### **Curriculum Vitae**

Notarization. I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Date: 7 Mar 2019

#### I. Personal Information

Signature

Katherine Tully | kltully@umd.edu 2108 Plant Sciences Building College Park, MD 20742 UID: 108453166

I.A. Academic Appointments at UMD

Assistant Professor in Agricultural Ecology 2014-present Department of Plant Sciences and Landscape Architecture 59% Instruction and 41% Research

- I.B. Administrative Appointments at UMD
- I.C. Other Employments

Columbia University *Adjunct Associate Research Scientist* 2014-2016 Agriculture and Food Security Center

Columbia University *Earth Institute Postdoctoral Fellow* 2011-2014 Agriculture and Food Security Center

### I.D. Educational Background

University of Virginia Ph.D. Ecology 2011 University of Virginia M.S. Ecology 2007 Kenyon College B.A. English, Spanish, Biology and Environmental Studies 2004

- <u>I.E.</u> <u>Continuing Education</u> Include Sponsor/organization; title; location; date(s); type (forum, pre-conference, workshop, other)
- I.F. Professional Certifications, Licenses, and Memberships

Member American Association for the Advancement of Science (AAAS) Member Agronomy Society of America (ASA) Member Crop Science Society of America (CSSA) Member Ecological Society of America (ESA) Member Soil Science Society of America (SSSA)

### II. Research, Scholarly, Creative and/or Professional Activities

### II.A. Chapters

- II.A.1. Books
- Kuyah S, Mbow C, Sileshi G, van Noordwijk M, **Tully K**, Rosenstock TS. 2016. Chapter 6: Quantifying carbon stocks and carbon stock changes in biomass on smallholder farms and in agricultural landscapes. *In* Rosenstock TS, Rufino MC, Butterbach-Bahl K, Wollenberg E, Richards M. (eds.), Methods for Measuring Greenhouse Gas Balances and Evaluating Mitigation Options in Smallholder Agriculture. Springer International, p 119-134. ISBN 978-3-319-29794-1

# Contribution: Created graphics and contributed to writing the manuscript.

### II.B. Refereed Journals

### II.B.1. Refereed Journal Articles

\* indicates undergraduate student | \*\* indicates graduate student | \*\*\* indicates post-doctoral researcher

34. Huddell AM, Galford G, **Tully K**, Crowley C, Palm CA, Neill C, Hickman JE, and Menge DL. *In preparation*. Potential for increasing nitrogen losses from intensifying tropical agriculture.

Contribution: participated in data collection and analysis, helped design theoretical framework and helped write the article.

33. **Tully K** and McAskill C. *In review.* Promoting soil health in organically managed systems: A review. *Renewable Agriculture and Food Systems.* 

Contribution: participated in conceptual ideas and theoretical framework, created graphics, and wrote the article.

32. Otte B\*\*, Schomberg HH, Mirsky SB, **Tully K.** *In revision.* Managing deep inorganic nitrogen, water, and corn performance in a cereal rye cover crop. *Agronomy Journal.* 

# Contribution: helped design and direct the study, participated in data analysis, and wrote the article.

31. **Tully K**, Gedan K, Epanchin-Niell R, Strong A, Bernhardt E, BenDor T, Mitchell M, Kominoski J, Jordan T, Neubauer S, Weston N. 2019. The invisible flood: the chemistry, ecology, and consequences of saltwater intrusion. *Bioscience*.

# Contribution: participated in conceptual ideas and theoretical framework, created graphics, and wrote the article.

30. **Tully K**, Weissman D\*\*, Wyner WJ\*, Miller J, Jordan T. 2019. Soils in transition: Saltwater intrusion alters soil chemistry in agricultural fields. *Biogeochemistry*.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

29. Thapa R\*\*, Mirsky SB, **Tully K**. 2018. Cover crops reduce nitrate leaching – A metaanalysis. *Journal of Environmental Quality*.47:1400-1411.

# Contribution: helped design and direct the study, provided statistical guidance, and helped write the article.

28. Koivunen EE, Swett CL, **Tully K**. 2018. Co-managing soil and plant pathogens: Effects of organic amendments on soil and fungal pathogen survival. *Plant and Soil*. 432: 171-189.

# Contribution: helped design and direct the study, analyzed soil data and generated graphics. Helped write the article.

27. Thapa R\*\*, Ackroyd VJ\*\*\*, Poffenbarger H, **Tully K**, Kramer M, Mirsky SB. 2018. Biomass production and nitrogen accumulation by hairy vetch-cereal rye biculture - A meta-analysis. *Agronomy Journal.* 110:1197-1208.

