PRANAY BHARADWAJ
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EDUCATION:

Dartmouth College, Hanover, NH, USA **2014 – Present**
Pre-Doctoral Candidate in MCB Program

Brandeis University, Waltham, MA, USA **2011-2012**
MS in Neuroscience

Vellore Institute of Technology, Vellore, India **2007-2011**
B.Tech in Biotechnology

RESEARCH EXPERIENCE:

- **Graduate Student:**
  Dartmouth College, Hanover, NH
  - **Rotation Student (Supervised by Dr. Michael B. Hoppa)** **09/2014 – 11/2014**
    Analyze the shift in the axon initial segment on murine hippocampal neurons and observe the corresponding change in the electrical properties and the release of calcium ions at the synapse.
  - **Rotation Student (Supervised by Dr. Margaret E. Ackerman)** **12/2014 - 02/2015**
    Engineer scFv binders against B7H6 antigen using Feldhaus library and an array of high throughput screening and sorting techniques.
  - **Rotation Student (Supervised by Dr. Elizabeth F. Smith)** **03/2015 – 05/2015**
    Computational analysis, quantification and comparison of microtubule sliding amongst various chlamydomonas mutants.
- **Research Assistant:**
  Park Laboratory, University of Massachusetts-Boston **06/2012 – 08/2014**
  (Supervised by Dr. Jin Ho Park)

Studied the neuro-endocrinological basis of sexual and play behavior, testosterone mediated modulation of synaptic architecture and cognitive function in mice.

- **Graduate Student:**
  Neural Circuit Lab, Brandeis University, Waltham, MA **09/2011-05/ 2012**
  (Supervised by Dr. Steve van Hooser)
  Image analysis using MATLAB to visualize the development of ferret visual cortex development.
- **Project Research Fellow:**
  Biotech lab, Defense Research and Development Establishment, India **01/2011-05/ 2011**
  (Supervised by Dr. Ram Kumar Dhaked)
  Discovery of small molecule inhibitors against botulinum neurotoxin and validation using *in-vitro* and *in-vivo* approaches.
- **Undergraduate Student: VIT University, India** **08/2009 - 10/ 2010**
  (Supervised by Dr. C. Ramalingam)
  Analysis of food samples to determine the probiotic content by performing an array of biochemical analyses.

Publications:

- **Bharadwaj P**, McInnis C, Madden AMK, Bonthuis PJ, Zup S, Rissman EF, et al. (2013) Increased Dendritic Spine Density and Tau Expression Are Associated with Individual Differences in Steroidal Regulation of Male Sexual Behavior. PLoS ONE 8(7): e69672. doi:10.1371/journal.pone.0069672
- Ramalingam C, **Bharadwaj P**., Bora P., Suniti S. (2010), "Qualitative and Quantitative Analysis of Native Food Products for Probiotic Properties", Journal of Experimental Sciences, Vol1, issue|7, page 19-25. Nov2010

Presentations:

- **SfN 2013, San Diego, CA, USA** **11/2013**
  Poster: **Bharadwaj P**., Venu S., Park J.H "Effects of prenatal testosterone on steroid-independent reproductive behavior of hybrid B6D2F1 mice."
- **SBN 2013, Atlanta, GA, USA** **06/2013**
  Poster: **Bharadwaj P**, McInnis C., Templin J.S ,Venu S., Park J.H. "Increased Dendritic Spine Density and Tau Expression are Associated with Individual Differences in Steroidal Regulation of Male Sexual Behavior"
- **International conference, ITM University, India** **01/2010**
  Presentation: **Bharadwaj P**., Singh B. K., "Vehicular emissions and Air pollution" at IITM Gwalior

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Internships:

- **DRDE Biochemistry Lab**
  Gwalior, MP, India **05/2010- 07/2010**
  (Supervised by Dr. Bijoy Bhattacharya)
  Skills: Peptide Mass Fingerprinting, GC/MS, RT-PCR, Western Blot, Gel Electrophoresis for protein/biological specimen analysis and gene expression related studies, Ethical treatment, foster care and euthanasia of laboratory animals.
- **VIT Technology Business Incubator,**
  VIT University, Vellore, TN, India **07/ 2009-09/2009**
  Skills: UV-VIS and IR spectrophotometry, Atomic Absorption Spectroscopy, FTIR, HPLC and Gas Chromatography.
- **Infection Biology Laboratory,**
  KIIT, Bhubaneswar, India **05/ 2009-07/ 2009**
  (Supervised by Dr. M. Suar)
  Skills: Lambda Red Recombinase method, various kinds of culture media preparation, plating and sub-culturing techniques, electroporation and plasmid shuffle.

Activities and Honors:

- Recipient of MCB scholarship at Dartmouth College, 2014
- Recipient of 'GSAS scholarship', Brandeis University, 2012
- Served as the President of the 'SABEST' Biotech chapter, VIT University, 2010-2011
- Recipient of DRDE research fellowship, 2009-2011.
- Member of varsity soccer and cricket teams, VIT University, 2008-2011