

# Suraj Nagendra Rao

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## PROFILE

- 3 years of experience in biology/biochemistry lab setting
- 1 year experience in data analysis for clinical research

## EDUCATION

**Brandeis University**, Waltham MA  
B.S. in Biochemistry and Biology  
Cumulative GPA: 3.30

*Expected May 2015*

### Relevant Course work:

General Chemistry & Lab	Physics (Calculus-based) & Lab
Organic Chemistry & Lab	Advanced Cell Biology
Cell Biology & Lab	Advanced Biochemistry - Information Transfer Mechanisms
Genetics and Molecular Biology & Lab	Advanced Biochemistry - Enzyme Mechanisms
Classical & Statistical Thermodynamics	Physical Chemistry of Macromolecules

## WORK EXPERIENCE

**Department of Neurology, University of Massachusetts Medical School**, Worcester, MA *Jun 2014 – present*

### Data Analysis Intern – Neurology

- Analyze electroencephalograms (EEG's) of epileptic patients using MATLAB programming
- Design algorithms using wavelet transform and Fourier transforms
- Filter raw data to help visualize high-frequency oscillations (HFOs) and detect epileptiform discharges
- Shadow a neurologist specializing in epileptic seizure patients

**Newton-Wellesley Hospital**, Newton MA

*Feb 2014 – present*

### Volunteer

- Day Surgery Recovery Department – interact with post-operative patients, bring food to them, wheel them out of hospital, clean rooms and IV's, organize supplies in the department
- Emergency Room Greeter – greet patients, assist patients, help senior persons requiring assistance

**Hedstrom Laboratory, Brandeis University**, Waltham, MA

*Oct 2011 – Apr 2014*

### Inhibitor Synthesis Research Assistant, Biochemistry Department

- Worked on organic synthesis of IMPDH inhibitors enzyme inhibition (IMPDH), IC50 and introducing inhibitors to bacterial strains using MIC protocol
- Co-authored published paper

**Procrysta Biologix**, Natick, MA

*Jun 2013 – Aug 2013*

### Protein Crystallization Research Assistant

- Worked on lowering protein viscosity and increasing concentration for subcutaneous injection
- Worked on synthesis, purification, and recrystallization of proteins
- Trained in High Performance Liquid Chromatography (HPLC) reading of protein samples, UV spectroscopy, pipetting and Q-Sepharose column chromatography

**Greater Lawrence Family Health Center**, Methuen, MA

*Dec 2012 – Jan 2013*

- Shadowed a family Primary Care Physician

## PUBLICATIONS (Co-author)

### Repurposing Cryptosporidium Inosine 5'-Monophosphate Dehydrogenase Inhibitors as Potential Antibacterial Agents

Kavitha Mandapati, Suresh Kumar Gorla, Amanda L. House, Elizabeth S. McKenney, Minjia Zhang, Suraj Nagendra Rao, Deviprasad R. Gollapalli, Barbara J. Mann, Joanna B. Goldberg, Gregory D. Cuny, Ian J. Glomski, and Lizbeth Hedstrom. *ACS Medicinal Chemistry Letters* **2014** 5 (8), 846-850

## SKILLS

Languages: English, Hindi (fluent), Kannada (fluent), French (partially fluent)

Computer: Strong skills in all platforms of Microsoft Office, SPSS, ChemDraw, MATLAB, web design, PyMol, LabChart

Lab: Mass spectroscopy, HPLC, SDS-PAGE, UV spectroscopy, columns, rotovapor, autoclave, protein assays