# Zhian N. Kamvar

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#### **EDUCATION**

Ph.D., Botany and Plant Pathology

Oregon State University, Corvallis, OR, expected 2017

Bachelor of Science, Biology

Truman State University, Kirksville, MO, December 2007

Minor: Chemistry

# TECHNICAL SKILLS

Computer Languages: R - proficient, Perl - familiar, Python - familiar,

BASH - familiar, C - used in the past

Lab Skills: Sterile technique, DNA extraction, PCR amplification.

#### **EXPERIENCE**

#### Graduate Research Assistant

Mar 2012 to Present

Grünwald Lab, OSU, Corvallis, OR

- Designed and executed simulation analyses for populations of partially clonal diploids.
- Authored an R package for genetic analysis of populations with mixed (sexual/clonal) reproduction. (http://cran.r-project.org/package=poppr)
- Isolated and maintained cultures of *Phytophthora syringae*.

### Graduate Teaching Assistant

Jan 2012 to Mar 2012

Biology Department, OSU, Corvallis, OR

- Appointed as a teaching assistant for an undergraduate intro biology course for science majors.
- Developed introductory presentations and guizzes for labs.
- Proctored all tests and quizzes.
- Graded assignments and provided students with timely feedback.
- Held office hours once a week.

## Graduate Research Assistant

Aug 2011 to Dec 2011

Jaiswal Lab, OSU, Corvallis, OR

• Engaged in various research projects combining bioinformatic-based text mining of databases, wet lab, and greenhouse work.

# English Instructor

Oct 2009 to Feb 2011

Herald NIE, Joong-Dong, Daegu, South Korea

- Taught basic to intermediate English to Korean students ranging from Elementary to Middle School with an emphasis on task-based learning techniques.
- Took charge of 18 different classes per week with the main task of teaching and monitoring language acquisition of each student throughout the year via monthly evaluations based on interviews and speaking tests.
- Wrote tests, assigned and graded homework pertinent to the level of the students. Initiated and mediated interesting topics for discussion courses.

English Instructor

Jul 2008 to Oct 2009

GnB English, Sangin-2-Dong, Daegu, South Korea

- Taught basic to intermediate English to Korean students ranging from Elementary to Middle School in tandem with one of the nine Korean English teachers at the academy.
- Assisted with at least 30 different classes per week and monitored the language acquisition of each student throughout the year.
- Had to be prepared for sudden changes in curriculum and classroom size.

Undergraduate Research Assistant

May 2006 to Dec 2007

Biology Discipline, Truman State University

- As part of a team of undergraduate students, contributed to the annotation of over 2.000 maize genes determined by microarray hybridization analysis to be involved in maize shoot apical meristem function and leaf primordial formation.
- Became proficient in performing and interpreting BLAST and InterProScan searches on sequences, identifying and assessing pertinent primary literature, and using a variety of databases to determine the putative function of maize
- Collaborated with other researchers on the same project.
- Research mentors: Drs. Brent Buckner and Diane Janick-Buckner.

Undergraduate Teaching Assistant

Sep 2006/07 to Dec 2006/07

Biology Discipline, Truman State University

- Helped prepare instructional labs for students of Dr. Diane Janick-Buckner's Cell Biology students.
- Responded to student lab questions and referred to professor those questions outside of my expertise/knowledge base.

Radio Announcer

May 2004 to Dec 2007

KTRM 88.7FM, Kirksville, MO

- Ensured successful initial and ongoing operation of transmitter.
- Covered extra scheduled shifts to make sure KTRM stayed on the air.
- Selected appropriate and entertaining playlists for listeners.

Summer Station Manager

May 2005 to Aug 2005

KTRM 88.7FM, Kirksville, MO

- Primary authority on personnel decisions, after input from team members.
- Organized weekly schedule of DJs.
- Determined the salaries of station directors and balanced a budget.

PUBLICATIONS Buckner B, Beck J, Browning, K, Hoxha E, Grantham L, Kamvar Z, Lough A, Nikolova O, and Schnable PS, Scanlon MJ, and Janick-Buckner D. 2007 Involving undergraduates in the annotation and analysis of global gene expression studies: creation of a maize shoot apical meristem expression database. Genetics 176: 741-747

PRESENT-ATIONS

Poster, Fungal Genetics Conference

Mar 12-17, 2013

• "Poppr: An R package for genetic analysis of populations with mixed (clonal/sexual) reproduction."

Talk, 26th Annual Biology Graduate Student Symposium Hatfield Marine Science Center, Newport, OR

Mar 2, 2013

• "Poppr: An R package for genetic analysis of populations with mixed (clonal/sexual) reproduction."

**Poster**, Oregon State University Fall CGRB Conference Corvallis, OR

Sep 21, 2012

• "Poppr: An R package for population genetic analysis"

**Poster**, Truman State University Student Research Conference Kirksville, MO

Apr 3, 2007

• "Annotation and Analysis of Global Gene Expression Studies: Creation of a Maize Shoot Apical Meristem Expression Database"

Poster, Maize Genetics Conference

Mar 22-25, 2007

St. Charles, IL

• "Annotation and Analysis of Global Gene Expression Studies: Creation of a Maize Shoot Apical Meristem Expression Database"

# EXTRA-CURRICULAR ACTIVITIES

Treasurer

Sep 2012 to Present

Botany and Plant Pathology Graduate Student Association, OSU

- Balanced budget.
- Issued reimbursements and travel awards.
- Helped organize and coordinate group social functions.

Radio Co-host Jan 2012 to Present

Inspiration Dissemination, 88.7FM, KBVR Corvallis

- Solicited graduate and undergraduate researchers at Oregon State University to discuss their research on the radio.
- Interviewed students to give a compelling narrative about their research and entrance into graduate school.

Active member Bioinformatics Users Group, OSU Sep 2012 to Present