# Andrew J. Muehleisen, Ph.D.

**(419)509-5093**
**amuehlei@uoregon.edu**
**04/9/2021**

## Education

**Ph.D., Forestry & Environmental Studies** Received May 2020
Yale University, New Haven, CT
Advisor: Dr. Liza S. Comita

**B.S. in Evolution and Ecology** Received May 2013
Minor in Engineering Sciences
Ohio State University, Columbus, OH
Magna cum Laude with Honors Distinction
Honors Research Distinction in Evolution, Ecology and Organismal Biology

## Teaching Experience

*Instructor of record:*

**Instructor of Record**, ENVS 410/510 Data Management and Visualization, Univ. of Oregon Fall 2021
- Co-instructed with Dr. Lauren Hallett

**Instructor of Record,** EVST 251 Pests, Parasites, and Pathogens, Yale University Spring 2019
- Created and instructed through Yale's Associates in Teaching Program.

**Invited guest lectures**:
- *Coexistence Theory and the Storage Effect*, EEB 305/705 Plant Ecology, Yale University
- *Tropical Forests and Climate Change*, FES 752 Ecology & Conservation of Tropical Forests, Yale University

*Pedagogical development:*

**Data Science Initiative Postdoctoral Associate,** University of Oregon Summer 2020-Present
- Content strategy for new undergraduate and graduate degree programs in data science

**Curriculum Development Consultant,** FES 720 Introduction to R, Yale University Spring-Summer 2018
- Hired through Rosenkranz Grant for Pedagogical Advancement to redevelop FES 720 and create self-guided R tutorials using the SWIRL package

*Teaching assistantship:*

**Teaching Fellow**, FES 611a Introduction to Environmental Data Science, Yale University Fall 2019
**Teaching Fellow**, FES 720 Introduction to R, Yale University Fall 2019
**Teaching Fellow**, FES 720 Introduction to R, Yale University Fall 2018
**Teaching Fellow**, FES 191 Trees: Environmental Biology & Global Significance, Yale University Spring 2018
**Teaching Fellow**, FES 720 Introduction to R, Yale University Fall 2017
**Teaching Fellow**, FES 717/EEB 617 Tropical Field Ecology, Yale University Spring 2017
**Teaching Fellow**, FES 720 Introduction to R, Yale University Fall 2016
**Teaching Fellow**, FES 752 Ecology & Conservation of Tropical Forests, Yale University Fall 2015
**Teaching Fellow**, FES 720 Introduction to R, Yale University Fall 2015

*Undergraduate mentorship:*

**Undergraduate Thesis Mentor**, Yale University Summer 2015
**Peer Research Contact**, Ohio State University 2011-2013

## Professional Experience

**Postdoctoral Research Associate**, University of Oregon Summer 2020-Present
- Joint appointment with the Institute of Ecology and Evolution and the Data Science Initiative

**Data Consultant**, Yale Environmental Leadership & Training Initiative — Spring 2018
**Field Technician**, Midwest Carbon Sequestration, Purdue University — Summer 2013
**Lab Assistant**, Aquatic Biogeochemistry, Ohio State University — Fall 2011

## Publications

Muehleisen, A., Schwartz, N. B., Stump, S. M., Staver, A. C. (2019). Deciduous-evergreen coexistence in tropical forests. *in prep.*

Muehleisen, A. J., Engelbrecht, B. M., Jones, F. A., Manzané-Pinzón, E., & Comita, L. S. (2021). Do experimental drought stress and species' drought sensitivity influence herbivory in tropical tree seedlings? *In review, Biotropica*

Muehleisen, A. J., Engelbrecht, B. M., Jones, F. A., Manzané-Pinzón, E., & Comita, L. S. (2020). Local adaptation to herbivory within tropical tree species along a rainfall gradient. *Ecology, 101*(11), e03151.

Muehleisen, A., Queenborough, S. A., Alvia, P., Valencia, R., & Fiala, B. (2016). Incidence of Extrafloral Nectaries and their relationship with growth and survival of lowland tropical rain forest trees. *Biotropica*, *48*(3), 321-331.

## Grants

**Associates in Teaching Program**, Yale University — 2019
**Tropical Resources Institute Endowment Fellowship**, Yale University — 2018
**Conference Travel Fellowship**, Yale University — 2018
**Doctoral Pilot Grant,** Yale Institute for Biospheric Sciences — 2015
**Summer Research Fellowship,** Ohio State Undergraduate Research Office — 2012

## Conference Presentations

**Sussex Plant Biology Symposium,** research talk — 2019
**Ecological Society of America Annual Meeting,** research talk — 2018
**Forestry and Environmental Studies Research Day**, research talk — 2018
**Ecological Society of America Annual Meeting**, poster presentation — 2016
**Forestry and Environmental Studies Research Day**, research talk — 2015
**Ohio State Undergraduate Research Conference**, poster presentation — 2012

## Technical Proficiencies

**Data Analysis**: R, Python, Matlab
**Remote Sensing**: Google Earth Engine
**Computer Science**: version control with Git, shell programming
**Modeling**: Mathematica, coexistence theory, evolutionary stable strategies, population matrix- and integral-projection
**Lab Techniques**: plant hydraulics, plant foliar chemistry (LCMS)

## Other Relevant Experience

**Engineering Capstone Design Project,** Ohio State University — Winter-Summer 2012
- *Solar-Powered Anaerobic Bio-Digester*

**Civil Engineering Intern**, City of Sylvania, Ohio — 2009, 2010