



**POTENTIAL APPLICATIONS OF BIOINFORMATICS  
IN BIOLOGICAL SCIENCES-PABBS 2022**

## Chief Patrons



**Dr. Ishari K. Ganesh (Founder-Chancellor, VISTAS)**



**Dr. A. Jothi Murugan**

**Pro-Chancellor- Planning  
& Development, VISTAS**



**Dr. Arthi K. Ganesh,**

**Pro-Chancellor- Academics, VISTAS**



**Ms. Preethaa K. Ganesh**

**Vice President, VISTAS**



**Dr. S. Sriman Narayanan**

**Vice Chancellor, VISTAS**



**Dr. P. Saravanan**

**Registrar, VISTAS**



**Dr. A. Udhaya Kumar**

**Controller of Examination, VISTAS**

## **EDITORIALBOARD©**

- 1. Dr. Radha Mahendran, Professor and Head, Dept. of Bioinformatics, VISTAS.**
- 2. Dr. R.Priya, Assistant Professor, Dept. of Bioinformatics, VISTAS.**
- 3. Dr.M.Vinoth, Assistant Professor,Dept. of Bioinformatics, VISTAS.**
- 4. Dr.J.Suganya, Assistant Professor,Dept. of Bioinformatics, VISTAS.**
- 5. Dr.M.Nishandhini, Assistant Professor,Dept. of Bioinformatics, VISTAS.**

**Publisher** : Darshan Publishers, Rasipuram, Namakkal (Dt), Tamil Nadu, India

**Edition** : Special Edition, PABBS'2022

**Date** : 4<sup>th</sup> May, 2022

*All rights are reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright holder.*

## **PREFACE**

*Vels Institute of Science, Technology & Advanced Studies (VISTAS) is one among the premier educational institutions in India founded by Dr. Ishari K Ganesh, a visionary and an eminent educationist, in fond memory of his father Shri. Ishari Velan, a former minister in the popular Govt. of Dr. MGR Vels group of institutions was established in the year 1992 and granted Deemed to be University status by the Ministry of HRD, Govt. of India in 2008 (Under Section 3 of UGC Act 1956) and now running 30 educational institutions. This esteemed institution offers courses in multiple streams over the last 30 years such as under graduate, post graduate and doctoral programmes in Medicine, Engineering, Management, Pharmaceutical Sciences, Maritime studies, Science and Humanities. VISTAS has been accredited with NAAC “A” grade in its new regulation scheme and announced as mentor institution.*

***Editorial Board***

## **ACKNOWLEDGEMENT**

*The main objective of the conference is to explore the **POTENTIAL APPLICATIONS OF BIOINFORMATICS IN BIOLOGICAL SCIENCES (PABBS 2022)**. It mainly aims to create a global virtual platform for debating new areas of research and bioinformatics advancements. It encompasses the process of creating medicinally useful substances, modifying genetic features in plants and animals, identifying new variant through Next generation Sequencing, diagnosis, personalized Medicine, Pharmacogenomics, primer Designing, Drug Designing, Crispr-Cas9 Technology and all elements of Environmental aspects.*

*We would like to convey our heartfelt thanks to every one of the authors, researchers, and reviewers who contributed their time and expertise to "**POTENTIAL APPLICATIONS OF BIOINFORMATICS IN BIOLOGICAL SCIENCES PABBS 2022**." This special edition is entirely a collaborative effort. This would not have been possible without the tremendous efforts of all of the authors, and we are confident that their contributions enhanced the conference relevance. These research articles serves as a prime multidisciplinary venue for academics, practitioners, and educators to share the most recent trends in Bioinformatics its advances, and concerns, as well as practical difficulties and answers.*

***Editorial Board***

## **ABOUT THE DEPARTMENT**

Department of Bioinformatics was started in 2002 to enable teaching and Research in interdisciplinary areas of Molecular biology, Biotechnology, Biochemistry, Microbiology, Genetics and Information technology. The department comes under the School of Life Sciences, VISTAS since 2009. The Department offers various courses like B.Sc., Biocomputing, M.Sc., Bioinformatics, and M.Phil. In Bioinformatics and Ph.D. in Bioinformatics to motivate and enhance individuals in education and current research. The Department has well equipped computer laboratories with high speed internet connection that enables the effective use of biological database and software's for research purposes. Also, the faculties have vast teaching experience and research activities with indexed publications in respective research areas of Bioinformatics.

## **ABOUT THE CONFERENCE**

PABBS-2022 National conference will bring together academicians, research institutions, scientists, industrialists and health care professionals, entrepreneurs to discuss the current trends in most captivating areas of bioinformatics in various biological fields. The Conference provide interdisciplinary platform for all the participants to upgrade their knowledge in various field of Biochemistry, Biomedical, Biophysics, Biostatistics, Biotechnology, Microbiology, Molecular Biology, Pharmacology. PABBS-2022 solicits all the Researchers to express their research findings through Oral presentations