## Contribution: provided statistical guidance and provided edits on the article.

26. Yu K, Carr D, Anderegg W, **Tully K**, D'odorico P. 2018. Response of a facultative CAM plant and its competitive relationship with a grass to changes in rainfall regime. *Plant and Soil*. 427:321-333.

# Contribution: helped carry out the study and provided edits on the article.

25. **Tully K,** Abwanda S, Thiong'o M, Mutuo PM, Rosenstock TS. 2017. Nitrous oxide and methane fluxes from urine and dung deposited on Kenyan pastures. *Journal of Environmental Quality*. 46:921-929.

# Contribution: helped with data analysis, generated figures, and wrote the article.

24. **Tully K,** Ryals R. 2017. Nutrient cycling in agroecosystems: Balancing food and environmental objectives. *Agroecology & Sustainable Food Systems* (Invited review article) 7:761-798.

# Contribution: participated in conceptual ideas and theoretical framework, created graphics, and wrote the article.

 Michelson H, Tully K. 2017. The Millennium Villages Project and Local Land Values: Using Hedonic Pricing Methods to Evaluate Development Projects. World Development. 101:377-387.

# Contribution: helped carry out the study and provided edits on the article.

22. Russo T, **Tully K**, Palm C, Neill C. 2017. Leaching losses from Kenyan maize cropland receiving different rates of nitrogen fertilizer. *Agriculture Ecosystems & Environment*. 108:195-209.

# Contribution: helped design and direct the study, collected all the data, ran sample analysis, and helped write the article.

 Palm C, Neill C, Lefebvre P and Tully K. 2017. Targeting sustainable intensification of maize-based agriculture in East Africa. *Tropical Conservation Science*. (Invited Special Issue) 10:1-4.

### Contribution: helped design the study, provided data, and helped write the article.

20. Hickman JE, Palm CA, **Tully K**, Diru W, Groffman PM. 2017. Non-linear response of nitric oxide fluxes to fertilizer inputs and the impacts of agricultural intensification on tropospheric ozone pollution in Kenya. *Global Change Biology*. 23:3193-3204.

# Contribution: helped collect field data and write the article.

19. **Tully K,** M, Hickman JE, McKenna M, Neill C, Palm CP. 2016. Fertilizer application alters vertical distributions and temporal dynamics of soil inorganic nitrogen in continuous maize systems in East Africa. *Ecological Applications* 26:1907-1919.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

 Tully K, Wood SA, Neill C, Palm CP. 2015. The effect of African Green Revolution interventions on nitrogen balances in smallholder maize farms in Western Kenya. *Agriculture, Ecosystems & Environment* 214:10-20.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

17. **Tully K,** Sullivan C, Weil R, Sanchez P. 2015 The state of soil degradation in sub-Saharan Africa: baselines, trajectories, and solutions. *Sustainability* 7(6):6523-6552. Invited review article.

# Contribution: participated in conceptual ideas and theoretical framework, created graphics, and wrote the article.

 Hickman JE, **Tully K**, Groffman PM, Diru W, Palm CA. 2015. A potential tipping point in tropical agriculture: Avoiding rapid increases in nitrous oxide fluxes from agricultural intensification in Kenya. *JGR-Biogeosciences*. 120:938-951.

### Contribution: helped collect field data and provided edits on the article.

 Wood SA, Bradford MA, Gilbert JA, McGuire KL, Palm CA, Tully K, Zhou J, Naeem S. 2015. Agricultural intensification and the functional capacity of soil microbes on smallholder African farms. *Journal of Applied Ecology* 52:744-752.

# Contribution: helped collect field data and provided edits on the article.

14. Wood SA, Almaraz M, Bradford MA, McGuire KL, Naeem S, Palm CA, **Tully K**, Zhou J. 2015. Farm management, not soil microbial diversity controls nutrient loss from smallholder tropical agriculture. *Frontiers in Microbiology* 6:1-10.

