

## Contact details:

### Parantu Shah

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## Personal Details

- Date of Birth: 03/11/1977
- Nationality: Indian
- Languages: English, Gujarati, Hindi, Marathi, Sanskrit, German

## Publications

### - From *PhD*

- Wattarujekrit, T, **Shah, PK**, and Collier, N  
PASBio: Predicate-argument Structures For Event Extraction in Molecular Biology.  
*BMC Bioinformatics* (under review).  
<http://research.nii.ac.jp/~collier/projects/PASBio>
- Perez-Iratxeta, C, Astola, N, Ciccarelli, F, **Shah, PK**, Bork, P and Andrade, MA  
A Protocol for the Update of References to Scientific Literature in Biological Databases.  
*Appl Bioinformatics*. 2003; 2(3): 189-91.
- **Shah, PK**, Perez-Iratxeta, C, Andrade, M and Bork P  
Information Extraction From Full Text Scientific Articles: Where are the Keywords?  
*BMC Bioinformatics*. 2003; 4(1): 20.
- **Shah, PK**, Aloy, P, Bork, P, and Russell, RB.  
Structural Similarities to Bridge Sequence Space: Finding New Families on the Bridges.  
*Submitted to Nucleic Acid Research*

## - From *M.Sc.*

### ➤ **Shah, PK**

Biological Sequence Analysis and its Applications to Protein Domains involved in Signaling

*M. Sc. Thesis*

### ➤ **Shah, PK** and R. Sowdhamini

Structural Understanding of the Transmembrane Domains of Inositol Triphosphate Receptors and Ryanodine Receptors Towards Calcium Channeling.

*Protein Eng.* 2001 Nov; **14** (11): 86774.

### ➤ **Shah, PK**, Buslje, CM and R. Sowdhamini

Structural Determinants of Binding and Specificity in Transforming Growth Factor Receptor Interactions.

*Proteins.* 2001 Dec 1; **45** (4): 40820.

## Fellowships

- ❖ Partial Funding for PASBio project, supporting my stay at National Institute of Informatics, NLP group, came from Japanese Ministry of Education and Science (grant no. 14701020).
- ❖ Joint Fellowships from Max-Delbrück Center for Molecular Medicine and Structural Biology and Biocomputing Program at EMBL, Germany for pursuing graduate studies.
- ❖ Nehru Cambridge Commonwealth Fellowships for graduate studies at Department of Biochemistry, Cambridge University (UK) [declined; couldn't win ORS fellowship that covers other expenses]
- ❖ Junior Scholar position for three years from TIFR/Department of Energy, Govt. of India to pursue research based *M.Sc.* at NCBS, Bangalore.
- ❖ Book grant for all three years from Dept. of Chemistry, the Maharaja SayajiRao University of Baroda, Vadodara.
- ❖ A Certificate of Merit in Lieu of Financial Aid From State of Gujarat for Securing high rank in Gujarat Secondary Education Board Exam.

## Education

- **Doctor of Philosophy (Structural Biology and Biocomputing)**
  - Joint degree between **European Molecular Biology Laboratory**, and *Universidad Autonoma De Madrid*.
  - Thesis Supervisors: Dr. Peer Bork (*EMBL*) and Dr. Alfonso Valencia (*UAM*, Spain)
  - August 2001-present
  
- **M.Sc. by Research in Life Sciences (Structural Biology and Bioinformatics)**
  - Joint degree between **National Center for Biological Sciences**, and *Manipal Academy for Higher Education*, India.
  - Thesis Supervisor: Dr. R. Sowdhamini (*NCBS*)
  - August 1998 –2001
  
- **Bachelor of Science with Honors**
  - **The Maharaja SayajiRao University of Baroda**, India
  - 64.73 %, with Chemistry (3 years) as principal subject and Mathematics and Physics as subsidiary subjects (2 years each).
  - 1995-1998
  
- **Secondary School Education**
  - Science Stream from **Sardar Vallabhbhai Vidyalaya**, India.
  - 85.61 %, securing rank among top students in Gujarat State.

## Computing Skills

- ❖ Programming Languages: C, C++, Perl, PostScript, Java (survival), HTML/XML and SQL, LAM-MPI.
- ❖ Operating Systems: Linux, SGI, Windows (I was administrating the systems at RS lab in NCBS).
- ❖ Databases: PostGresQL

- ❖ Area of Interest: Data Mining in Molecular Biology, Systems Biology, Machine Learning, Information Extraction and Presentation

## Conference Organization

I, with other PhD students successfully organized the 3<sup>rd</sup> International PhD Student Symposium on “Life within Boundaries- membranes and compartments in biology” at EMBL on November 14-16, 2002. European Union, High Level Scientific Conference Committee and private companies supported the symposium.

## Invited Lectures

- **From Genomes to Systems.**  
October 2003, at National Institute of Informatics, Japan.
- **Bioinformatics: overview and future.**  
July 2002, at Dept. of Biochemistry, The Maharaja SayajiRao University of Baroda, India.
- **Machine Learning Methods and Protein structure prediction**  
September 2000, at National Center for Biological Sciences (part of Biochemistry and Biophysics graduate coursework), India.

## Misc.

- ❖ I have presented posters and attended various conferences in the area of life sciences, mathematics and computational linguistics.
- ❖ Scored 750/800 and 670/800 in quantitative and analytical reasoning sections of GRE general exam.
- ❖ Teaching assistant for Biochemistry and Biophysics basic graduate course in 2001 at NCBS.
- ❖ My general interests involve reading, traveling, skiing, hiking, roller-blading etc.

- ❖ Acted as one of the judges for poster session in European Junior Science and Humanities Symposium held at EMBL in March 2003 and 2004.
  
- ❖ Please see the press release:  
EMBL PhD students break boundaries with their third symposium.  
[http://www.embl-heidelberg.de/ExternalInfo/oipa/n2002/n12/n12\\_8.pdf](http://www.embl-heidelberg.de/ExternalInfo/oipa/n2002/n12/n12_8.pdf)
  
- ❖ Please see the press release:  
Recognition of fold and functions of protein domain superfamilies coded in genome sequences.  
[http://www.wellcome.ac.uk/en/isrf/if\\_stru\\_rsowd.shtm](http://www.wellcome.ac.uk/en/isrf/if_stru_rsowd.shtm)

## Interesting URLs

- European Molecular Biology Laboratory: <http://www.embl.org>
- Bork group: <http://www.bork.embl-heidelberg.de>
- NLP group at NII: <http://research.nii.ac.jp/~collier>
- National Center for Biological Sciences: <http://www.ncbs.res.in>
- Comp. Approaches to protein Science: <http://www.ncbs.res.in/~faculty/mini.html>
- Tata Institute for Fundamental Research: <http://www.tifr.res.in>
- The Maharaja SayajiRao University of Baroda: <http://www.msub.edu>

## References:

Will be provided upon request.