**Kyrie (Aly) Baumgartner**

PhD candidate

Baylor University | Department of Geosciences

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**EDUCATION**

2015-present Ph.D. | Baylor University | Department of Geosciences

Dissertation: *Filling the gaps in the African floral record: developing new paleobotanical paleoclimate models for tropical Africa*

Advisor: Dr. Daniel Peppe

2012-2014 M.S. | East Tennessee State University | Department of Biology

Thesis: *Neogene Climate Change in Eastern North America: A Quantitative Reconstruction*

Advisor: Dr. Yu-Sheng (Christopher) Liu

2008-2012 B.S.| University of Michigan | Program in the Environment

**TEACHING EXPERIENCE**

**Baylor University**

Historical Geology | Teaching Assistant | Spring 2019

Stratigraphy and Sedimentology | Teaching Assistant | Spring 2018

Invertebrate Paleontology | Teaching Assistant | Fall 2017

Environmental Geology | Teaching Assistant | Spring 2016, Fall 2018

World Oceans | Teaching Assistant | Fall 2015, Fall 2016, Spring 2017

**PUBLICATIONS**

(*italics* undergraduate assistant)

**Peer-Reviewed**

[2]. Peppe, D.J., **Baumgartner, A.**,Flynn, A. G., and Blonder, B. 2018. Reconstructing paleoclimate and paleoecology using fossil leaves: In Croft, D. A., Simpson, S. W., Su, D. F. (eds). Methods in Paleoecology: Reconstructing Cenozoic Terrestrial Environments and Ecological Communities: Springer (Vertebrate Paleobiology and Paleoanthropology Series), Dordrecht.

[1]. Bucksch, A., Atta-Boateng, A., Fortuné Azihou, A., Balduzzi, M., Battogtokh, D., **Baumgartner, A.**, et al. 2017. Morphological Plant Modeling: Unleashing Geometric and Topologic Potential within the Plant Sciences. Frontiers in Plant Science, 8: 900.

**In Review or In Preparation**

**Baumgartner, A.**, *Donahoo, M*.,Chitwood, D., and Peppe, D. *in prep*. Rapid leaf character response to climate variability in *Vitis*: Implications for leaf physiognomic paleoclimate reconstructions.

**Baumgartner, A.**, *Donahoo, M*., and Peppe, D. *in prep.* Filling the gaps in the African floral record: developing new paleobotanical paleoclimate models for tropical Africa.

**Baumgartner, A.,** and Peppe, D. *in prep*. Paleobotanical paleoclimate estimates from the early Miocene Rusinga Island, Lake Victoria, Kenya.

**Presentations & Abstracts**

(\* poster)

**Baumgartner, A.,** *Donahoo, M*., and Peppe, D. 2018. Preliminary Paleobotanical Paleoclimate Estimates from the Early Miocene Rusinga Island, Lake Victoria, Kenya. 2nd Lembersky Conference in Human Evolutionary, Rutgers University, New Brunswick, New Jersey.

\***Baumgartner, A.,** *Donahoo, M*., and Peppe, D.2018. Assessing the relationship between leaf size and shape in African floras: Implications for paleoclimate proxies. Green Life Symposium, University of Michigan, Ann Arbor, Michigan.

**Baumgartner, A.,** *Donahoo, M*., and Peppe, D**.** 2018. Testing the applicability of leaf physiognomic proxies for climate on equatorial African floras. 10th European Palaeobotany & Palynology Conference, Dublin, Ireland.

**Baumgartner, A.,** *Donahoo, M*., and Peppe, D.2018. Assessing the relationship between leaf size and shape in African floras. Ecological Integration Symposium, Texas A&M University, College Station, Texas.

\***Baumgartner, A,** Peppe, D. J., Chitwood, D. H., and *Donahoo, M*. 2016. Rapid leaf character response to climate variability in Vitis: Implications for leaf physiognomic paleoclimate reconstructions. XIV IPC/X IOPC Salvador, Bahia, Brazil.

\***Baumgartner, K. A**., and Meyer, H. W. 2015. Effects of allochthonous pollen influx on paleoclimate reconstructions: Evidence from the late Eocene Florissant flora, Colorado. Paleoecology Symposium, Cleveland Museum of Natural History and Case Western Reserve, Cleveland, Ohio.