## Contribution: helped collect field data and provided edits on the article.

- 13. **Tully K,** Weil R. 2014. Ion selective electrode offers accurate, inexpensive method for analyzing soil solution nitrate in remote regions. *Communications in Soil Science and Plant Analysis.* 45:1974-1980.
- 12. Rosenstock T, **Tully K,** Arias-Navarro C, Butterbach-Bahl K, Neufeldt H, Verchot L. 2014. Agroforestry with N-fixing trees: Sustainable development's friend or foe? *Current Opinion in Environmental Sustainability*, 6:15-21.
- Tully K, Lawrence D, Wood SA. 2013. Organically managed coffee agroforests have larger soil phosphorus but smaller soil nitrogen pools than conventionally managed agroforests. *Biogeochemistry*, 115:385-397.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

10. **Tully K,** Wood SA, Lawrence D. 2013. Fertilizer type and species composition affect nutrient leachate in coffee agroecosystems. *Agroforestry Systems*. 87:1083-1100.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

 Tully K, Wood TE, Schwantes AM, Lawrence D. 2013. Soil nutrient availability and reproductive effort drive patterns in nutrient resorption in *Pentaclethra macroloba*. *Ecology*. 94:930-940.

Contribution: participated in data collection and analysis, and wrote the article.

8. **Tully K**, Lawrence D, Scanlon TM. 2012. More trees less loss: Nitrogen losses decrease with increasing biomass in coffee agroforests. *Agriculture, Ecosystems and Environment.* 161:137-144.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

7. **Tully K**, and Lawrence D. 2012. Canopy and leaf composition drive patterns of nutrient release from pruning residues in a coffee agroforest. *Ecological Applications*. 22:1330-1344.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

 Huang C-Y, Tully K, Clark DA, Oberbauer SF, McGlynn TP. 2012. The δ<sup>15</sup> N signature of the detrital food web tracks a landscape-scale soil phosphorus gradient in a Costa Rican lowland tropical rain forest. *Journal of Tropical Ecology.* 28: 395-403.

# Contribution: participated in data collection and provided edits to the article.

5. **Tully K**, Lawrence D. 2011. Closing the Loop: Nutrient balances in organic and conventional coffee agroforests. *Journal of Sustainable Development.* 35: 671-695.

# Contribution: designed and directed the study, participated in data collection and analysis, and wrote the article.

4. **Tully K**, Lawrence D. 2010. Declines in leaf litter nitrogen linked to rising temperatures in a wet tropical forest. *BIOTROPICA*. 42: 526-530.

# Contribution: participated in data collection and analysis, and wrote the article.

 Goeghegan J, Lawrence D, Schneider L, Tully K. 2010. Accounting for Carbon in Models of Land Use and Implications for Payments for Environmental Services: An Application to SYPR. *Regional Environmental Change*. 42: 526-530.

# Contribution: helped with data analysis and graphics and provided edits to the article.

 Lawrence D, Radel R, Tully K, Schmook B, Schneider L. 2010 Untangling a global decline in tropical forest resilience: constraints on the sustainability of shifting cultivation. *BIOTROPICA*. 40: 21-30.

### Contribution: helped with data analysis and graphics and provided edits to the article.

 Vandecar K, Lawrence D, Wood TE, Das R, Oberbauer S, Schwendenmann L, Tully K. 2009. Diurnal fluctuations in labile soil phosphorus in response to climatic conditions and soil CO<sub>2</sub> efflux in a wet tropical forest, La Selva, Costa Rica. *Ecology*. 90: 2547-2555.

# Contribution: helped with data collection and provided edits to the article.

# II.C. Conferences, Workshops, and Talks

#### Summary of productivity

Туре	Total
Invited presentations	42
Academic seminars	12
Invited Symposium	2
Organized sessions	7
Agencies and organizations	5
Lectures in University courses	9
Referred Conferences	32
Contributed oral sessions	24
Contributed posters	8
Non-Refereed Conferences	15
Contributed oral sessions	6
Contributed posters	9
Invited workshops	2
Workshops organized	4
TOTAL	95

#### II.C.1. Invited Talks

\* indicates undergraduate student | \*\* indicates graduate student | \*\*\* indicates post-doctoral researcher First person listed is the speaker.

