

GOVERNMENT COLLEGE KARIAVATTOM

REPORT OF THE SEMINAR ON

OMICS APPROACHES IN BIOTECHNOLOGY

Organized by

DEPARTMENT OF BIOTECHNOLOGY

GOVERNMENT COLLEGE, KARIAVATTOM

Thiruvananthapuram - 695 581

('NAAC' Accredited 'B' grade college)

on

13-15th February 2019

THREE DAY SEMINAR ON OMICS APPROACHES IN BIOTECHNOLOGY (13-15th February 2019)

The department of Biotechnology, Government College, Kariavattom has organised a three day seminar on the topic 'omics approaches in biotechnology' on 13-15th February 2019. The College Council allotted an amount of Rs.75,000/- (Rupees seventy five thousand only) to the department of Biotechnology for conducting a three day seminar. The department council meeting held on 10-11-2019 selected Dr. Soumyarani VS, assistant Professor, Department of Biotechnology as the coordinator for the seminar and Dr. JairaniPS, HOD and Assistant Professor, Dept of Biotechnology, Dr. Jayaram VS, Dr. Raghul Subin S, Dr. Abhilash BS, Assistant Professors of Department of Zoology and Sri. Binoy KR, HOD Dept of Botany, Smt. Smiths DG, Assistant professor Dept of Botany as the organising committee members.

The department council held on 14-11-2019 decided to conduct the seminar on 13-02-2019 to 15-02-2019 as to get the participation of all students of the department after the end semester examinations. The seminar entitled "omics approaches in biotechnology" had been proposed to address the significance and advances omics approaches in current biotechnology research. The seminar was organised to give the students an exposure to the latest research in frontier areas of biotechnology. Eminent scientists like Dr. Priya Srinivas, Dr. Abdul Jaleel KA, Dr. Moinak Banerjee, Dr. E. Sreekumar, Dr. Shijulal Nelson Sathi- Scientists, Rajiv Gandhi Center for Biotechnology, Thiruvananthapuram, Dr. Madhusoodanan from Department of Biochemistry, Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Dr. A Jayakumaran Nair and Prof. Achut Sankar from University of Kerala were selected to be the resource persons for the seminar. The department council decided to invite students, research scholars and faculty members of various colleges and research institutions working on life science subject to the seminar.

The coordinator received the advance amount Rs. 75,000/- (Rupees seventy five thousand only) from the Principal, Government College, Kariavattom for making the arrangements for the seminar. The department council conducted meeting with student representatives and assigned duties to students and faculty constituting different committees (Registration, program, Food, Transportation etc) for the smooth conduct of the seminar.

The inaugural session commenced with a prayer followed by the welcome speech by Dr. Soumyarani VS, the coordinator of the program. Dr. B Unnikrishnan Nair, Principal, Government College, Kariavattom presided over the session.



Photo 1: Welcome speech by Dr. Soumyarani VS, Assistant professor, Biotechnology, the coordinator of the program



Photo 2: Inauguration by the chief guest, Dr. Jayakumar Nair A, Associate professor and Head, Department of Biotechnology, Kerala University Campus



The chief guest, Dr. Jayakumar Nair A, Associate professor and Head, Department of Biotechnology, Kerala University Campus officially inaugurated the seminar.

Dr. Jairani PS, HOD department of Biotechnology, Dr. S Baiju, PTA secretary, Dr.H Sabeen , IQAC co-coordinator, Mr. Ananthu, Union Chairman, has delivered the felicitation address. The inaugural session ended with Vote of thanks by Dr. Jairani PS, HOD and Assistant Professor, Department of Biotechnology, organizing committee member of the program. A tea break of 15 min was taken before starting the scientific sessions.



Photo 5: Presidential address by the Principal Dr.B Unnikrishnan Nair



Photo 6: Vote of thanks by Dr. Jaiani PS, Assistant Professor & HOD, Department of Biotechnology, organizing committee member

The key note address was delivered by Dr. A Jayakumaran Nair on topic proteomics, genomics and metabolomics.



Photo 7: Keynote Address by Dr.A Jayakumaran Nair

Photo 8: Hand Over memento to Dr. A Jayakumaran Nair by Dr. JaianiPS

The first scientific session was on the topic “Tumor microenvironment” by Dr. Priya Srinivas, Scientist F, RGCB, TVPM. The session I took 90 min (11:30 am to 1 PM) with a short interactive session lasted for 15 min. The talk was really enlightening to the UG students going deep into the very core aspects of starting a career in research in Biotechnology. The challenges as well as opportunities were well discussed. This was followed by lunch break for half an hr (1 PM to 1.30 PM).



