

Theme of Bio-informatics

Bioinformatics is an exciting field that is central in analyzing the large amounts of data produced in molecular genetics and biochemistry, and allows an unprecedented understanding of the architecture and dynamics of life. At the beginning of the Genomic Revolution bioinformatics concern was creation and maintenance of database to store biological information, such as nucleotide and amino acid sequences and interface was developed whereby researchers could access both existing data in banks as well as submit new or revised data. Ultimately, however, all of this information must be combined to form a comprehensive picture of normal cellular activities so that researcher may study how these activities are altered in different disease states. Therefore, the field of bioinformatics has evolved such that the most pressing task now involves the analysis and interpretation of various types of data.

Objectives

The process of drug discovery is very complex and requires an interdisciplinary effort to design effective and commercially feasible drugs. Computer aided drug design (CADD) is an emerging tool for research and drug development process as it reduces the time taken for the process of drug development and expense. There is an ever growing effort to apply computational power to the combined chemical and biological space in order to streamline drug discovery, design, development and optimization. The rapidly expanding literature on the computational study of drug structure and activity is important both for the insights it provides into our existing drugs and for the ideas it contributes to new drug discovery. The addition of computer aided drug design technologies to the R&D approaches of a company, could lead to a reduction in the cost of drug design and development by up to 50%. There is a greater necessity to create a scientific platform for various categories of people of biological sciences to expose them to this field of bioinformatics with special reference to Drug design

The workshop provides an opportunity to hands on experience in dealing with tools of Bioinformatics, for the researchers and teachers in Biochemistry, Biotechnology, Micro biology and other related fields. Participants will be getting hands on experience in the following fields along with lectures by experts from IICT, Rajiv Gandhi Institute of Science and Technology, Anna University and Bioinformatics centers.

Databases: NCBI, PUBCHEM, Molinspiration, ADME/tox etc.

Drug Design: Pharmacophore library preparation.

Virtual Screening: Lipinski's filter, ADMET screening and selection of active hit molecules – a mini project have to do online by the participants during workshop and submit the report for evaluation.

“Participants can carry their laptops for more convenient”

Materials

All the participants will be provided with study material regarding the software used for the training on CDs individually so as to enable them to practice the same at their place of work. Further free software for drug design and virtual screening available for academic users with restricted permissions will be provided for the registered participants. Additional interactive CDs in Biology (Bioinformatics, Human Genome Project, Biochemistry, Protein Purification and Human body) are also available with the Organizing Secretary (www.bic-sku.org).

How and who can Apply

To provide hands on experience to individual participants, it is proposed to have only 20 registrations. As present workshop is aimed at practical training in drug design and toxicity screening, a basic knowledge in Bioinformatics and drug discovery in pharmaceutical industry. A brief resume along with a note as how the training will be useful for their research or teaching, should be sent to the Organizing Secretary by e-mail with registration fee (PG students Rs.200/-, Research students and teaching personnel Rs.500/- and industrial or project sponsored Rs.1000/-) by DD

Drawn in favor of “Head, Department of Biochemistry, S.K University” payable at Andhra Bank, S.V. puram Branch. Drafts from other than Andhra Bank should add collection charges in addition. Participants have to make their own arrangements for their stay during workshop. However guest house/hotel/hostel accommodation will be made available on well advance request along with payment of Rs.500/- as advance.

11th National Workshop
On

“Design and Screening of Drugs by Computational Techniques”

(24th & 25th March, 2017)
REGISTRATION FORM

Name:

Designation:

Qualification:

Address:

Mobile:

Email:

Registration Fee: DD No. _____

Andhra bank _____ branch

Whether accommodation is required : Yes/No

If yes advance sent: Rs. _____ DD. No. _____

Date: _____ Signature _____

PS: Please send the registration form along with brief resume by e-mail (preferably by e-mail)

Contact Email: chitta34c@gmail.com

More Details: www.bic-sku.org

About the University

Sri Krishnadevaraya University (SKU) had its beginning as the Post Graduate center of Sri Venkateswara University in the year 1968. Its gained autonomy in the year 1976. SKU is located 9k.m. from Anantapuramu and is well connected by rail and road with metropolitantcities like Bangalore, Chennai and Hyderabad. SKU has facilities for undertaking study and research through well-established library, buildings and laboratories. The students, besides the opportunities for academic advancement, are provided with facilities such as outdoor stadium, E-Class Room, Internet, and computer networks for their overall personality development

About the Department

Biochemistry department of Sri Krishnadevaraya University was established in 1985 and grown to occupy a unique place among biochemistry departments of its kind in the southern part of the country. Given its active involvement in research and in creation of infrastructure in Molecular Biology with particular emphasis on Plant and Microbial. The Biochemistry department has received support from UGC, DBT, DST and AICTE to create facilities to conduct modern research in applied areas.

About the DBT-BIF

The Department of Biotechnology, Ministry of Science and Technology, Government of India provided financial support for the establishment of Bioinformatics Infrastructure Facility (BIF) for the promotion of Biology Teaching through Bioinformatics (BTBI) at SKU, Anantapuramu as central facility, under the Biotechnology Information Network (BTISnet) program. The main objectives of DBT- BIF include supporting the teaching and research activities in the area of Bioinformatics for students of biology and its allied areas of Sciences of SKU and the neighboring institutions. In addition BIF organizes Training programs or Workshops for familiarizing the applications of Bioinformatics in various field of Biology. BIF has High end, Medium end Servers connected to Desktop Systems with OS, Operating and application software's, Databases and Journals and 2 Mbps broadband internet connectivity with special reference to Drug design.

To,
Prof/Dr.

Local Organizing Committee

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**Dept. of Biochemistry &
Biotechnology**

Sri Krishnadevaraya University
Anantapuramu-515003, A.P. India.
www.bic-sku.org