

## *Curriculum Vitae of Mary Kay Johnston, Ph.D.*

- Title:** Associate Professor of Biology and Environmental Science & Conservation  
Concordia University Texas (Aug 2011-present)
- Contact Information:** Concordia University Texas, 11400 Concordia University Dr, Austin, TX 78726  
email: marykay.johnston@concordia.edu
- Education:** 2011. University of Texas at Austin. Ph.D. in Ecology, Evolution and Behavior  
2004. University of Oklahoma. M.S. in Zoology  
2000. University of Oklahoma. B.S. *magna cum laude* in Zoology
- Languages:** English, French
- Awards/Honors:** 2014. Calvin College/BioLogos Foundation seminar participant (\$1,000)  
2014. Concordia University faculty development mini-grant (\$750)  
2015. CTX Neeb teaching award Finalist  
2017. CTX Neeb teaching award Finalist  
2018. CIC Seminars on Science Pedagogy Team Lead (\$1000)  
2020. CTX Blackboard Ally accessibility improvement contest Winner (\$75)  
2020. Concordia Faculty Scholarship Award (\$1000)  
2021. CTX Blackboard Ally accessibility improvement contest Winner (\$50)

### **Publications:**

- Johnston, M.K. (2000) Undergraduate honors thesis, "Local and Regional Factors that Influence Diversity and Abundance: studies of carabids and ants along two elevation gradients"  
University of Oklahoma.
- Johnston, M.K. (2004) M.S. thesis, "Effects of substrate chemical composition and heterogeneity on diversity and species composition in mites and ants on Barro Colorado Island, Panama."  
University of Oklahoma.
- Johnston, M.K. (2011) Ph.D. Dissertation, "Waterfowl impacts to zooplankton communities in wetland meta-ecosystems." University of Texas at Austin.
- Donoso, DA, MK Johnston, M Kaspari (2010) Trees as templates for tropical litter arthropod diversity. *Oecologia* 164:1 (201-211).
- Donoso DA, MK Johnston, N Clay & ME Kaspari. (2013) Trees as templates for trophic structure of tropical litter arthropod fauna. *Soil Biology and Biogeochemistry* 61 (45-61).
- Johnston, MK (2019) "The environmentalist's dilemma: Game theory, morality and the environment."  
Proceedings of the Association of Lutheran College Faculties Annual Meeting. Published online.
- Johnston, MK, Editor (2020) Proceedings of the Association of Lutheran College Faculties Annual Meeting. Published online.
- Johnston, MK, Editor (2021) Proceedings of the Association of Lutheran College Faculties Annual Meeting. Published online.

### **Oral & Poster presentations:**

- Donoso, DA, MK Johnston, N Clay and M Kaspari (2011) "Trees construct but seasonality deconstruct trophic structure of tropical litter arthropod communities. Oral presentation. Annual meeting, Ecological Society of America. Austin, TX.
- Johnston, MK and MA Leibold (2013) "Meta-ecosystems: waterfowl mediated movement of materials and organisms in prairie pothole wetlands" Oral presentation. Annual meeting, Association for the Sciences of Limnology and Oceanography. New Orleans, LA.
- Johnston, MK and D Koeck (2014) "Biomonitoring the Balcones: Assessing biodiversity from a

