Natya Hans, PhD Candidate

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Biology Department
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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 α- and β- 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 Spring 2019
Lead instructor: Dr Cherie Bond (UF Gainesville)

Teaching Assistant – Biological Science Online) Fall 2018
Lead instructor: Dr Nicole Gerlach (UF Gainesville)

Instructor – Lab in Biological Science for Non Majors (Online) Summer 2018
Lab coordinator: Dr Kent Vliet (UF Gainesville)

Teaching Assistant – Genetics Spring 2018
Lead instructor: Dr Michelle Yoo (UF Gainesville)

Instructor– X lab 2 (Pre-health Post-Baccalaureate Program) Fall 2017
Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)

Teaching Assistant– Critical Analysis of Biological Research (Online) Spring 2017
Lead instructors: Dr Norman Douglas, Dr Teresa Mutahi (UF Gainesville)

Instructor– X lab 1 Fall 2015, Summer 2016, Fall 2016
Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)

Instructor– X lab 2 Spring 2016
Lab coordinators: Dr David Jullian, Dr Gabriela Waschewsky (UF Gainesville)

Graduate Lab Instructor– Integrated Principles of Biology Fall 2014, Spring 2015, Summer 2017
Lab coordinator: Dr Kent Vliet (UF Gainesville)

Workshop and Symposia

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

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

Participated in workshop on Molecular Evolution at MBL, Woods Hole, MA from July 19th to July 29th ,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 23rd -24th, 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 at moderator for lightening 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

Professional Membership

Society for the Study of Evolution
Society of Systematic Biology
Genetics Society of America

References

Dr. J. Gordon Burleigh, Associate Professor, Biology Department, University of Florida
Email: gburleigh@ufl.edu
Phone: +1 352 392 2776

Dr. Rebecca Kimball, Professor, Biology Department, University of Florida, USA
Email: rkimball@ufl.edu
Phone: +1 352 846 3737

Dr. Mike Miyamoto, Professor, Biology Department, University of Florida, USA
Email: miyamoto@ufl.edu
Phone: +1 352 392 3275

Dr. Andrew M. Lynn, Professor, School of Computational and Integrative Sciences, JNU, New Delhi
Email: andew@jnu.ac.in
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