



VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH (VFSTR)

The University was established in the year 2009 and is accredited by NAAC as "A". The University gives top priority to academic excellence with social responsibility. This has been made possible under the dynamic leadership of honorable Chairman Dr. Lavu Rathaiiah, and Vice-Chairman Shri. Lavu Sri Krishna Devarayalu, Member of Parliament. The University is driven by values, ethics, and a dedicated team of professionals. With a greater emphasis on innovation, research, skill development and entrepreneurship, the University has entered an exciting phase and is shouldering greater responsibilities in imparting technical skill development, in keeping with our honorable Prime Minister's vision of "Skill India, Make in India and Digital India".

ABOUT THE DEPARTMENT OF BIOTECHNOLOGY

The Department of Biotechnology at VFSTR was established in the year 2006. It was accredited by NBA in the year 2020. There are 24 doctorates among its faculty members. It supports the extension activities such as rural development by promoting the cultivation of medicinal plants to the local farmers, especially among women. The Department is very well established with COE, animal cell culture facility, bioprocessing lab, plant tissue culture lab, bioinformatics lab, animal house, clean room, and biogas plant, with an ample strength of students (600) and faculty. The Department has been supported by VFSTR, DST-FIST, and has attracted more than 10 external research projects to the tune of Rs. 3.5 crores. The Department offers B.Tech (Biotechnology and Bioinformatics), B.Tech. (Hons), M.Tech and Ph.D. Programs. Both B.Tech and M.Tech students undergo industrial internships, either in India or abroad. Every academic year, 20% of the students go for higher studies abroad, while 10% of the students prefer higher education in India, and the remaining 60% students get placements in various firms.

ABOUT THE SYMPOSIUM

The international symposium on bioinformatics (InSyB) is a flagship symposium of the Asia-Pacific Bioinformatics Network (APBioNet). This event is the fourth in the series, for the first time virtually, given the current pandemic situation. The last three InSyBs were held in Indonesia (2017), Malaysia (2018), and India (Punjab). Although this is the second time InSyB is being held in India, this time, it is being held in the southern parts of the country. InSyB as a symposium is targeted to the student group and younger researchers. The theme of InSyB 2020 "Bioinformatics for Disease Therapeutics" covers the whole spectrum of disease therapeutics, especially viral diseases like COVID-19, utilizing the tools of Bioinformatics and Omics. The prime aim of the symposium is to bring researchers, pharmacists, academics and industrial practitioners onto a single platform who can help in stimulating discussions and academic excellence. More than 10 experts in the field of bioinformatics have been invited from India and abroad (Australia, Japan, Singapore, Chile), who will deliver keynote/plenary talks on selected domains, entailing various aspects of disease therapeutics using various bioinformatics tools. We hope the participants will immensely benefit from attending the InSyB 2020.

INTERNATIONAL SYMPOSIUM on BIOINFORMATICS (InSyB 2020) FOR DISEASE THERAPEUTICS

21-22 December 2020

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AGAGTTTATTGACGGCGTGCACTATTTTT
TTTTATTGTTGCCATGCAATAAGTGTA
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Organized by the
Department of Biotechnology (NBA-Accredited)

Under the Aegis of



Asia-Pacific Bioinformatics Network (APBioNet)



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur District - 522 213. A.P., | Tel : 0863 2344700

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Keynote Speakers



Prof. Kenta Nakai
(Keynote Speaker on 21st Dec, 2020)
Professor, Human Genome Center,
The Institute of Medical Science,
The University of Tokyo, Japan
Topic: Using Various Kinds of NGS Data
for Understanding Cell-Type Specific
Regulation of Gene Expression



Prof. G. P. S. Raghava
(Keynote Speaker on 22nd Dec, 2020)
Professor & Head, Department of
Computational Biology, Indraprastha
Institute of Information Technology
(IIIT-Delhi), New Delhi, India
Former Chief Scientist, CSIR-Institute of
Microbial Technology, Chandigarh
Topic: Computer-Aided Immunotherapy
to Fight Against Emerging Pathogens



Prof. G. Narahari Sastry
Director, CSIR-North East Institute of
Science and Technology,
Jorhat, Assam, India
Topic: Understanding Relationships
between Infection and Immunity:
Role of Modelling and Informatics



Prof. Bruno Gaeta
Senior Lecturer and Director of Studies,
Bioinformatics Engineering,
School of Computer Science and
Engineering, UNSW Australia
Topic: Bioinformatics to Study a
Range of Aspects of Immune Function



Prof. Adaikalavan Ramasamy
Sr. Research Scientist, Genome Institute of
Singapore, A*STAR, Singapore



Dr. Mohammad Asif Khan
President, APBioNet
Associate Professor & Dean, School
of Data Sciences, Perdana University,
Malaysia
Topic: Mapping the Minimal Set of
the Viral Peptidome



Dr. Shandar Ahmad
Professor, School of Computational and
Integrative Sciences, Jawaharlal Nehru
University, New Delhi, India
Topic: "Genome beyond a 4-letter
sequence: emerging roles for local
and global DNA shapes"