# Academic seminars – 12 total

2018	<b>Tully K.</b> <i>Ecosystems in transition: Sea-level rise unlocks agricultural legacies.</i> University of Maryland, STEAM Salon, College Park, MD. 11 Oct.
	<b>Tully K.</b> <i>Ecosystems in transition: Sea-level rise unlocks agricultural legacies.</i> University of Delaware, Newark, DE. 5 Oct.
	<b>Tully K.</b> <i>Ecosystems in transition: Sea-level rise unlocks agricultural legacies</i> . Johns Hopkins University, Baltimore, MD. 3 Apr.
2017	<b>Tully K</b> . <i>Balancing food and the environment: local strategies in a global food system.</i> Howard University, Department of Biology, Washington, DC. 15 Feb.
2016	<b>Tully K</b> . <i>Balancing food and the environment: local strategies in a global food system.</i> Department of Entomology, College Park, MD. 23 Sep.
	<b>Tully K</b> . <i>Balancing food and the environment: local strategies in a global food system.</i> National Socio-environmental Synthesis Center, Annapolis, MD. 26 Apr.
2015	<b>Tully K</b> , Sustainable intensification of agriculture: Balancing food and environmental objectives. Dept. of Biology - University of Maryland, MD. 2 Feb.
2014	<b>Tully K</b> , Sustainable intensification of agriculture: Balancing food and environmental objectives. University of California Berkeley, Berkeley, CA. 13 Feb.
	<b>Tully K</b> , <i>Nutrient management for food and the environment</i> . University of Guelph, Ontario, Canada. 19 Feb.
	<b>Tully K</b> , Sustainable intensification of tropical agriculture: Balancing yields, the environment, and human well-being. Earlham College: Richmond, IN. 24 Feb

**Tully K**, Sustainable intensification of agriculture: Balancing food and environmental objectives. University of Maryland, College Park, MD. 30 Mar.

2013 **Tully K**, *Nutrient use and the sustainable intensification of agriculture*. University of California Davis, Davis, CA. 6 May.

Invited Symposia – 1 total

2019 **Tully K**, *Making science relevant to farmers.* American Association for the Advancement of Science, Washington DC. 15 Feb.

Organized sessions – 7 total

2019 **Tully K.** Agroecosystems in transition: sea level rise and saltwater intrusion alter biogeochemical cycling in coastal farmlands. Marsh Resilience Summit, Williamsburg, VA. 6 Feb.

Session: Marshes, Agriculture, and Industry; Organizers: Keryn Gedan

- 2018 **Tully K.** *Nitrogen on farms: strategies for mitigating losses in a changing climate.* American Geophysical Union Annual Meeting, Washington DC. 10 Dec. Session: Centennial Challenge: The Bioatmospheric N Cycle—N Emissions, Transformations, Deposition, and Terrestrial and Aquatic Ecosystem Impacts; Organizers: Meredith Hastings, Maya Almaraz, Rebecca Ryals.
- 2017 **Tully K.** Coastal agroecosystems in transition: saltwater intrusion and nutrient dynamics. Ecological Society of America Annual Meeting, Portland OR. 9 Aug. Session: Our sinking coasts: Sea level rise effects on coastal ecosystem services; Organizers: **Tully K** and Gedan K

**Tully K,** Hickman J, Russo T, Neill C, and Palm C. *The fate of nitrogen and controls of nitrogen loss under intensifying Africa maize cultivation.* International Food Security Symposium. University of Illinois at Urbana-Champaign. 4 Apr.

Session: Soil and water; Organizer: Peter Goldsmith

2016 **Tully** K, Gedan K, Weissman D\*\*, and Jordan T. *The effects of saltwater intrusion on nutrient transport in agroecosystems of the Atlantic Coastal Plain*. RAE-TCS Annual Meeting, New Orleans, LA. 12 Dec.

Session: Sea level rise, marsh migration, and coastal land conversion; Organizer: Keryn Gedan

2015 **Tully K**, Gedan K, Jordan T. *Rising sea-level effects on plant-nutrient interactions at the boundary of migrating tidal marsh and farmland.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting, Minneapolis, MN. 14 Nov

Session: Wetland response to climate change; Organizer: Bruce Vasilas

**Tully K**, Russo T, Hickman J, Neill C, Palm C. *Greening the African Green Revolution: Exploring agroecological transitions in East Africa.* Ecological Society of America Annual Meeting, Baltimore, MD. 12 Aug

Session: Putting Agroecology to Work: From Science to Practice and Policy; Organizer: Marcia DeLonge

Agencies and organizations - 5 total

2018 **Tully K.** *Ecosystems in transition: sea-level rise unlocks agricultural legacies.* Botanical Society of Washington, Washington, DC. 1 May. **Tully K.** *Water and agriculture.* The Woodrow Wilson International Center for Scholars, Washington, DC. 30 May.

2016 **Tully K**. *Research as an agroecologist and community farmer*. Northeast Region Urban Agriculture and Sustainability Meeting, University of DC, Washington, DC. 24 Jun.

**Tully K**, Weissman D\*\*, Gedan K, Jordan T. *Saltwater-induced nutrient transport from agricultural landscapes in the Atlantic Coastal Plain.* Romanian Delegation for the World Bank, College Park, MD. 24 May.

