

# Natya Hans, PhD Candidate

[natyauf@gmail.com](mailto:natyauf@gmail.com)

Biology Department  
University of Florida  
Gainesville, FL 32611

## Education

### **University of Florida, Gainesville**

Ph.D. candidate, Department of Biology 2013 – present  
Advisor: Dr. J. Gordon Burleigh  
Dissertation: Statistical and Genomics Perspectives on Diversification Models

### **Jawaharlal Nehru University, New Delhi**

Master of Technology, School of Computational and Integrative Sciences 2011 - 2013  
Advisor: Dr Andrew Michael Lynn  
Dissertation: Applications of Data-Mining techniques in Cheminformatics

### **Kurukshetra University, Kurukshetra, India**

Bachelor of Technology, Ambala College of Engineering 2006 - 2010  
Undergraduate advisor: Dr. G Lakshmi Kumari  
Major Project: Preparation of immunogen: T3-BSA and T4-BSA for production of Polyclonal Antibodies against 3, 3', 5-Triiodo-Thyronine (T3) and thyroxine (T4)  
Minor Project: Purification of Goat-anti-mouse antibody and its labeling with HRP

## Fellowships

Travel Grant (\$300) from National Science Policy Network	2018
Summer Fellowship (\$4000) from Biodiversity Institute at UF	2018
Travel Grant (\$600) for Macroevolution course at Oregon State University, Corvallis	2017
Travel Stipend (\$500) from SSE to attend Evolution conference in Portland	2017
Teaching Assistantship from Department of Biology, UF	2014 -2020
Genetics and Genomics Graduate Student Research Fellowship, UF	2013- 2014
UGC research fellowship for Master's/ Doctoral Student	2011- 2013
JNU Research Student Fellowship	2011- 2013

## Skills

Programming Languages: Perl, python, R, Bash scripting (Unix and Linux shell), C++  
Basic database management with MySQL

## Awards

---

GATE (Graduate Aptitude Test in Engineering) All India rank 321 with 98.04 percentile	2011
GATE All India rank 380 with 96.63 percentile	2010
Qualified CSIR-UGC-JRF NET in Life Sciences with All India Rank 266	2010

## Invited Talks

---

**Hans, N;** Ponciano J M, Burleigh J G. Spotlight Session: Bright side of Phylogenetics: Evaluating the identifiability of diversification model. Evolution Meeting, Providence, RI. June 2019.

**Hans, N;** Ponciano J M, Burleigh J G. Towards diagnosing identifiability of evolutionary models. Second annual Biodiversity symposium, Gainesville, FL. May 2019 (Presented as a UFBI fellow)

## Posters

---

**Hans, N;** Ponciano J M, Burleigh J G. Characterizing the performance of species diversification models. Evolution Meeting, Portland, OR. July, 2017.

**Hans, N;** Kimball R., Braun E.L., and Burleigh J.G. Building Avian Tree of Life using Supermatrix. Florida Genetics Symposium. Gainesville, FL. November, 2014.

**Hans, N;** Yendrek C., Ainsworth L., Brown P., Leakey A.D.B., Dalsing B., Rios L., Sorgini C., Barrios-Perez E. , Erice G , Shim S, Leisne C, McIntyre LM. The impact of ozone growth and development in *Zea mays*. Florida Genetics Symposium. Gainesville, FL. November, 2013.

**Hans, N;** Bharti D., and Lynn A.M. Quantitative Structure Activity Relationships (QSAR) for targets against *Mycobacterium tuberculosis* using data-mining techniques. International Conference on Biomolecular forms and functions. Bangalore, India. January, 2013.

**Hans, N;** Mittal P, and GL Kumari. Production of Monoclonal antibodies against  $\alpha$ - and  $\beta$ - subunits of hCG. National Conference on Medical Biotechnology, Rohtak, India. Rohtak, India. April, 2010.

