29th & 30th January, 2021

Organized
By
Department of Biochemistry & Bioinformatics
GITAM Institute of Science

GITAM
(Deemed to be University)
(Estd. u/s 3 of UGC Act 1956)
Rushikonda, Visakhapatnam – 530045
Andhra Pradesh, India.

ABOUT ORGANISERS

GITAM Deemed to be University

Gandhi Institute of Technology and Management (GITAM), is a deemed to be university under section 3 of the UGC Act 1956. GITAM is a premier educational institution in the country established with a vision to impart futuristic and comprehensive education of global standards with a high sense of discipline and social relevance in a serene and invigorating environment. GITAM is located at Visakhapatnam and has two off-campus at Hyderabad and Bengaluru. GITAM is offering multidisciplinary programs at UG, PG & Doctoral levels. It is one of the deemed to be university that has been accorded 12-B status by UGC facilitating the university to receive funds from different funding agencies. GITAM was awarded Category-I graded autonomy by UGC-MHRD. GITAM was accredited by NAAC with “A+” grade and approved by AICTE. Over the last 40 years, GITAM has achieved many milestones and established a mark of its own in the field of higher education. Late Dr. M.V.V.S. Murthi, visionary, industrialist, educationist, philanthropist and former parliamentarian had guided the destinies of the University since its inception. Now under the leadership of Honorable President Shri M. Sri Bharat, GITAM has become a diverse and dynamic Educational Institute.

GITAM Institute of Science

GITAM Institute of Science was established with a main emphasis on education and research in the basic and emerging areas of Science with contemporary relevance.

Institute of Science offers B.Sc., BCA, BEM, M.Sc., MCA, M.Phil., and Ph.D. programmes in Applied mathematics, Biochemistry, Bioinformatics, Chemistry, Biotechnology, Computer Science, Electronics, Physics, Environmental Science, Food & Nutrition, Microbiology etc.

Sir CV Raman Bhavan Building

Department of Biochemistry and Bioinformatics

Academics

Department of Biochemistry was established in 2001 and is devoted for holistic nurturing of the students to achieve academic heights. The curriculum is designed to cover basics to advanced aspects. The teaching-learning process is woven around project works, seminars, field work and industrial visits apart from generic theoretical issues. Innovative teaching methodology and extensive wet lab practical training impart hands on experience in the respective fields. This also enables the students to qualify in CSIR, ICMR, GATE, IARI, BINC Examinations etc.

The department offers the following programmes

Undergraduate Programmes
- B.Sc. in Biochemistry, Bioinformatics and Chemistry
- B.Sc. in Biochemistry, Bioinformatics and Microbiology

Postgraduate Programme
- M.Sc. in Biochemistry and Molecular Biology

Doctoral Programmes
- Ph.D. in Biochemistry & Ph.D. in Bioinformatics

Research

The faculty is actively involved in research in the areas of Cancer biology, Immunology, Genetic engineering, Clinical biochemistry, Structural bioinformatics, Drug designing, Stem cell biology and Neurobiology.

The thrust areas of research in department include Cancer biology, Bioactive compounds from medicinal plants and marine sources, and Bioinformatics. The faculty published more than 300 research papers in National and International journals of repute; and 33 Ph.D. and 2 M.Phil. degrees were awarded by the department.

Nine major and six minor research projects worth of Rs ~2 crores funded by DST, DBT, UGC, DRDO and GITAM were completed. Five major research projects funded by DBT, DST, ICMR and CSIR of worth Rs ~1 crore are in progress.

In addition, the School of Life Sciences is supported with FIST (Funds for Infrastructure) by DST, New Delhi. Our students received CSIR-NET and DST-Inspire Junior Research Fellowship for pursuing Ph.D. in reputed National institutes.
The students of this department are the recipients of University gold medal successively since inception of GITAM (Deemed to be University). A significant number of students are pursuing post-doctoral research and higher degrees in advanced research labs both in India and Abroad.

Placements

Our ALUMNI occupied pivotal positions in reputed organizations such as Bioserve, NIN, IILs, ICMR, Dr. Reddys’ laboratories and Shantha Biotech.

ABOUT INTERNATIONAL WEBINAR

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing pandemic of coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, China. The World Health Organization declared the outbreak a Public Health Emergency of International Concern in January 2020 and a pandemic in March 2020. As of 7 January 2021, more than 87.1 million cases have been confirmed, with more than 1.88 million deaths attributed to COVID-19.

Symptoms of COVID-19 are variable, ranging from mild symptoms to severe illness. Common symptoms include headache, loss of smell and taste, nasal congestion and rhinorrhea, cough, muscle pain, sore throat, fever and breathing difficulties. COVID-19 spreads from person to person mainly through the respiratory route after an infected person coughs, sneezes, sings, talks or breathes. A new infection occurs when virus-containing particles exhaled by an infected person, either respiratory droplets or aerosols, get into the mouth, nose, or eyes of other people who are in close contact with the infected person. Preventive measures to reduce the chances of infection include staying at home, wearing a mask in public, avoiding crowded places, keeping distance from others, ventilating indoor spaces, washing hands with soap and water often and for at least 20 seconds, practising good respiratory hygiene, and avoiding touching the eyes, nose, or mouth with unwashed hands.

The standard method of testing for presence of SARS-CoV-2 is real-time reverse transcription polymerase chain reaction (rRT-PCR), which detects the presence of viral RNA fragments. Antiviral medications are under investigation for COVID-19, in randomized controlled trials. Remdesivir was granted in the U.S. for people hospitalized with severe COVID-19.

By mid-December 2020, 57 vaccine candidates were in clinical research, including 40 in Phase I–II trials and 17 in Phase II–III trials. In Phase III trials, several COVID-19 vaccines demonstrated efficacy as high as 95% in preventing symptomatic COVID-19 infections.[156] National regulatory authorities have approved six vaccines for public use: two RNA vaccines (tozinameran from Pfizer–BioNTech and mRNA-1273 from Moderna), two conventional inactivated vaccines (BBIBP-CoV from Sinopharm and CoronaVac from Sinovac), and two viral vector vaccines (Gam-COVID-Vac from the Gamaleya Research Institute and AZD1222 from the University of Oxford and AstraZeneca). Despite of the effort’s world has witnessed second outbreak leading to lockdowns and effects on economies of the country.

This webinar will focus on discussing the latest developments including the following themes

- SARS-CoV-2 structure and replication characterized by in situ cryo-electron tomography
- Mechanistic Insights into SARS-CoV-2 Main Protease Inhibition
- Bioinformatics aided research and development of tools for COVID-19
- SARS-CoV-2: Structural insights, vaccine development and future implications
- Understanding Immunity towards COVID-19 pandemic
- Development of diagnostic kits for identification of various diseases

REGISTRATION

There is no registration fee for the participants

Registration link

https://forms.gle/Ak87CWB9JquA2PWD8

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