

11 YEARS OF UNIVERSITY
RECOGNITION
21 YEARS OF
ACADEMIC
EXCELLENCE



REVA
UNIVERSITY
Bengaluru, India

Two days hands-on Training workshop

IMMUNOINFORMATICS AND IN-SILICO VACCINE DESIGN

**25th and 26th
March 2024**

Organized by

**School of
Applied Sciences**

Department of Biotechnology:
"SciGeniX@REVA Club"
REVA University





WORKSHOP CO-ORDINATORS

**Dr. Karthick Vasudevan, Dr.K.R.Dasegowda,
Dr. Majji Rambabu, Prof.Prashantha CN
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Sri. Umesh Raju

Hon. Pro Chancellor, REVA University

PATRON

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Vice Chancellor, REVA University

Dr. A Shubha

Pro Vice Chancellor (AGTP), REVA University

CONVENERS

Dr. Pasupuleti Visweswara Rao

Associate Dean, School of Applied sciences, REVA University

Prof. Shilpa B. R

Director (I/C), School of Applied Sciences, REVA University

WORKSHOP CO-COORDINATORS:

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Dr. Karthick Vasudevan, Associate Professor, SoAS

Dr. K.R.Dasegowda, Assistant Professor, SoAS

Dr. Majji Rambabu, Assistant Professor, SoAS

Dr. Vivek Keshri, Assistant Professor, SoAS

STUDENT CO-ORDINATORS

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Mr. Abishek, Ms.Nandhini B (MSc-Bioinformatics)

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ABOUT REVA UNIVERSITY

REVA University has been established under Government of Karnataka Act 80 of the year 2012 and notified in the Karnataka Gazette dated 7 Feb. 2013. The University is in Bengaluru on a sprawling green campus, spread over 45 acres of land, built with state-of-the-art infrastructure creating an environment conducive to higher learning and research. The founder of REVA University believes in the motto 'Knowledge is Power'. Driven with a philanthropic vision and a missionary zeal, the campus is built to transform students into outstanding citizens. The University prides itself in contributing to the holistic development of every student. The University currently offers 55 Undergraduate Programmes, 28 full-time Postgraduate Programmes, 2 part-time Postgraduate Programmes, Ph.D. Programmes in various disciplines and several Certificate / Diploma and Postgraduate Diploma Programmes in Engineering, Architecture, Science and Technology, Commerce, Management Studies, Law, Arts & Humanities, and Performing Arts. The programmes offered by REVA University are well planned and designed based on in-depth analysis and research with emphasis on knowledge assimilation, practical applications, hands-on training, global and industrial relevance, and social significance.

ABOUT

SCHOOL OF APPLIED SCIENCES

The School of Applied Science, started in the year 2014, is known for its dedication and commitment. There are 98 highly qualified teaching faculties teaching various subjects as Physics, Chemistry, Mathematics, Biochemistry and Biotechnology. The school has organized many events such Inspire Internship program, KSTA conference, National and International conferences. The department has dedicated R&D centre and many funded research projects from various funding agencies such as DST-SERB, DST-TERI, VGST etc.



The Department of Biotechnology, currently being functional under the School of Applied Sciences. The biotechnology department offers various courses related to UG, PG and Ph.D like B.Sc. (Biotechnology, Biochemistry, Genetics), B.Sc. (Microbiology, Chemistry, Genetics), B.Sc. (Bioinformatics, Statistics, Computer Science), M.Sc. Biotechnology, M.Sc. Microbial Technology, M.Sc. Bioinformatics and Ph.D. Biotechnology. Department has established MOU with various research organizations and industries like ICAR-NIVEDI, Clini India, MMS University, Biozeen-Bengaluru, NIPGR-New Delhi etc. The Postgraduate programs are industry integrated and focus on student career development. Besides, we offer a varied range of unique elective courses, online programs like MOOC/SWAYAM/COURSERA, Student Development Programme, workshops, Internships, and other research-based exposures which are part of the curriculum. The short-term certificate program offered by the biotechnology department deliver career strengthening opportunities to the students. Thus, we provide students with a wide range of career opportunities in various domains of Life Sciences.