**Baumgartner, K. A**., and Meyer, H. W. 2014. Coexistence Climate Analysis of the Late Eocene Florissant Flora, Colorado. Geological Society of America Abstracts with Programs 46:6, p. 490.

**Baumgartner, K. A**. 2013. Paleoclimate Reconstructions of Three Mid-Atlantic Miocene Sites. Geological Society of America Abstracts with Programs 45:7, p. 303.

**Invited Presentations**

**Baumgartner, A.** 2018. I speak for the trees: what plants can tell us about climate. WISE Lecture Series. Baylor University, Waco, TX.

**Baumgartner, A.** 2014.Back to the Future: Paleoclimate, Paleoenvironment and the Gray Fossil Site. Lunchtime Lecture at the Gray Fossil Site, Gray, TN.

*Student Presentations*

*Donahoo, M.A*., **Baumgartner, K.A.**, and Peppe, D.J. 2018. Applying Paleobotanical Paleoclimate Proxies: A Case Study of Tropical African Floras. URSA Scholars, Baylor University.

*Donahoo, M.A*., **Baumgartner, K.A**., and Peppe, D.J. 2017. Applying paleobotanical paleoclimate proxies: A case study of tropical African floras. Geological Society of American Abstracts with Programs 49:6.

**GRANTS**

2017 Leakey Foundation $14,400

GSA Graduate Research Grant$2,500

2016 Evolving Earth Foundation $3,000

Dallas Paleontological Society Frank Crane Memorial Scholarship $1,000

Total $20,900

**POPULAR MEDIA**

2019 Common Descent Podcast interview: Angiosperm Evolution

2018 Common Descent Podcast interview: Listener Question

Common Descent Podcast interview: Grass

2014 Experiment.com crowd-funding project:

“What was the paleoclimate of Florissant Fossil Beds National Monument?”

Palaeo After Dark interview: Geological Society of America Meeting

2013 Palaeocast interview: Geological Society of America Day 2

2013-present Personal blog: Scientia and Veritas [scientiaandveritas.wordpress.com]

**HONORS & FELLOWSHIPS**

2018 Baylor University Department of Geosciences

Outstanding Teaching Assistant Award

Nominated for Baylor University Graduate School

Outstanding Graduate School Instructor Award for Fall 2018

2017 Baylor University Department of Geosciences

Outstanding Teaching Assistant Award

Nominated for Baylor University Graduate School

Outstanding Graduate School Instructor Award for Fall 2017

**STUDENT ADVISING**

**Mentoring**

*Baylor University*

Biology: Sam Chun, Samantha Flores, Austin Hubbert, Taylor Horn

Environmental Science: Delany Baum

Geology: Ryley Collins, Gilliane Del Rosario, Michaela Donahoo, Carson Steinmann

**Undergraduate B.S. Thesis**

Michaela Donahoo (GEO)

Thesis*: Applying paleobotanical paleoclimate proxies: A case study of tropical African floras*

**RESEARCH and PROFESSIONAL EXPERIENCE**

2016 **Bone Blitz** | Waco Mammoth National Monument, Waco, TX

2015-present **Graduate Teaching Assistant** | Baylor University, Waco, TX

2014 **Paleontology/Museum Assistant** **(GeoCorps)** | Florissant Fossil Beds National Monument, Florissant, CO. Mentor: Herb Meyer

2013 **Lab/Field Volunteer** | Gray Fossil Site, Gray, TN

2012-2014 **Graduate Research Assistant** | East Tennessee State University, Johnson City, TN

2011, 2012 **Paleontology Intern** | The Mammoth Site, Hot Springs, SD

2010-2012 **Fossil Preparator** | University of Michigan Museum of Paleontology, Ann Arbor, MI

2010-2012 **Docent** | University of Michigan Natural History Museum, Ann Arbor, MI

**COLLECTIONS and FIELD EXPERIENCE**

2019 **National Museums of Kenya Department of Palaeontology, Nairobi, Kenya**

Paleobotany. (4 weeks)

2018 **Rusinga Island, Kenya**

Paleobotany, stratigraphy, sedimentology. (1 field season)

**National Museums of Kenya Department of Palaeontology, Nairobi, Kenya**

Paleobotany. (6 weeks)

**Bastrop, Texas, USA**

Paleobotany, stratigraphy, sedimentology. (visiting)

2017 **The Royal Botanic Gardens at Kew Herbarium, London, UK**

Botany. (3 weeks)