2015 **Tully K**. *Climate Change and Agriculture: Adaptation and Mitigation.* American Embassy, Hanoi Vietnam, 27 Dec.

Invited lectures in University courses – 9 total

- 2018 Food Security and food waste, 6 Mar, PLSC 425 Urban Sustainability. University of Maryland, College Park, MD. Instructor of record: Andrew Ristvey
  - Instructor of record: Andrew Ristvey
- 2017 *Climate change in agriculture: adaptation and mitigation*, 4 Sep, PLSC 125: Feeding 9 Billion. University of Maryland, College Park, MD.

Instructor of record: Shunyuan Xiao

Nutrient cycling in agroecosystems, 12 Sep, PLSC 125: Feeding 9 Billion

Instructor of record: Shunyuan Xiao

*Major food crops and alternative food sources,* 10 Oct, PLSC 125: Feeding 9 Billion. University of Maryland, College Park, MD.

Instructor of record: Shunyuan Xiao

*Urban agriculture*, 30 Oct, LARC 151: Urban Agriculture: Designing and Assessing Edible Landscapes. University of Maryland, College Park, MD.

Instructor of record: Dennis Nola

*Agroecology*, 14 Mar, PLSC 425 Urban Sustainability. University of Maryland, College Park, MD.

Instructor of record: Andrew Ristvey

2016 *Climate change in agriculture: adaptation and mitigation*, 6 Sep, PLSC 125: Feeding 9 Billion. University of Maryland, College Park, MD.

Instructor of record: Shunyuan Xiao and Burkhard Schultz

*Agroecology*, 24 Mar, PLSC 425 Urban Sustainability. University of Maryland, College Park, MD.

Instructor of record: Steve Cohan

2015 *Distribution and types of crops*, 24 Sep. BSCI 215: Global Sustainability. University of Maryland, College Park, MD.

Instructor of record: Keryn Gedan

#### II.C.2. Refereed Presentations

\* indicates undergraduate student | \*\* indicates graduate student | \*\*\* indicates post-doctoral researcher First person is the speaker unless otherwise noted

#### Contributed oral sessions - 24 total

2019 **Tully K**, Weissman D\*\* *Saltwater intrusion changes soil chemistry on coastal farmlands with impacts for water quality.* Soil Science Society of America Annual Meeting, San Diego, CA. 8 Jan.

Gaimaro J<sup>\*\*</sup>, Meisinger JJ, Kratochvil R, **Tully K.** *Cover crop mixtures reduce nitrogen leaching compared to monocultures in the mid-Atlantic region.* Soil Science Society of America Annual Meeting, San Diego, CA. 8 Jan.

Kottkamp A\*\*, Palmer M, **Tully K.** *Hydrologic drivers of soil organic carbon stabilization in seasonally-saturated wetlands.* Soil Science Society of America Annual Meeting, San Diego, CA. 8 Jan.

2018 **Tully K**, Weissman D\*\*, Jordan T, and Miller J. *Agroecosystems in Transition: Sea Level rise and Saltwater Intrusion Alter Biogeochemical Cycling in Coastal Farmlands* American Geophysical Union Annual Meeting, Washington, DC. 12 Dec.

De la Reguera E<sup>\*\*</sup>, Palmer M, **Tully K.** *Farming carbon: the link between saltwater intrusion and carbon storage in coastal agricultural fields.* American Geophysical Union, Washington, DC. 13 Dec.

**Tully K,** Weissman D\*\*, O'Neal K, Epanchin-Niell R. *Extent and impact of sea-level rise and saltwater intrusion on coastal farm sin the Chesapeake.* American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 7 Nov.

Thapa R\*\*, Mirsky S, **Tully K**, Schomberg H, Reberg-Horton C, Gaskin J, Cabrera M, Sweep E. *Cover crops reduce nitrate leaching in agroecosystems: A global meta-analysis.* American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 5 Nov

Thapa R\*\*, Mirsky S, **Tully K.** *Cover crop decomposition in no-till corn fields: Controlling factors.* American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 6 Nov.

Ackroyd V<sup>\*\*\*</sup>, **Tully K**, Mirsky S. *The Northeast Cover Crop Council: Progress and future plans*. American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 6 Nov.

**Tully K** and Weissman D<sup>\*\*</sup>. *The invisible flood: The extent and impact of sea-level rise and saltwater intrusion on coastal farmlands.* Ecological Society of America Annual Meeting. New Orleans, LA. 8 Aug.