ABOUT THE DEPARTMENT

School of Applied Sciences

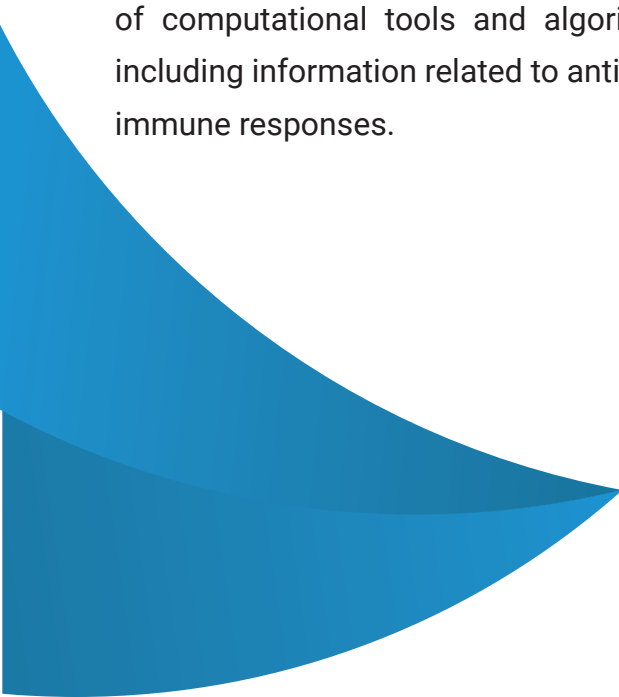
Programs offered

- » B.Sc. Biotechnology, Biochemistry and Genetics
- » B.Sc. Bioinformatics, Statistics and Computer Science
- » B.Sc. Microbiology, Chemistry and Genetics
- » M.Sc. Biotechnology
- » M.Sc. Bioinformatics
- » M.Sc. Microbial Technology
- » M. Sc. Clinical Embryology and Assisted Reproductive Technology
- » M.Sc. Physics
- » M.Sc. Chemistry
- » M.Sc. Mathematics

About

The workshop

The study and understanding of the immune system and its interactions with diseases, antigens, and the human body are the goals of the interdisciplinary discipline of immunoinformatics, which blends immunology, bioinformatics, and computational biology. In order to evaluate and interpret complicated biological data relevant to immunology, it involves the application of a number of computational approaches and tools. Immunoinformatics has the following important features and applications. Immunoinformatic used in the development of vaccines, therapeutics, and diagnostics for various infectious diseases, cancer, and autoimmune disorders. It involves the application of computational tools and algorithms to process and interpret immunological data, including information related to antigens, antibodies, immune receptors, immune cells, and immune responses.



Course Contents

DAY 1	DAY 2
B-cell and T-cell epitope prediction	Physiochemical property analysis of vaccine
Allergen and Antigenicity prediction	Target identification and Docking
Cytokine releasing epitope prediction	Population coverage analysis
2-D structure prediction of vaccines	Codon optimisation and Insilco cloning
Homology modelling and Validation of modelled vaccine	Immune simulation

Workshop Outcomes

Participants will acquire hands on skill sets in

In-silico technologies in Immunology

Enhanced vaccine design

Personalized cancer immunotherapy

Understanding immune system function post vaccination

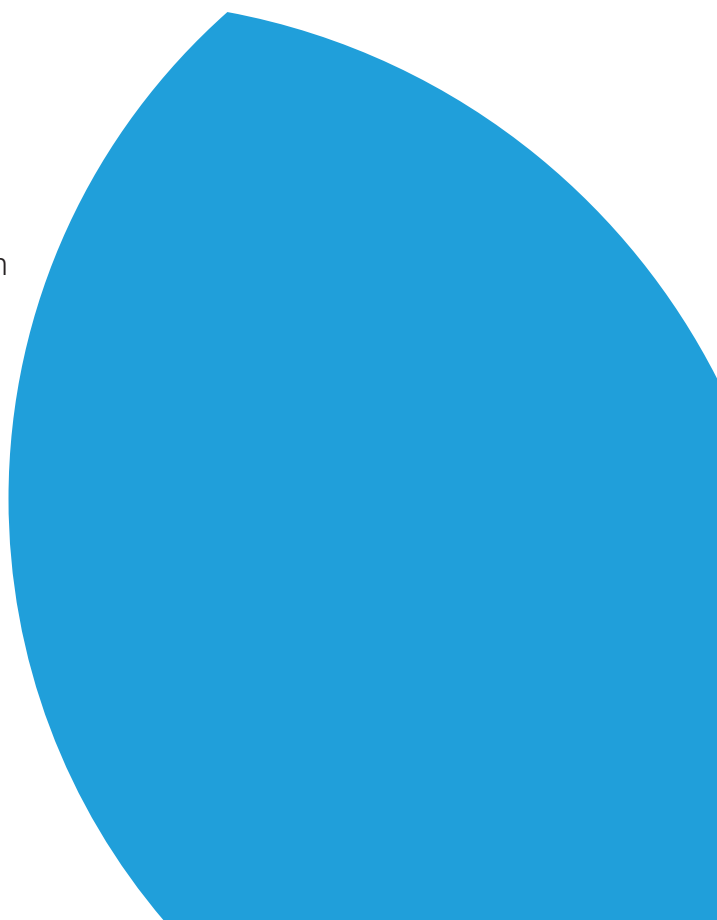
Venue: JJ hall, 2nd floor and Bioinformatics Lab,

3rd Floor, Science block

Department of Biotechnology

School of Applied Sciences

REVA University



Registration account details

REVA CENTRE FOR COMPETENCY DEVELOPMENT

THE KARNATAKA BANK LTD

A/C NO. 6662500101008701

REVA UNIVERSITY BRANCH

IFSC CODE: KARB0000666

SWIFT: KARBINBBBNG

Registration

Note: Number of participants restricted to 30 only

Registration Fees: INR 850 /-

- The interested participants are requested to fill the online application form along with the mentioned workshop fee submission details.
- Last Date for registration: 23.03.2024
- Workshop date: 25.03.2024 and 26.03.2024

Registration link: <https://www.reva.edu.in/payment>

QR CODE FOR REGISTRATION

