept of antimicrobial ‘pollution’. He also spoke on various issues such as heightened rates of resistance and presence of antibiotic residues in water

bodies. The talk summarized the impact of AMR on the environment and the need for better awareness and policy initiatives.

The second session was led by Prof Thomas Mathew, Director, School of Biosciences, Mar Thoma College, Thiruvalla on the topic 'Linking Science and Society'. The session was chaired by Dr Prasanth Rathinam, Asst. Professor and Scientist, Pusphagiri Research Center. The talk encompassed the broader theme of science and society; and was helpful for students in understanding the need for researchers and scientists to engage on the pressing needs of the society. Prof. Mathew briefed on the important contributions of various eminent scientists over the decades and called for more innovative solutions on the issue of AMR from the upcoming generation of researchers and scientists.

After a short break, the next session was on the topic 'Antimicrobial Resistance in Tuberculosis: Research Perspectives' by Dr Sathish Mundayoor, Doyen of Science, IUCBR, Kottayam. The session was chaired by Dr Jinu John, Asst. Professor of Biotechnology, CMS college, Kottayam. The session included various developments on drug resistance in Tuberculosis and the research progress made in the domain. Dr Mundayoor further enlightened the students on various scopes of research and possible career opportunities in the area.

The next session titled 'Antimicrobial properties of Nanoparticles' by Dr Nandakumar Kalarikkal, Director, IIUCNN, MG University and chaired by Dr K Sudha, Asst. Professor of Biotechnology, St Peters College, was on the application of nanoparticles as medicines and the antimicrobial properties of nanoparticles. Dr Kalarikkal spoke on the possible research avenues in nanoscience research and how it can open new vistas in finding solutions for the problem of AMR. He also gave examples of his team's research on evaluating antimicrobial properties of various nanoparticles and their feasibility in practical situations.

The forenoon session concluded with a session by Dr. Ramesh N, Asst. Professor, School of Biosciences, VIT University, Vellore and was chaired by Dr Prakash Williams, Asst. Professor of Biotechnology, Bishop Moore College. The session was on the topic 'Phage therapy for overcoming AMR: What's new?'. Dr Ramesh gave a brief overview on the topic and presented various findings from his research projects.

The technical sessions ended with an overall view of the developments in AMR in different fields and were much appreciated by the audience.

The afternoon started off with a session by Mr. Satya Sivaraman, Communications Coordinator, ReAct Asia Pacific and was chaired by Harish Radhakrishnan, Asst. Professor of Biosciences, Mar Thoma College. Mr. Satya engaged the audience on the topic ‘Communicating about AMR to the public’ and spoke on various health perspectives seen in the country on medicine use and antibiotic resistance. Mr. Satya also spoke of how the student clubs could be vital in engaging larger audiences on the issue of antibiotic resistance. Later on, Dr Philip Mathew addressed the audience on the need to further increase the mandate of ASPIC network and pitched various ideas to expand the activity base of the individual clubs. The sessions ended with feedback from all the participants.



Members of ASPIC Club MAC participating the annual meeting of the ASPIC clubs was held on 20th February 2020 at Hotel Aida, Kottayam, India.



Annual Report 2020-2021

First meeting of ASPIC Club on the year 2020-2021 was conducted online on 10th June, 2020. In this meeting Ms Megha Pradeep of B Sc Biotechnology was selected as the president and Ms. Amala Rajesh of B Sc Biotechnology as Secretary of ASPIC Club. Around 110 students actively participated in all the activities of the club throughout the year.

Online Competition

ASPIC Club conducted online competition for best researcher proposals in Antibiotic Resistance- Students best researcher champions for AMR in 2021. Various students of our college participated in this competition. ASPIC conducted online Webinar on the topic “Resistance to antibacterial agent” on 21st November 2020 and various students are participated in this webinar.

The third annual meeting of APSIC Clubs was conducted on 25th march 2021 by online mode, with an aim to bring together representatives from all the ASPIC clubs. The context and sessions were introduced by Dr Philip Mathew, Consultant, React Asia Pacific. He explained the need to publicize the issues related to AMR and public health; and the role of students in the whole exercise.



Annual report 2021-2022

First meeting of ASPIC Club on the year 2021 – 2022 was conducted on online mode on 14th June, 2021. In this meeting Ms. Vyshnavi Prakash of final B Sc Biotechnology was selected as the president and Mr. Roshan Paul of second B Sc Biotechnology as Secretary of ASPIC Club. Around 100 students actively participated in all the activities of the club throughout the year.

Online Webinar series

As part of the ASPIC activities a Webinar Series on various aspects of AMR and related areas are conducted. The first webinar of the series on Environmental sustainability and AMR: Antibiotic pollution is being held on 18th June 2021, Friday at 6.30 pm. The webinar will focus on the issue of antibiotic pollution and pharmaceutical effluents being released unsafely into the environment during the manufacturing processes. Twelve of our students attended this webinar.

Second webinar was conducted on July 16th 2021 the topic “COVID-19: Antibiotics & AMR “Are antibiotics really necessary for all COVID-19 patients”. Ten of our students attend this webinar.

As part of the ASPIC webinar series, third webinar on July 30th 2021 at 06.00 pm. The webinar was on “Food Systems Challenges & AMR focusing on the aspects of food safety, security and sustainability”. Twelve of our students attended this webinar.

On 10th September 2021 a webinar on” Research proposal writing” by Dr. Philip Mathew, Consultant, ReAct Asia pacific was conducted and in this webinar around fifteen students are participated. This webinar enlightened them about various aspects of project proposal writing.

A meet up of all the ASPIC student bearers and faculty advisors, fourth annual meeting on 31st January 2022, on Zoom platform. The speaker for the event is Dr Ponnari Gottipati, consultant of LV Eye institute. It was a breakout session, during the meet we discuss about our club and various network activities.

The fourth annual meeting

The meeting was attended by representative students and staff representatives from Mar Augusthinose college ASPIC clubs. The annual meeting of the ASPIC clubs was held on 3rd June 2022 at Radisson Blu Kochi , India .The meeting featured an array of expert talks on AMR in relation to various fields and was instrumental in planning activities for the year.



The banner features the ReAct logo (Antibiotic Resistance) in the top left and the ASPIC Clubs logo in the top right. The central text reads 'ASPIC Clubs ANNUAL MEETING 2022' with 'ANNUAL MEETING 2022' in large, bold, red letters. Below this, it says 'ASPIC [Antibiotic Stewardship & Prevention of Infection in Communities] Clubs' and 'a student engagement initiative of ReAct Asia Pacific'. At the bottom, the event details are listed: 'Date: 03 June 2022', 'Venue: Radisson Blu, Kochi', and 'Time: 10am-4pm', separated by dashed lines.

ReAct
Antibiotic Resistance

ASPIC Clubs

ASPIC Clubs ANNUAL MEETING 2022
ASPIC [Antibiotic Stewardship & Prevention of Infection in Communities] Clubs

a student engagement initiative of **ReAct Asia Pacific**

Date: 03 June 2022 // Venue: Radisson Blu, Kochi // Time: 10am-4pm