

**ANNUAL REPORT**  
**(1<sup>st</sup> April 2007-31<sup>st</sup> March2008)**

**Department Name: Biomedical Informatics**

**Staff**

<b>Name</b>	<b>Designation</b>
Dr. Sita Naik	Coordinator
Dr. Suraksha Agrawal	Co Principal Investigator
Dr. Rakesh Aggarwal	Co Principal Investigator
Mr. Aditya Narayan Sarangi	Senior Research Officer (ICMR)
Mrs. Bhawna Rathi	Research Officer (ICMR)
Ms. Nidhi Trivedi	Research Associate (DBT)

**Departmental Activities:**

**Ongoing Projects**

- a. Biomedical Informatics Centres (Project Code No.: 271, ICMR).
- b. Establishment of Bioinformatics Infrastructure Facility (BIF) for the Promotion of Biology Teaching Through Bioinformatics (BTBI) under the BTIS net program (San. No.: BT/BI/04/055/2001, DBT).

**Teaching and Training**

**a. Short Term Training**

The main object of this training is to impart introductory knowledge along with bioinformatics tools and techniques for gene and protein analysis to the student, researchers and medicos. The centre organized two short term training courses in bioinformatics in this year.

**b. Long Term Training**

Postgraduate students from neighboring universities undergo training for 3-6 month and perform lab based project for the partial fulfillment of M.Sc Degree.

Project: Computational Prediction of 3D Structure for the Matrix Protein2 (BM2) of Influenza B Virus (Jan-Mar 2008, Anshul Tiwari M.Sc. Bioinformatics, Integral University).

**c. Credit Course**

The centre organized one 01-credit course of 15days duration for research scholars and medicos of SGPGIMS in this year.

Sl. No	Training Name	Duration	No. of Trainee
1	01 course in Bioinformatics	8 -26,October, 2007	22
2	First Course in Bioinformatics, Introduction, Principles and Applications	1-2,December, 2007	16
3	Second Course in Bioinformatics, Introduction, Principles and Applications	22-24 February, 2008.	20
4	Workshop titled 'Computers and Informatics in Medicine'	March 17-19, 2008	60

### **Creation and Maintenance of website**

Biomedical Informatics developed the website for the centre which can be access through <http://biomedinfo.sgpgi.ac.in>.

### **Databases Developed**

The Centre has designed in house database for highlighting the research achievements of SGPGI which contains searchable lists of completed and ongoing intramural and extramural projects undertaken by the faculty at SGPGI from 1988. Database also includes the lists of past and current PhD students enrolled at SGPGI under various departments.

### **Initiation of R&D activities in Bioinformatics**

Current work is going on Insilico studies of Hepatitis E Virus using bioinformatics tools and techniques. Center is developing BiomedLinux Live DVD based on knoppix, which will contain the free pre installed bioinformatics and biomedical software packages for biomedical, molecular and evolutionary data analysis. The centre is also developing its local WWWBLAST Server.

### **Scientific conferences/training/workshop attended**

#### **Aditya Narayan Sarangi (SRO)**

1. Training program in Bioinformatics (03 -25 August, 2007) at the Institute of Bioinformatics and Applied Biotechnology (IBAB), Bangalore, Karnataka.
2. Accelrys workshop on Docking and Scoring using Discovery Studio (28-29 January 2008) at Dr. B.R Ambedkar Centre for Biomedical Research, Delhi.

**Bhawna Rathi (RO)**

1. Training program in Bioinformatics (03 -25 August, 2007) at the Institute of Bioinformatics and Applied Biotechnology (IBAB), Bangalore, Karnataka.

**Future activities**

The centre plans to hold short term training programs and workshop for students, researchers and academicians on a regular basis. It also proposes to start diploma and certificate course in the field of Biomedical Informatics for which permission has been taken from the Institute's Academic Board. A meeting of curriculum committee is planned in Feb 2008 and the courses are expected to start from the coming academic year. Centre will find linkages with different research organizations, universities to promote bioinformatics education and research. Centre will develop various software tools and databases related to medical sciences.