#### Elizabeth Ann Bowman

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### I. Education

**PhD, Plant Pathology, University of Arizona**, School of Plant Sciences, Aug. 2016 – present **Certificate in College Teaching**, Office of Instruction and Assessment 2017 – present

M.S., Plant Pathology, University of Arizona, School of Plant Sciences, 2016

**B.S., Botany, Oregon State University**, College of Agriculture, 2014 (*summa cum laude*)

### **II. Appointments**

| 2017-2018 | Teaching Assistant, School of Plant Sciences, University of Arizona            |  |
|-----------|--|--|
| 2014-2017 | National Science Foundation Graduate Research Fellow, University of Arizona    |  |
| 2013-2014 | Research Intern, Mycorrhizal Lab, USFS Pacific Northwest Research Station      |  |
| 2013      | Undergraduate researcher, Bot 465, Lichenology, Oregon State University        |  |
| 2012-2013 | -2013 Research Assistant, Oregon Flora Project, Department of Botany and Plant |  |
|           | Pathology, Oregon State University   |  |

#### **III. Publications**

#### **Peer-reviewed publications**

- Huang Y-L, **Bowman EA**, Massimo NC, Garber NP, U'Ren JM, Sandberg DC, Arnold AE. 2017. Using collections data to infer biogeographic, environmental, and host structure in communities of endophytic fungi. *Mycologia*, in press.
- **Bowman, EA** and Arnold AE. 2016. Ectomycorrhizal and foliar endophytic fungal communities differ in sensitivity to climate-related factors along a spatially constrained elevation gradient. *American Journal of Botany*, 2018. DOI: https://doi.org/10.1002/ajb2.1072
- Fraser, SJ, **Bowman EA**, Gianopulos NG, Newcombe G. *Xanthoria parietina* in the inland Pacific Northwest. *North America Fungi* 11 (2016): 1-12. DOI: http://dx.doi.org/10.2509/naf2016.011.002

### IV. Fellowships, Grants, and Awards

| 2018      | Forest Fungal Ecology Award, Mycological Society of America, \$1,250       |  |
|-----------|--|--|
| 2018      | Travel award, School of Plant Sciences, University of Arizona, \$500       |  |
| 2017-2019 | William A. Hanacek Scholarship, School of Plant Sciences, University of    |  |
|           | Arizona, \$12,000  |  |
| 2017-2018 | ARCS Foundation Award, Bray/Kucera Scholar, University of Arizona \$10,500 |  |
| 2014-2017 | National Science Foundation Graduate Research Fellowship, Climate change   |  |

- and fungal symbionts of *Pinus ponderosa*, \$132,000
- 2014 Robert L. Gilbertson Fellow, School of Plant Sciences, University of Arizona, \$1,000
- **2013-2014** Registry of Distinguished Students, College of Agricultural Sciences, Oregon State University
- Jean Siddall Memorial Scholarship, Department of Botany and Plant Pathology,Oregon State University, \$1,000
- 2013 *Merrill Family Foundation Scholarship*, College of Science, Oregon State University, \$2,000
- 2013 BSA PLANTS Travel Grant, Botanical Society of America and the National Science Foundation, \$750

#### V. Presentations

- **2018 Bowman, Elizabeth A.** Sensitivity of fungal symbionts to disturbance, environmental stress, and isolation: a perspective from anciently fragmented forests (Departmental seminar). University of Arizona, School of Plant Sciences. Tucson, AZ.
- **Bowman, Elizabeth A.** and A. Elizabeth Arnold. Ectomycorrhizal and foliar endophytic fungal communities differ in sensitivity to climate-related factors along a spatially constrained elevation gradient (oral presentation). Yosemite Symbiosis Workshop, Wawona, CA.
- **Bowman, Elizabeth A.** and A. Elizabeth Arnold. Fungal symbionts of forest trees in the context of climate change (poster). College of Agricultural and Life Sciences Poster Forum, University of Arizona, Tucson, AZ.
- **2016 Bowman, Elizabeth A.** and A. Elizabeth Arnold. Fungal symbionts of forest trees in the context of climate change (poster). Conference of the Mycological Society of America. Berkeley, CA.
- Arnold, A. Elizabeth, Jana M. U'Ren, Jolanta Miadlikoska, Ignazio Carbone, Yu-ling Huang, **Elizabeth A. Bowman**, Georgiana May, and François Lutzoni. Perspectives from leaves and lichens on the scale and distribution of the global endobiome (oral presentation). Conference of the Mycological Society of America. Berkeley, CA.
- **2016 Bowman, Elizabeth A.** Fungal symbionts of forests trees in the context of climate change (Departmental seminar). University of Arizona, School of Plant Sciences. Tucson, AZ.

#### VI. Teaching

Teaching assistantships

**Spring 2018** ACBS/PLS 312, <u>Animal and Plant Genetics</u>, Teaching assistantship Taught weekly labs; graded homework and exams

**Fall 2017** PLS 170C1, <u>Plants and our World</u>, Teaching assistantship Taught lecture on Evolution and Natural Selection (1.25 hrs)

# Software Carpentry and Data Carpentry

**Fall 2017** R for Reproducible Scientific Analysis Workshop, a two-day intensive workshop teaching coding in R, version control with git, and reproducible research, University of Arizona

# VII. Professional development

| 2018 | Alan Alda science communication workshop, University of Arizona        |
|------|--|
| 2017 | Graduate teaching assistantship workshop, University of Arizona        |
| 2017 | Software and Data Carpentry Instructor Training, University of Arizona |

# VIII. Outreach

| 2017 - 2018 | Mentor for high school student researcher, Vail Independent School District       |  |
|-------------|---|--|
| 2015 - 2017 | Presenter, AgDiscovery, High school students learning about agricultural research |  |
|             | at the University of Arizona (STEM minorities)                                    |  |
| 2015 - 2017 | Mentor, Blast, Three weeks research and biotechnology laboratory experience for   |  |
|             | high school students (41 students to date)  |  |
| 2017        | Mentor for high school student, workshop on phyllosphere microbes                 |  |
| 2017        | Mentor for high school students conducting an experiment on seed microbes         |  |
|             | (female, minority)  |  |
| 2017        | Graduate representative for the PLS Inclusive Excellence Committee                |  |
| 2016 - 2017 | Mentor for high school student researcher, Vail Independent School District       |  |
|             | (female)  |  |
| 2016        | Mentor for undergraduate researcher studying how fire affects the                 |  |
|             | ectomycorrhizal community in the Santa Catalina Mountains, IOU-NA REU             |  |
|             | program (Native American)   |  |
| 2016        | Mentor and Presenter, Tucson High Magnet School Microbial workshop (105           |  |
|             | students)   |  |
| 2015        | Mentor, Tucson High Magnet School, Advising high school students on science       |  |
|             | projects (female, minority)   |  |
| 2015        | Mentor and Presenter, Science and Nature in Tandem for Youth (SANITY) -           |  |
|             | field experience for high school students (17 students)                           |  |
| 2015        | Volunteer, Tucson Festival of Books, School of Plant Sciences booth               |  |
| 2014        | Volunteer, Plant Science Family Night, Ventana Vista School                       |  |
|             |   |  |

### IX. Professional Affiliations

| 2017 - present        | International Symbiosis Society    |
|-----------------------|------------------------------------|
| <b>2013 - present</b> | The Mycological Society of America |
| 2013 - present        | Botanical Society of America       |