

Zhian N. Kamvar

Curriculum Vitae

Education

- 2011–Present **Ph. D. Botany and Plant Pathology**, *Oregon State University*, Corvallis, OR.
Expected 2017
- 2003–2007 **Bachelor of Science Biology**, *Truman State University*, Kirksville, MO.
Minor: Chemistry

Experience

Vocational

- 2012–Present **Graduate Research Assistant**, *Grünwald Lab*, Corvallis, OR.
Utilizing population genomic tools to analyze patterns of differentiation in populations of the plant pathogen *Phytophthora syringae* in Oregon Nurseries.

Details:

- Designed simulation analyses for populations of partially clonal diploids
- Authored R package for genetic analysis with mixed (sexual/clonal) reproduction (<https://github.com/grunwaldlab/poppr>)
- Isolated, maintained, and extracted DNA from cultures of *Phytophthora syringae*
- **Research Advisor: Dr. Niklaus J. Grünwald**

Miscellaneous

Awards

- 2014 Most Innovative Program – Intercollegiate Broadcasting System

Computer skills

- Basic BASH, Inkscape
- Intermediate PYTHON, PERL, C, L^AT_EX, OpenOffice, Linux, OSX
- Advanced R

Lab Skills

Sterile Technique, DNA extraction, GBS library prep

Presentations

- 2013/11/21 **Oral Presentation**, *Department of Botany and Plant Pathology*, Oregon State University, Corvallis, OR.
Determination of pattern and process in the evolution of the plant pathogen *Phytophthora syringae*
- 2013/05/02 **Oral Presentation**, *Biology Graduate Student Symposium*, Hatfield Marine Science Center, Newport, OR.
Poppr: An R package for genetic analysis of populations with mixed (clonal/sexual) reproduction

Languages

English **Mothertongue**

Korean **Intermediate**

Can manage basic conversation

Extracurricular

- 2012–Present **Radio Co-host**, *Inspiration Dissemination*, KBVR, Corvallis.
Co-created, produced, and hosted a weekly radio show interviewing graduate students in STEM fields about their research and experiences in graduate school.
- Details:
- Provided opportunity for graduate students a unique form of outreach.
 - Facilitated education of media students by providing audio editing opportunities post producing recorded episodes.
 - Actively worked with graduate students to improve their science communication skills.
- 2012–Present **Treasurer**, *Graduate Student Association*, Department of Botany and Plant Pathology, Oregon State University.
Balanced the budget, served on bi-annual travel awards committee, helped organize and coordinate group social functions.
- 2012–Present **Active Contributor**, *Bioinformatics Users Group*, Oregon State University.
Contributed presentations and discussions relevant to use of bioinformatics tools.

Publications

- **Kamvar ZN**, Tabima JF, Grünwald NJ. (2014) *Poppr*: an R package for genetic analysis of populations with clonal, partially clonal, and/or sexual reproduction. *PeerJ* 2: e281 <http://dx.doi.org/10.7717/peerj.281>
- 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