Weissman D<sup>\*\*</sup>, **Tully K.** Saltwater intrusion and nutrient cycling on coastal farmland. Society of Wetland Scientists Meeting. Denver, CO. 31 May.

2017 Thapa, R\*\*, Poffenbarger H, **Tully K**, Ackroyd V\*\*\*, Kramer M, Mirsky S. *Biomass Production and Nitrogen Accumulation By Hairy Vetch-Cereal Rye Mixtures: A Meta-Analysis.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting Annual Meeting. Tampa, FL. 24 Oct.

Ackroyd, V\*\*\*, Mirsky S, **Tully K**. *First Steps: Creation of the Northeast Cover Crops Council and initial development of outreach products.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Tampa, FL. 25 Oct.

**Tully K**, Wyner J\*, and Weissman D\*\*, *Sea-level rise unlocks agricultural legacies on Maryland's Lower Eastern Shore.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Tampa, FL. 24 Oct.

**Tully K**, Wyner J\*, and Weissman D\*\*. *Soils in transition: Sea-level rise unlocks agricultural legacies.* Ecological Society of America Annual Meeting, Portland, OR. 8 Aug.

Huddell A, Galford G, Menge D, **Tully K**, Hickman K, Macedo M, Palm C, and Neill C. *Nitrogen losses from tropical agroecosystems.* Ecological Society of America Annual Meeting. Portland, OR. 9 Aug.

Otte B<sup>\*\*</sup>, Schomberg H, Mirsky SB, and **Tully K.** *Cereal rye (Secale cereale) cover crop can reduce reactive N distribution in soil profiles of a no-till agroecosystem.* Ecological Society of America Annual Meeting. Portland, OR. 10 Aug.

Weissman D\*\*, Gedan K, and **Tully K.** Saltwater intrusion and legacy nutrients release in coastal farmland. Ecological Society of America. Portland, OR. 8 Aug.

2016 **Tully K**, Weissman D\*\*, Gedan K, Jordan T. *The effects of saltwater intrusion on phosphorus transport in agroecosystems of the Atlantic Coastal Plain* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Phoenix, AZ. 6 Nov.

Ackroyd VJ\*\*\*, Mirsky SB and **Tully K**. *The Northeast Cover Crops Council: Encouraging and Supporting Cover Crop Use in the Northeast US.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Phoenix, AZ. 6 Nov.

Otte B\*\*, Mirsky SB, Schomberg H, **Tully K**. *Managing Water and Nitrogen in No-till Corn Production with a Cereal Rye Cover Crop.* American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Phoenix, AZ. 7 Nov.

- 2013 **Tully K**, Hickman J, and Palm C, *The effects of the African Green Revolution on nitrogen losses from two contrasting soil types in sub-Saharan Africa*. Ecological Society of America. Minneapolis, MN. 7 Aug.
- 2010 **Tully K** and Lawrence D. Canopy and leaf diversity regulate patterns of decomposition and nutrient release in a coffee agroforest. Ecological Society of America Annual Meeting. Philadelphia, PA. 4 Aug.
- 2007 **Tully K** and Lawrence D. *Litter nutrients in tropical secondary forests in response to climate variability*. Ecological Society of America Annual Meeting. San Jose, CA. 9 Aug.
- II.C.3. Refereed Posters: Total = 8
- 2019 Wang Z<sup>\*\*\*</sup>, Timlin D, **Tully K.** *An application of time domain reflectometry in soil electrical conductivity measurement.* Soil Science Society of America Annual Meeting, San Diego, CA. 7 Jan.
- 2018 Kottkamp A, Palmer M, **Tully K.** *Hydrologic drivers of soil organic carbon stabilization in seasonally-saturated wetlands.* American Geophysical Union Annual Meeting, Washington, DC. 11 Dec.

Thapa R\*\*, Mirsky S, **Tully K.** *Why do cover crops reduce nitrate leacing more effectively: A meta-analysis.* American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 6 Nov.

Iona A L, Reberg-Horton C, Timlin D, Thapa R<sup>\*\*</sup>, Schomberg H, **Tully K**, Gaskin J, Cabrera M. *Cover crop effects on corn yield*. American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 6 Nov.

Ackroyd V<sup>\*\*\*</sup>, **Tully K,** Mirsky S. *The Northeast Cover Crop Council: Progress and future plans.* American Society of Agronomy-Crop Science Society of America Annual Meeting, Baltimore, MD. 6 Nov.