- metacommunity perspective" Poster presentation. Annual meeting, Association for the Sciences of Limnology and Oceanography. Portland, OR.
- Johnston, MK (2015) "Endless forms most beautiful: Diverse perspectives on the intersection between science and faith" Concordia University Biological Sciences Distinguished Speaker Series.
- Pittman, J, G LaPorta, J Gonzalez, E Bailes, MK Johnston (2015) "Comparative analysis of chemical composition with phylogeny with Asteraceae and Fabaceae" Poster presentation. Undergraduate Research Day at the Texas State Capitol. Austin, TX.
- Whitehead, S and MK Johnston (2016) "Building programs in sustainability that foster an 'intense consciousness of land.'" Oral presentation. Annual meeting, Association for Environmental Studies and Sciences.
- Johnston, MK (2016) "Endless forms most beautiful and wonderful: Aquatic microalgae as a model for teaching evolution" Oral presentation. Annual meeting, Association for the Sciences of Limnology and Oceanography. Santa Fe, NM.
- Boineau, M, R Boice, C Smith, MK Johnston (2018) "Heat's role as a mechanism of dynamic stretching." Poster presentation. Texas Academy of Science Annual Meeting. Midland, TX.
- Maddox, CA, MK Johnston (2018) "Reducing some physiological stress effects by exercising." Poster presentation. Texas Academy of Science Annual Meeting. Midland, TX.
- Nguyen, M, V Sherman, H Rafferty, R Ray, MK Johnston (2018) "Roadside edge effects on herbaceous plant communities," Poster presentation. Texas Academy of Science Annual Meeting.
- Terry-Stewart, KN, J Davis, R Navarro, C Jones, MK Johnston (2018) "The effects of dispersal and nitrogen fertilizer on leaf litter arthropod communities." Poster presentation. Texas Academy of Science Annual Meeting. Midland, TX.
- Johnston, MK (2018) "Framing explanations of biological diversity." Oral presentation. Association of Lutheran College Faculties Annual Meeting, St. Paul, MN.
- Rangel, S., C. Findley, AK Olivarez, MK Johnston (2019) Aquatic habitat survey for the Jollyville Plateau salamander (*Eurycea tonkiaewae*), a threatened endemic of Central Texas. Poster presentation. Texas Academy of Science Annual Meeting, Brownwood, TX.
- Chatterton, C.R., A. Wostarek, L. Shuffield, MK Johnston (2019) Effect of nitrate supplementation and input frequency on lipid production in *Chlorella vulgaris*. Poster presentation. Texas Academy of Science Annual Meeting, Brownwood, TX.
- Johnston, MK (2019) "Undergraduate Research: Notes and reflections from the field" Faculty workshop at the Dinde Center for Teaching and Learning, Concordia University, Austin, TX.
- Chatterton, C.R., A. Wostarek, L. Shuffield, MK Johnston (2019) Effect of nitrate supplementation and input frequency on lipid production in *Chlorella vulgaris*. Poster presentation. Undergraduate Research Day at the Texas State Capitol, Austin, TX.
- Johnston, MK (2019) "The environmentalist's dilemma: Game theory, morality and the environment." Oral presentation. Association of Lutheran College Faculties Annual Meeting, Springfield, OH
- Klein, M, A Banuelos, S Hoelting, S Park, MK Johnston (2020) The influence of increased carbon dioxide on anxiety in fire ants (*S. invicta*) and harvester ants (*P. barbatus*). Poster presentation. Texas Academy of Science Annual Meeting, Nacogdoches, TX.
- Mueller, M, J Spivey, MK Johnston (2020) A preliminary assessment of the fossil rodents of Friesenhahn Cave. Poster presentation. Texas Academy of Science Annual Meeting, Nacogdoches, TX.
- Mullins, R, J Gallardo, H Kalenak, E Richter, MK Johnston (2020) The effect of animal fat subsidies on plant growth and soil arthropods. Poster presentation. Texas Academy of Science Annual Meeting, Nacogdoches, TX.
- VanDyke, L, K Dunkerley, S Mendez, MK Johnston (2020) The effects of static and dynamic warmups on balance and agility. Poster presentation. Texas Academy of Science Annual Meeting, Nacogdoches, TX.
- Johnston, MK (2020) Camus, The Plague, and Social Unrest. Organizer and Moderator for the summer Salon Series. Association of Lutheran College Faculties.
- Hopper, S, T Freeman, A Seth, E Thayer, D Gutierrez, MK Johnston (2021) Crowding and food quality significantly affect blowfly (*Lucilia sericata*) larval development and mPMI estimation. Oral

presentation. Texas Academy of Science Annual Meeting, online. This presentation was a section winner, which included a cash prize.

Hopper, S, T Freeman, A Seth, E Thayer, D Gutierrez, MK Johnston (2021) Crowding and food quality significantly affect blowfly (*Lucilia sericata*) larval development and mPMI estimation. Poster presentation. Undergraduate Research Day at the Texas State Capitol, Austin, TX (online).

Johnston, MK (2021) The Things That Terrify: Horror and dread in their social and cultural contexts. Organizer and Moderator for the summer Salon Series. Association of Lutheran College Faculties.

Johnston, MK (2021) Finding Scrat in the Ice Age: Community composition and variation among Pleistocene rodents in Friesenhahn Cave (San Antonio, Texas). Poster presentation. American Indian Science and Engineering Society Annual Meeting, Phoenix, AZ.

Johnston, MK (2021) Strengthening undergraduate research experiences during COVID with Concordia's natural resources. Oral presentation. Association of Lutheran College Faculties Annual Meeting, Austin, Texas.

#### **Invited Talks:**

Johnston, MK (2020) Taxonomy of Native Plants of Texas. Texas Master Naturalists - Balcones Canyonlands Chapter.

Johnston, MK (2021) Finding inspiration in the little things: a journey with the mosses. Concordia University Texas Honors Convocation keynote speaker.

Johnston, MK (2021) Native Plants of Central Texas. Texas Outdoor Woman Network, Austin Chapter

Johnston, MK (2021) Evolution & the History of Life on Earth, American University of Paris

Johnston, MK (2021) Texas Native Plants. Texas Master Naturalists - Balcones Canyonlands Chapter

Johnston, MK (2021) Texas Native Plants. Texas Master Naturalists - Good Water Chapter

Johnston, MK (2021) Nations within a Nation: Tribal Sovereignty and the Federal Government. Concordia University Texas, Native American Heritage Month.

#### **Service:**

Appointee, Texas Biology Textbook Review Panel. 2013. Appointed by the Texas State Board of Education Program instructor. 2013-2016. Camp Quest Oklahoma. Conducted science and nature program activities

President, Association of Lutheran College Faculties. 2019-2021.

Judge. 2014-2021. Austin area regional science fair. (Annual event)

Mentor, 2021-present. Full Circle Mentorship program for American Indian Science & Engineering Soc.

#### **Service to Concordia University:**

Co-Chair of the Biology Department. 2016 to present. Concordia University Texas.

Student organization faculty sponsor: Biology Club, Gamer's Society, Storm Makers Dance Club

Presenter and Assistant for Black Heritage Month and Hispanic Heritage Month

Native American Heritage Month -- Event Organizer and Presenter

Committee Service at Concordia University Texas

2015. University council, Faculty Representative

2015-2017. Executive Committee of the Faculty, School of Natural and Applied Sciences Rep

2018-2019. Concordia University Institutional Review Board

2017-2021. Executive Committee of the Faculty, Chair

2020-2021. Diversity, Equity, and Inclusion Committee.

2019-present. Concordia Friesenhahn Cave Council, Director of Research and Education

2020-present. Academic Policies Committee.

2021-present. Executive Committee of the Faculty, Academic Policies Committee Representative.