

# Jacob Roffey Hopkins

Residence: 508 East 14th Street Bloomington, IN 47408

Permanent: 3914 Deanna Drive Kokomo, IN 36902

## Education

- Western Highschool
  - Graduated with A average
  - Eagle Scout 2012
- Indiana University Fall 2012-May 2015
  - Microbiology B.S.
  - Graduated “Highest Distinction”
  - Dean's list: Fall 2012-Spring 2016
  - Founder's Scholar: 2013-2016
  - Honors Thesis: December 2015 “A Test of Initial Spatial Structure of Arbuscular Mycorrhizal Community and Plant Community Composition on Preferential Allocation and Fungal Fitness” (Won “Outstanding Honors Thesis 2016”)
  - Integrated Freshman Learning Experience (IFLE), Summer 2012-Spring 2013
  - Phi Beta Kappa
- University of Kansas
  - Ecology and Evolutionary Biology Ph.D. Candidate

## Experience

- **Fall 2016 Semester, Graduate Teaching Assistant (University of Kansas): Cellular Biology**
  - Led undergraduate class sizes ranging from 12-17 during in class experimental activities
  - Provided feedback to students on exam and writing assignments
  - Developed supplementary concept based lecture materials for each class

## **June 2012-June 2016, Lab Technician/ Undergraduate Researcher in Professor James D. Bever's**

### Lab

- Organized and developed personal projects dealing with plant-soil feedback, preferential allocation and plant-fungal community studies
  - Aided grad students with experimental procedure, field work, proofreading and many other tasks
  - Led fellow undergraduate lab technicians in lab related work and helped to teach the basics of experimental techniques
  - Worked in a variety of areas and disciplines within the lab including: molecular work, experimental planning, statistics, field work, writing scientific papers, microscope work, greenhouse work and quantitative spore isolation work
- **May 2011-May 2012, Camp Counselor for Camp Invention**
    - Led first through fifth graders in organized science related activities
    - Aided camp leaders and helped to promote a cohesive, safe and fun environment for the children to learn physics related principles
    - Learned innovative ways to teach science topics to younger generations

## Publications

- Chaudhary *et al.* 2016. MycoDB, a global database of plant response to mycorrhizal fungi. *Journal of Scientific Data* 3:160028.
- Hopkins and Bever. In Prep. A Test of Initial Spatial Structure of Arbuscular Mycorrhizal Community and Plant Community Composition on Preferential Allocation and Fungal Fitness.

## Conference Presentations

- Honor's Thesis Defense; Bloomington, IN; 2015
  - “A Test of Initial Spatial Structure of Arbuscular Mycorrhizal Community and Plant

- Community Composition on Preferential Allocation and Fungal Fitness”
- Midwest Ecology and Evolution Conference; Bloomington, IN; 2015
    - Hopkins, Jacob, Jim Bever. 2015. *Observing Plant Community Dynamics in Response to Preferential Allocation and Plant Species Competition*

### **Grants**

- Applied for 2015 NSF GRFP

### **Awards**

- Outstanding Honors Thesis Award. Indiana University Bloomington. \$200.

### **Outreach**

- Indiana High school Outreach Project. Summer 2015.
  - Helped students carry out a plant-soil feedback project and learn the scientific process.
- IU Science Festival 2014
  - Open to public event allowing for hands-on learning about a variety of science and research topics
- Wonderlab Museum of Science, Health & Technology
  - Taught Kindergartners and First graders about plant anatomy and physiology

### **Invited Talks**

- “Plant Growth!” Wonderlab Museum of Science, Health & Technology. 07/2016.

### **References**

- James D. Bever, jbever@indiana.edu, IU Faculty, Indiana University Bloomington
- Peggy A. Shultz, pshultz@ku.edu, KU Faculty, The University of Kansas Lawrence
- Jonathan Bauer, jonbauer@indiana.edu, Post Graduate Student, Indiana University Bloomington