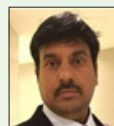
Dr. Prashanth N Suravajhala
Sr. Scientist, Systems Biology,
Department of Biotechnology and Bioin-
formatics, Birla Institute of Scientific
Research, Jaipur-302001,
Rajasthan, India
Topic: Systems Genomics of Prostate
Cancer: Indian Perspective



Dr. Tikam Chand Dakal
Asst. Professor, Department of
Biotechnology,
Mohanlal Sukhadia University,
Rajasthan, India
Topic: Bioinformatics analyses of
SARS-COV-2 Spike Protein: Steps
Towards Designing COVID-19
Therapeutics



Dr. Aparna Banerjee
Asst. Professor, Universidad Catolica
del Maule, Talca, Chile
Topic: Genomic and Molecular Charac-
terization of a Unique, Avirulent Variant
of Bacillus Anthracis from Hot Spring



Dr. Sugunakar Vuree
Asst. Professor,
Department of Biotechnology,
School of Bioengineering and
Biosciences, Lovely Professional
University, Punjab, India
Topic: Envisioning the Role of Cancer
Biomarkers through the Intervention of
Bioinformatics

CHIEF PATRONS

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Dr. S. Krupandhi, Dean-Planning and Monitoring,
Head & Professor, Dept. of Biotechnology, VFSTR

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Scientific Advisor, Dept. of Biotechnology, VFSTR

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Dr. Tarun Pal,
Asst. Prof., Dept. of Biotechnology, VFSTR

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Mrs. A. Naga Lakshmi, Asst. Prof., VFSTR
Mr. N. Venkata Raju, Asst. Prof., VFSTR

REGISTRATION:

Free for Students, Research Scholars, Scientists, and Faculty members from the Universities, Institutions, Colleges and Industries in India & Abroad.

REGISTRATION

Registration opens on **25th November 2020** | Registration closes on **15th December 2020**

https://docs.google.com/forms/d/e/1FAIpQLSezPpyGqfWfB2gBm486Xgd_ogI4707uy0ScRy9j4ve04M_Yxg/viewform?usp=sf_link

INSTRUCTIONS TO PARTICIPANTS

Presentation will be held over a virtual platform, such as ZOOM.
The ZOOM link will be provided to the registered participants.
E-certificate will be issued for all the participants.

VENUE

NET working facility lab supported by the DST-FIST.
Department of Biotechnology (NBA-Accredited).
Vignan's Foundation for Science, Technology and Research (Deemed to be University),
Vadlamudi-522213, Guntur, Andhra Pradesh, India.

Program Schedule

**International Symposium on Bioinformatics (InSyB-2020)
For Disease Therapeutics
Being Organized Under the Aegis of APBioNet and the Department of
Biotechnology, VFSTR University, Vadlamudi-522213, Guntur
(from 21st to 22nd December, 2020)**

DAY-1: 21st December 2020 Each key note speaker will deliver 40-minute talk, but no questions and answers will be entertained Each invited speaker will deliver 30-minute talk followed by 5-minute discussion	
9.10 AM - 9.15 AM	Introduction of Honorable Guests of Inaugural Function - Dr. Abhinav Parashar Introduction of Keynote Speakers – Dr. K. Srikanth Scientific Program Coordinators
9.15 AM - 9.25 AM	Genesis of InSyB-2020 and Its Importance Dr. A. Ranga Rao - Organizing Secretary of the Virtual Symposium
9.25 AM - 9.35 AM	Welcome Address by Dr. Lavu Rathaiah Garu Chairman, Vignan Group of Institutions
9.35 AM - 9.45 AM	Inaugural Address by Padma Shri Dr. M.Y.S. Prasad Vice-Chancellor, VFSTR and Former Director, Space Center, Sriharikota, Andhra Pradesh, Distinguished Scientist in ISRO (APEX)
9.45 AM - 9.50 AM	About VFSTR – Commodore, Dr. M.S. Raghunathan Registrar, VFSTR
9.50 AM - 9.55 AM	About the Department of Biotechnology – Prof. S. Krupanidhi Head, Department of Biotechnology, VFSTR
9.55 AM - 10.00 AM	About the InSyB-2020 Webinar Dr. N. Jalaja, Convenor of the Webinar
10.00 AM - 10.40 AM	Keynote Speaker: Dr. Kenta Nakai Professor, Institute of Medical Science, The University of Tokyo, Japan Topic: Using Various Kinds of NGS Data for Understanding Cell-Type Specific Regulation of Gene Expression
10.40 AM - 11.15 AM	Invited Speaker: Shanti Swarup Bhatnagar Awardee Dr. G. Narahari Sastry Director, CSIR-North East Institute of Science and Technology, India Topic: Understanding Relationships between Infection and Immunity: Role of Modeling and Informatics
11.15 AM-11.50 AM	Invited Speaker: Dr. Bruno Gaeta Professor, School of Computer Science and Engineering The University of New South Wales, Australia

