

## Patrons

**Dr. M. Ramdas Pai**

Chancellor, MAHE, Manipal

**Dr. H. S. Ballal**

Pro Chancellor, MAHE, Manipal

**Dr. H. Vinod Bhat**

Vice Chancellor, MAHE, Manipal

**Dr. Poornima Baliga B**

Pro Vice Chancellor (Health Sciences)

**Dr. Helmut Brand**

Director, PSPH, MAHE, Manipal

**Dr. D. Srikanth Rao**

Director, MIT, MAHE, Manipal



# CARAMS

## Instructional Workshop on Computational Biology and Bioinformatics (IWCBB 2019)

December 02- 07, 2019



## Scientific Advisory Committee

**S. Arumugam (Chairman)**

Amrutha Vishwa Vidyapeetham

**G. Sudhakara**

MIT, MAHE, Manipal

**Manjunatha Prasad Karantha**

CARAMS, MAHE, Manipal

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DGS, MAHE, Manipal

**B. P. Varadaraya Pai**

Director-Finance, MAHE, Manipal

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## About the Conference

A huge amount of data, particularly biological data, based on experimental studies is available in various databases such as KEGG, STRING, HPRD, MINT, DIP, Reactome, BioGRID, SPIKE, IntAct etc. Most of these data are representable as a networks. The main focus of this workshop are to identify and learn the use of network based tools for extracting useful information from the above data and to identify feasible results which are to be validated experimentally.

Some of networks that appear in the area of Biological networks are

- Brain Network
- Protein-Protein Interaction network
- Gene Regulatory Network
- Metabolic Network

The above networks are among the network models such as scale free networks, random networks, small world networks, regular networks. Further, network parameters such as degree centrality, stress centrality, closeness centrality, betweenness centrality, eigenvector centrality etc. are useful in analyzing the networks.

The objectives of this workshop, organized by the CARAMS, MAHE (Network Science and its Applications Chapter), is to discuss on different databases associated with biological experiments, visualization of biological networks and tools for analyzing these networks. This course consists of designing of theoretical models and hands on training in analyzing the networks using software packages.

## About MAHE, Manipal

Manipal Academy of Higher Education is synonymous with excellence in higher education. Over 28,000 students from 57 different nations live, learn and play in the sprawling University town, nestled on a plateau in Udupi district of Karnataka. It also has nearly 2500 faculty and almost 10000 other support and service staff, who cater to the various professional institutions in Health Sciences, Engineering, Management, Communication and Humanities which dot the Wi-Fi-enabled campus. The University has off-campus in Mangalore and Bangalore, and off-shore campuses in Dubai (UAE) and Melaka (Malaysia). The Mangalore campus offers medical, dental, and nursing programs. The Bangalore Campus offers programs in Regenerative Medicine. The Dubai campus offers programs in Engineering, Management and Architecture, and the Melaka campus offers programs in Medicine and Dentistry. Every institute has world class facilities and pedagogy, which are constantly reviewed and upgraded to reflect the latest trends and developments in higher education. For more details visit us <https://manipal.edu/>

## About CARAMS

CARAMS has been established in September 2018 at MAHE with the objective of fostering advanced research and training in the area of Mathematics, Statistics and their applications. It facilitates the bridging of the gap between Mathematicians/Statisticians and Applied Mathematicians working in the area of Health, Technological, and Social Sciences. CARAMS, MAHE is functioning with its four chapters, namely, Algebra and Analysis, Matrix Analysis and its Applications, Network Science and its Applications, and Statistics and Operations Research.

Visit us at <http://carams.in>

## Resource Persons



**S. Arumugam**  
Amrutha Vishwa Vidyapeetham



**Veeky Baths**  
BITS Pilani, Goa Campus



**Somasundaram A.**  
BITS Pilani, Dubai Campus



**Bobby Paul**  
SOLS, MAHE, Manipal



**Anirban Banerjee**  
IISER, Kolkata



**Manjunatha Prasad Karantha**  
CARAMS, MAHE, Manipal



**Fayaz S. M.**  
MIT, MAHE, Manipal

## Registration Fee

Category	Registration Fee
Academic Faculty/Research Scholars	₹5000 + GST
UG/PG Students	₹3000 + GST
MAHE Faculty/Research Scholars	₹5000
MAHE UG/PG Student	₹3000

There is no GST for the Faculty/Research Scholars/UG/PG Students of MAHE

## How to Register?

Register online in our portal using the link <http://carams.in/registration> and pay the registration fee through the payment gateway available in our website. The registration fee may be paid using a crossed DD drawn in favor of "Manipal University conference/workshop" payable at Manipal or Udupi. The details of the same needs to be sent to the following address or may be submitted on the spot:

**Organizing Secretary, IWCB 2019**  
CARAMS, Level VI,  
Health Sciences Library Building  
MAHE, Manipal  
Karnataka, 576 104, India

## Accommodation

Registration fee covers Registration kit, breakfast, lunch and dinner. Accommodation at a Guest House/Shared flats/Hostel/Fortune Inn Valley View will be arranged, on prior request on a payment basis. The payment towards the hostel accommodation may be partially/fully waived off/reimbursed by the organizers depending on the availability of funds.

## Important Date

Last date for registration : **Nov 15, 2019**  
Last date for payment : **Nov 22, 2019**

Last day of the workshop is reserved for the presentation of research articles by the participants in the fields related to Computational Biology and Bioinformatics. Title and abstract may be submitted for the possible presentation on or before **November 22, 2019**. Organizers will bring out a book of abstracts

Registration of participants failing to pay the registration fee on or before November 22, 2019, may be cancelled.

For more info visit us at <https://carams.in/events/iwcb-2019>