**Muséum National d'Histoire Naturelle Herbarium, Paris, France**

Botany. (1 week)

**National Museums of Kenya Herbarium and Department of Palaeontology, Nairobi, Kenya**

Botany, paleobotany. (4 weeks)

2016 **San Juan Basin, New Mexico, USA:**

Paleobotany, stratigraphy, sedimentology. (visiting)

**Missouri Botanical Gardens Herbarium, St. Louis, Missouri, USA**

Botany. (2 weeks)

2015 **Missouri Botanical Gardens Herbarium, St. Louis, Missouri, USA**

Botany. (2 weeks)

2014 **Florissant Fossil Beds National Monument, Colorado, USA**

Paleobotany, vertebrate paleontology, fossil preparation. (3 months)

2013 **Gray Fossil Site, Johnson City, Tennessee, USA**

Vertebrate paleontology, fossil preparation. (3 months)

2012 **Mammoth Site of Hot Springs, South Dakota, USA**

Vertebrate paleontology, fossil preparation. (2 months)

2011 **Mammoth Site of Hot Springs, South Dakota, USA**

Vertebrate paleontology, fossil preparation. (3 months)

**SERVICE**

**University**

*Baylor University*

2018 Fall Fossil Festival, Waco Mammoth National Monument, Waco, TX

College Fair, DeSoto ISD, DeSoto, TX

Paleo Journal Club, Baylor University, Waco, TX

R training, Peppe Lab, Baylor University, Waco, TX

Visiting scientist, Cub Scout meeting, Waco, TX

2017-present Department of Geosciences Social Media Co-Manager, Baylor University, Waco, TX

2017 Earth Science Week, Mayborn Museum, Waco, TX

Sic 'Em Science Day, Mayborn Museum, Waco, TX

2016 Central Texas Girl Scout STEM Fair, Texas State Technical College

*East Tennessee State University*

2014 Darwin Day, Gray Fossil Site, Gray, TN

2013 GIS Day, Gray Fossil Site, Gray, TN

National Fossil Day, Gray Fossil Site, Gray, TN

*University of Michigan*

2011 Outreach Facilitator, Science for Tomorrow, UMMNH, Ann Arbor, MI

2010-2011 Outreach Facilitator, Family Science & Reading Program, UMMNH, Ann Arbor, MI

**Professional**

2014-2015 Visiting scientist, Hanover-Horton School District, Hanover, MI

**WORKSHOPS**

2018 Advances in Paleoecology, 2nd Lembersky Conference in Human Evolutionary Studies, Rutgers University, New Brunswick, NJ, November 14-16, 2018.

Women in the Academy Conference: Navigating the Journey to Success, Baylor University, Waco, TX, April 7, 2018.

REACHE (Research on East African Catarrhine and Hominoid Evolution) Conference, Nairobi, Kenya, August 6-10, 2018.

rstudio::conf, 2nd Annual Meeting Workshop, San Diego, CA, January 31-Feburary 3, 2018.

2016 Portal to the Public Network (PoPNet) Workshop, Mayborn Museum, Waco, TX, Nov. 7 & 14, 2016.

2015 Paleoecology Symposium Research Workshop at the Cleveland Museum of Natural History, Cleveland, OH, Sep. 10-13, 2015.

NIMBioS Investigative Workshop, Morphological Plant Modeling: Unleashing geometric and topologic potential within the plant sciences, University of Tennessee, Knoxville, TN, Sep. 2-4, 2015.

**ACTIVE COLLABORATORS**

Daniel Peppe| Baylor University| Department of Geosciences

Daniel Chitwood | Michigan State University| Department of Horticulture

Michelle Lawing | Texas A&M University| Department of Ecosystem Science and Management

Kieran McNulty | University of Minnesota| Department of Anthropology

Lauren Michel | Tennessee Tech University| Department of Earth Sciences

**PROFESSIONAL MEMBERSHIPS**

American Association for the Advancement of Science (AAAS)

Association for Women Geoscientists (AWG)

Baylor University Association for Women Geoscientists (BAWG)

Baylor University Women in Science and Engineering (WISE)

Botanical Society of America (BSA)

Earth Science Women's Network (ESWN)

Geological Society of America (GSA)

Paleontological Society (PS)

Don Sundquist Center of Excellence in Paleontology