## Teaching

---

Teaching Assistant – Genetics	Spring 2020
Lead instructor: Dr Michael M Miyamoto (UF Gainesville)	

Teaching Assistant – Principles of Graduate Training	Fall 2019
Lead instructor: Dr Matthew Leibold (UF Gainesville)	

Teaching Assistant – Genetics Lead instructor: Dr Cherie Bond (UF Gainesville)	Spring 2019
Teaching Assistant – Biological Science Online) Lead instructor: Dr Nicole Gerlach (UF Gainesville)	Fall 2018
Instructor – Lab in Biological Science for Non Majors (Online) Lab coordinator: Dr Kent Vliet (UF Gainesville)	Summer 2018
Teaching Assistant – Genetics Lead instructor: Dr Michelle Yoo (UF Gainesville)	Spring 2018
Instructor– X lab 2 (Pre-health Post-Baccalaureate Program) Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)	Fall 2017
Teaching Assistant– Critical Analysis of Biological Research (Online) Lead instructors: Dr Norman Douglas, Dr Teresa Mutahi (UF Gainesville)	Spring 2017
Instructor– X lab 1 Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)	Fall 2015, Summer 2016, Fall 2016
Instructor– X lab 2 Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)	Spring 2016
Graduate Lab Instructor– Integrated Principles of Biology Lab coordinator: Dr Kent Vliet (UF Gainesville)	Fall 2014, Spring 2015, Summer 2017

## **Workshop and Symposia**

---

Participated in workshop on Applied Phylogenetics at Bodega Bay, CA from May 23<sup>rd</sup> to June 2<sup>nd</sup>, 2019.

Attended the Second Annual Science Policy Symposium by SEPA at Rockefeller University, NYC November 10<sup>th</sup>-11th 2018.

Participated in workshop on Molecular Evolution at MBL, Woods Hole, MA from July 19<sup>th</sup> to July 29<sup>th</sup>, 2018.

Attended the Data and Software Carpentry Instructor training to become a certified instructor at University of Florida from March 3-4, 2018.

Attended Evolution 2017 conference at Portland Oregon.

Participated in the short course on Macroevolution and Diversification at Corvallis from June 23<sup>rd</sup> -24<sup>th</sup>, 2017

## Outreach

---

- Volunteering as a facilitator for Girls who code UF chapter from August 2019- present.
- Science fair judging for local schools for
  - 12/13/18 - Westwood Middle School (Gainesville)
  - 12/12/19 – Kanapaha Middle School (Gainesville)
  - 11/16/17 - Bishop Middle School (Gainesville)
  - 12/9/15 - Ft. Clarke Middle School (Gainesville)
- Science fair judge for the Alachua Region Science and Engineering Fair held on 02/08/18 at the Santa Fe College Gymnasium (Gainesville)
- Organized DNA day (April 2016) at University of Florida Genetics Institute
- Volunteered for two years at United Way of North Central Florida organization, Reading Pals

## Service and Leadership

---

- Served as moderator for lightning talk session at SSB standalone meeting Gainesville, January 2020
- Served in the organizing committee for SSB standalone meeting in Gainesville, January 2020
- Serving as Treasurer for SACNAS (Society for Advancement of Chicanos/Hispanics and Native Americans in Science) Florida Chapter, 2019-2020
- Serving as content developer for biology department newsletter symBIOsis, 2019-2020
- Will be serving as Public Relations & Fundraising Rep for Biology Graduate Student Association, from Fall 2019 onwards
- Served as the IT rep for Biology Graduate Student Association, managing the website for the year 2018-2019
- Served as the Graduate Student Council Student Rep for Genetics Institute 2013-2014
- Organized Synthetic Biology Symposium at School of Computational and Integrative Sciences, JNU 2012. Co-organized with Rajan Shrivastava.

## Research Internships

---

Using microRNAs to determine genes involved in hematopoietic pathway in Zebrafish, ICGEB, New Delhi, India (Project Assistant) 2011

Quality control and testing drug dissolution rates. Atlas Pharmaceuticals. Haridwar, India. 2009

Cloning and expression of gene "X" Ranbaxy. Gurgaon, India 2008