- 2016 Ackroyd V\*\*\*, Mirsky S, **Tully K**. The Northeast Cover Crops Council: Encouraging and Supporting Cover Crop Use in the Northeast US. American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Phoenix, AZ. 7 Nov.
- 2015 Otte B\*\*, Mirsky S, Rice C, Schomberg H, Tully K. Allelochemicals from cereal rye for weed suppression. American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting. Minneapolis, MN. 17 Nov.
- 2014 **Tully K**, Russo T, Hickman J, Neill C, and Palm C, *Predicting nitrogen leaching losses from intensifying agriculture in sub-Saharan Africa*. American Geophysical Union Annual Meeting. San Francisco, CA. 17 Dec.
- II.C.4. Non-Refereed Presentations: Total = 6
- 2019 **Tully K**, Gedan K, Miller J, Epanchin-Niell. *Extent and impact of sea-level rise and saltwater intrusion on coastal farms.* Lower Shore Agronomy Day, Princess Anne MD. 30 Jan.
- 2017 **Tully K**, Koivunen E, Swett C. *Organic soil amendments affect soil quality and grey mold.* Strawberry Twilight Extension Presentation at Wye Research and Education Center, Queenstown, MD. 24 May.
- 2016 Griffith K<sup>\*\*</sup>, **Tully K**. *Cover Crop Mixtures to Reduce Agricultural Nitrate Loss to the Chesapeake Bay.* Third Annual Graduate Student Rural Sociology Conference. Pennsylvania State University. State College, PA. 13 Feb.

Weissman D<sup>\*\*</sup>, Gedan K, **Tully K**. *Salt-water intrusion and legacy phosphorus release from coastal farmland*. Third Annual Graduate Student Rural Sociology Conference. Pennsylvania State University. State College, PA. 13 Feb.

Weissman D\*\* and **Tully K.** Saltwater intrusion and legacy nutrient release from coastal farmland. Farm to Phrag Workshop: National Socio-Environmental Synthesis Center. Annapolis, MD. 26 Feb.

- 2015 **Tully, K**. *Growing maize efficiently in sub-Saharan Africa: the interactions of soils and fertilizer.* Annual Symposium in Plant Biology. College Park, MD. 28 May.
- 2011 **Tully K** and Lawrence D, *Effects of management and canopy trees on nutrient pools, retention and loss from coffee agroforests.* Environmental Sciences Seminar Series. Charlottesville, VA. 10 Feb.
- II.C.5. Non-Refereed Posters: Total = 9
- De la Reguera E, Palmer M, Gedan K, Tully K. Impact of salinity on plant germination and survival on saltwater-intruded agricultural fields. Marine Estuarine and Environmental Sciences Colloquium Research Poster Session. UMCES Appalachian Laboratory Frostberg, MD. 5 Oct.
  Kottkamp A, Noveno B, Tully K, Palmer M. Does hydrology promote soil carbon stability in seasonal wetlands? Marine Estuarine and Environmental Sciences Colloquium Research Poster Session. UMCES Appalachian stability in seasonal wetlands? Marine Estuarine and Environmental Sciences Colloquium Research Poster Session. UMCES Appalachian Laboratory Frostberg,

MD. 5 Oct.

Weissman D, **Tully K**. Our changing coastlines: Adapting agricultural lands to sealevel rise and saltwater intrusion. Global Challenges: Building Healthy Food Systems, College of Agriculture and Natural Resources. College Park, MD. 4 Oct. De la Reguera E, Palmer M, Gedan K, **Tully K.** Impact of salinity on plant germination and survival on saltwater-intruded agricultural fields. Global Challenges: Building Healthy Food Systems, College of Agriculture and Natural Resources. College Park, MD. 4 Oct

- 2017 Ackroyd V, Mirsky S, **Tully K**. The Northeast Cover Crops Council: Encouraging and Supporting Cover Crop Use in the Northeast US (poster). Midwest Cover Crops Council meeting. Grand Rapids, MI. 14 Mar.
- Yevoo E\*, Weissman D\*\*, Tully K. Undergraduate Research Day University of Maryland. College Park, MD. 26 Apr.
   Wyner, WJ\*, Weissman D\*\*, Tully K. Environmental Science and Technology Capstone Poster Session. College Park, MD. 12 May.
- Ackroyd V, Mirsky S, Tully K. The Northeast Cover Crops Council: Encouraging and Supporting Cover Crop Use in the Northeast US. Southern Cover Crops Council meeting. Goldsboro, NC. 20 July.
   Otte B\*\*, Mirsky S, Rice C, Tully K, Schomberg H. *Allelochemicals from Cereal Rye for Weed Suppression.* Northeastern Weed Science Society Annual Meeting. Philadelphia, PA. 4 Jan.
- II.C.6. Workshops

Invited Workshops = 2 total

- 2018 Soil as a Social-Ecological Feedback, National Environmental Synthesis Center. Annapolis, MD. 17-19 Sep.
- 2016 Data needs for implementing an N surplus framework, Environmental Defense Fund. Washington, DC. 20 Jul.