	Topic: Bioinformatics to Study a Range of Aspects of Immune Function
11.50 AM-12.25 PM	Invited Speaker: Dr. Adaikalavan Ramasamy Sr. Research Scientist, Genome Institute of Singapore, Singapore Topic: Career Pathways for Bioinformatics Trained Researchers
12.25 PM - 1.40 PM	Lunch Break
1.40 PM-2.15 PM	Invited Speaker: Dr. Shandar Ahmad Professor, School of Computational and Integrative Sciences Jawaharlal Nehru University, New Delhi, India Topic: Genome Beyond a 4-letter Sequence: Emerging Roles for Local and Global DNA Shapes
2.15 PM - 3.00 PM	Oral Presentations by Faculty/Scholar/Students Each Oral Presentation will be of 12-Minute Duration Followed by 3-Minute Discussion
2.15 PM – 2.30 PM	Dr. S. Anil Kumar Assistant Professor, Department of Biotechnology VFSTR University, Vadlamudi Topic: Corona Virus Unknowns from the Knowns
2.30 PM – 2.45 PM	Patricio Gonzalez Faune Faculty of Agricultural and Forestry Sciences Universidad Catolica del Maule, Talca, Chile Topic: Computational Study on Temperature Driven Structure-Function Relationship of Biofilm Producing Glycosyl Transferase Enzymes
2.45 PM – 3.00 PM	Dr. A. Vijaya Sai Assistant Professor, Department of Biotechnology VFSTR University, Vadlamudi Topic: Molecular Phylogenetic Analyses of Pulmonata (Mollusca:Gastropoda)
DAY-2: 22nd December 2020 Each key note speaker will deliver 40-minute talk, but no questions and answers will be entertained Each invited speaker will get 30-minute time slot followed by 5-minute discussion	
	Introduction of Speakers – Dr. Ch. Anjani Devi Dr. Md. Nazneen Bobby
9.00 AM – 9.40 AM	Keynote Speaker: Prof. G.P.S. Raghava Professor & Head, Department of Computational Biology Indraprastha Institute of Information Technology (IIIT-Delhi), New Delhi, India; Former Chief Scientist, CSIR-Institute of Microbial Technology, Chandigarh, India Topic: Computer-Aided Immunotherapy to Fight Against Emerging Pathogens
9.40 AM – 10.15 AM	Invited Speaker: Dr. Prashanth N Suravajhala Sr. Scientist, Department of Biotechnology and Bioinformatics Birla Institute of Scientific Research, Jaipur, India Topic: Systems Genomics of Prostate Cancer: Indian Perspective

10.15 AM – 10.50 AM	<p>Invited Speaker: Dr. Mohammad Asif Khan President-APBioNet, Associate Professor & Dean School of Data Sciences Perdana University, Malaysia</p> <p>Topic: Mapping the Minimal Set of the Viral Peptidome</p>
10.50 AM - 11.25 AM	<p>Invited Speaker: Dr. Tikam Chand Dakal Assistant Professor, Department of Biotechnology Mohanlal Sukhadia University, Rajasthan, India</p> <p>Topic: Bioinformatics Analyses of SARS-COV-2 Spike Protein: Steps Towards Designing COVID-19 Therapeutics</p>
11.25 AM - 12.00 PM	<p>Invited Speaker: Dr. Sugunakar Vuree Assistant, Professor, School of Bioengineering and Biosciences, Lovely Professional University, Ludhiana, Punjab, India</p> <p>Topic: Envisioning the Role of Cancer Biomarkers Through the Intervention of Bioinformatics</p>
12.00 PM - 1.30 PM	Lunch Break
1.30 PM - 2.05 PM	<p>Invited Speaker: Dr. Aparna Banerjee Assistant Professor, CIEAM, Universidad Catolica del Maule, Talca, Chile</p> <p>Topic: Genomic and Molecular Characterization of a Unique, Avirulent Variant of <i>Bacillus anthracis</i> from Hot Spring</p>
2.15 PM - 2.30 PM	Feedback from Participants
2.30 PM - 3.35 PM	Valedictory Function
2.30 PM - 2.40 PM	Introduction of Honorable Guests of the Valedictory Function- Dr. Prakash Narayan Reddy
2.40 PM – 2.50 PM	Symposium Summary Report by Dr. S. Anil Kumar Coordinator – InSyB-2020
2.50 PM – 3.00 PM	Prof. S. Asha - Feedback Report from Students of VFSTR
3.00 PM - 3.10 PM	Message by Guest of Honour - Prof. G. Srinivasa Rao Dean, R&D, VFSTR
3.10 PM - 3.20 PM	Message by Guest of Honour - Prof. D. Vijaya Ramu Dean, Academics, VFSTR
3.20 PM - 3.30 PM	Valedictory Address by Chief Guest Sri. Lavu Sri Krishna Devarayalu Member of Parliament Vice-Chairman-Vignan Group of Institutions
3.30 PM – 3.35 PM	Vote of Thanks – Prof. T.C. Venkateswarlu, Dept. of Biotechnology, VFSTR