



ABOUT US

ACS-bioINFORMATICS is a division of ACS a privately held leading company established in the year 1999 with the sole aim of providing low cost, high quality Software development, Software Testing, Knowledge management, Consultancy, Training and Staffing solutions, globally, by leveraging our world class experiences, customer centric processes and best practices.

Interactive pragmatic training with leading experts and industry practitioners...

- Protein Target & Ligand Modelling
- Virtual Screening & Docking
- Structure-based Drug Design
- Pharmacophore Models
- Focused Library Design
- QSAR & Predictive Toxicology
- Lead Optimization
- Fragment-based Drug Design
- QSDAR-based Drug Discovery



A hands-on focus to drug discovery problems using leading-edge software. Discuss practical examples, methods and emerging techniques

- Class facilitation, discussions and support led by experts from different CSIR Labs and Industries.
- Use leading drug discovery software packages
- From Chimera, Autodock4 Molspiration, Swiss Deep Viewer, Argus lab, Hex, Flex-X and Marwin Sketch
- Further exercises and trial software provided for continuing work beyond class
- **7 Days for wet lab training (any one)**
 - Plant Tissue Culture
 - Molecular Biology
 - Down Stream Processing
 - Fermentation Technology
 - Basic and advanced Microbiology



Rapid 3-D and 2D- QSAR with Molecular Descriptor Generation

- Learn about the QSAR Concept
- Using similar structure form the large group of databases & Scaffold Hopping
- Build a 3-D QSAR Model
- Interpret the CoMFA model
- Predict Activity for Test Compounds
- Search Database & get back new hits with predicted activity

Innovative Fragment-based Drug Design at PDB Scale

- Generate Fragment-based Compound Sets
- Cross PDB and Supplier Databases in Set Creation
- Compare Interaction Surface against full PDB
- Examine 3-D Local interaction similarities
- Carry out fast-structure comparisons
- Examine compound sets produced





Prediction of Pharmacological Properties & QSAR Analysis

- Study Molecular Structure-Biological Activity Relationships
- Generate Molecular Descriptors
- Develop Quantitative Structure-Activity Relationships (QSAR)
- Detect Descriptors Relevant for Modeled Properties
- Predict Toxicity, Carcinogenicity & Human Intestinal Absorption
- Apply Semiempirical Quantum Chemistry Calculations



Fragment Molecule Design, Ligand Filtering & Virtual Screening

- Create Pseudo-fragments for Rapid Screening
- Fragment-based Docking & Virtual Screening
- Binding Pose Prediction of Ligands
- Analyse Ligand-Receptor Interactions
- Design Workflow from Database to Lead
- Analyse Interaction Results

Analysing SAR Data using Advanced Structure Searching & Predictions

- Rapidly Analyse Large Chemical & Biological Databases
- Use Advanced Structure Searching Techniques
- Prediction of Chemical Properties
- Database Storing & Searching of Chemical Information
- Application of Chemical Terms for Molecular Calculations
- Prediction of Partitioning, Solubility & Bioavailability

Focused Library Design

- Dock inhibitors using ADT4
- Inspect binding modes
- Prepare and screen a large Combinatorial Library
- Design Focused Library
- Inspect Structure Activity relationships
- Derive fragment hypothesis





4 ways to register...

- Online at www.acsbioinformatics.com
(Ticket Office is only visible after login)
- Email: training@acsbioinformatics.com
- Phone Nitin Chitranshi 0522 4028631
- Post ACS-bioINFORMATICS
BIOTECH PARK
Sector-G, Jankipuram, Kursi Road,
Lucknow-226021 (U.P.) INDIA

**Register now for
Summer Training
on
Drug Discovery
Design & Planning
Methods**

Name.....
.....

Company/institute.....
.....
.....

Tel and mobile

Email:.....

Alternative Email:

Billing
Address.....
.....
.....

City..... Postcode.....

Country.....

Signed..... Date.....

Training Module & Fees Structure

Training module

- | | |
|---|-------------------|
| 1. Bioinformatics (one month) | Rs 6,850 |
| 2. Bioinformatics + Wet Lab (22 days + 7 days) | Rs 5000 + Rs 3000 |
| 3. Bioinformatics + Mini Project (One and half month) | Rs 6850 + Rs 4000 |

REGISTRATION

I wish to register for the Summer Training taking place at Biotech Park (June, 2008).

Please contact me over local accommodation options for staying during the training.
(subject to availability).

All registration payments must be received in advance before 30th April, 2008.

Demand Draft to be made in favor of "Advance Computer Systems", payable at Lucknow.