Photo 9 : Session I : Dr. Priya Srinivas



The afternoon session (Session II) started at 1.30 PM on the topic ‘On introduction to mass spectrometry’ by Dr. A. Abdul Jaleel KA. The presentation was eminent in quality and content, but presented simply to the students. The students were given an overview of opportunities in proteomics for their higher studies. The session came to an end by 3 PM, with a vote of thanks by the coordinator. A tea break for 15 min was taken before the next session.



Session II: Dr Abdul Jaleel



Memento handover to Dr.Abdul Jaleel by Dr.Jairani

Session III were taken by Dr. S sreekumar , JNTBGRI, Palode, Trivandrum on the topic “omics data management and bioinformatics’ which took 90 min from 3.15 pm. It was a very informative presentation unveiling all sorts of applications of bioinformatics and computational biology in Biotechnology research. The first day scientific session ended with an interactive talk by Dr. Sreekumar.



Session III ; Dr.S Sreekumar



Memento handover to Dr.Abdul Jaleel by Dr.Jairani

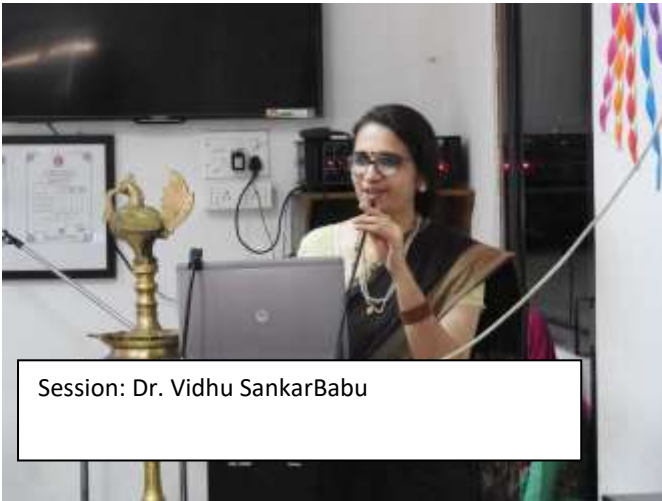
The second day 14/02/2019 were started by session with Dr. Moinak Banerjee. on the topic “epigenomics in development of complex diseases’ which took 90 min from 9.30 am to 11.pm. It was a very informative presentation revealing the role of environmental factors in development of complex diseases like Parkinsons or Alzhimers. The session were enlightened with the never ending questions on epigenomics from audience side. After tea break next session taken by Dr. Vidhu SankarBabu on phylometabolomics. The session were an openings to an area which is still has to be explore in detail like the role of metabolic profiling in phylogenic studies. The session took 90 minutes and ended up with lunch brake.



Session IV: Dr. Moinak Banerjee



Memento handover to Dr.Moinak Banerjee by Dr.Javaram VS



Session: Dr. Vidhu Sankar Babu



Memento handover to Dr.Vidhu Sanka by Sri. Binov KR





SessionVI: Dr. E Sreekumar

Memento handover to Dr.E Sreekumar by Smt. Smitha DG

Afternoon session was taken by Dr. E sreekumar , RGCB, on the topic “role of omics in the study of viral diseases’ which took 90 min from 1.30 pmto 3.pm. He has delivered an excellent talk on pathological aspects of viral diseases and the role of various omics approaches in virus identification and host pathogen interactions. The last session on the second day were handled by Dr. Shijulal Nelson Sathi. The topic was the metagenomics and the current approaches in metagenomic studies. The talk were a new opening to many of the students as the area revealed the hidden pathways of gene flow in environment among different species and supposed to be a major reason for development of drug resistance in microorganisms. The session take 90 minutes.With this session second day of seminar winded up.



Session VII: Shijulal Nelson Sathi

The third day (15-2-19) started by a talk of Dr. Madhusoodanan on role of various omics approaches in elucidating complex disease pathways. He described in detail various DNA sequencing methods and its impact on identification of disease markers. The last session were taken by Dr. Achut Sankar. It was a very informative

and the talk encompasses the whole area of omics study from DNA to metabolome. With this talk all the scientific session ended up.



Session VIII; Dr.Madhusoodanan



Memento handover to Dr.Madhusoodanan
by Dr.BS Abhilash



Session IX: Dr. Achut Sankar



Memento handover to Dr.Achut Sankar by
Dr.Jairani

Afternoon session started with students and faculty paper presentation. Ten participants from various institutions presented their work. Divya from SCTIMST selected for best paper presentation. The Valedictory Session began at 4.45 pm presided by the Vice principal Smt. Jaya. A total of 120 participants attended the seminar. The participants shared their experiences and provided their feedback in the proforma. The certificates were presented by the coordinator to the students and delegates. The session was concluded by a vote of thanks by the coordinator.

All the faculty members and students of the department of Biotechnology put their hard work for the success of the seminar. The student feedback was overwhelming and they wanted more such seminars in future too. The variety in content and the eminence of the speakers made the seminar a high quality one.