Workshops Organized = 4 total

- 2018 Saltwater Intrusion on the Eastern Shore Stakeholder workshop. Princess Anne Civic Center, Princess Anne, MD. 21 Feb.
- Co-organizers: Tully K and Gedan K (20 participants including organizers)
  The effects of sea-level rise and saltwater intrusion on wetland nutrient transport and vegetation dynamics in the North American Coastal Plain, National Environmental Synthesis Center. Annapolis, MD. 5-7 Apr.

Co-organizers: **Tully K** and Gedan K (14 participants including organizers)

2016 From Farm to Phrag: Eastern Shore Research Network Workshop: University of Maryland/SESYNC: Annapolis, MD. 26 Feb (all day); Co-organizers: **Tully K** and Gedan K (12 participants including organizers) Northeast Cover Crop Council Meeting. National Agricultural Library, Beltsville, MD. 15-16 Nov; Co-organizers: Mirsky S, Ackroyd V, **Tully K** (40 participants including organizers)

#### II.D. Professional and Extension Publications

- II.D.1. Reports and Non-Refereed Monographs
- 1. Status of trends of land degradation and restoration and associated changes in biodiversity and ecosystem function. Ch.4 *In* The IPBES assessment report on land degradation and restoration. 2018. Montanarella, L., Scholes, R., and Brainich, A. (eds.). Secretariat of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, Bonn, Germany. 744 pages.
- Neill C, Palm CA, Lefebvre P, Tully K. 2016. Using Soil Characteristics to Target Sustainable Intensification of Maize-based Agriculture in East Africa. Report to International Maize and Wheat Improvement Center (CIMMYT).
- II.D.2. Refereed Extension Publications
- 1. Miller, J, Adkins J, and **Tully K.** Providing Aerial Images Through UAVs. Fact Sheet 1056. UME University of Maryland, College Park. 6pp.

#### II.E. Completed Creative Works

- II.E.1. Websites
- <u>www.agroecologylab.org</u> Laboratory website with biographies, blogs, methods and useful material for graduate students with a focus on women and minorities in science.
- <u>www.columbiaheightsgreen.org</u> Designed for the Columbia Heights Green, an urban farm in northwest Washington, DC that I manage and direct.
- <u>www.northeastcovercrops.com</u> Website for the Northeast Cover Crops Council, a clearing house and database for cover crop data in the northeastern US.

#### II.F. Sponsored Research and Programs – Administered by the Office of Research Administration (ORA)

#### II.F.1. Grants

Summary of productivity		
Туре	My portion	Projects Total
Active competitive funding	\$1,555,055.00	\$7,605,009.00
Active non-competitive funding	\$228,000.00	\$228,000.00
Pending competitive funding	\$685,176.00	\$685,176.00
Past competitive funding	\$31,425.00	\$31,425.00
Past non-competitive funding	\$60,000.00	\$60,000.00
Contracts	\$22,109.00	\$22,109.00
Competitive funding awarded to my students	\$156,000.00	\$156,000.00

-	etitive funding non-ORA itive funding non-ORA	\$0 \$50,000.00 <b>\$2,806,765.00</b>	\$0 \$50,000.00 <b>\$8,865,719.00</b>
Active Compe	etitive Funding National Institute of Food and Agricu food production systems challenge a Cover crops: the cornerstone of water r	area	
2018-2022	face of increasing demand and climate Lead PI: Reberg-Horton at North Caroli Co-PI: K Tully at University of Maryland	<i>change</i> na State University	Total: \$5,000,000 Tully: \$308,280
2018-2020	Harry Hughes Center for Agroecolog Building coastal resiliency: adapting cro saltwater intrusion to balance economic environmental health Lead PI: K Tully at University of Marylan	opping systems to viability and	Total: \$126,913 Tully: \$79,258
2018-2023	National Institute of Food and Agricu Agroecosystems in a Changing Clim Adapting agroecosystems to saltwater i mitigating nutrient losses from coastal for Lead PI: K Tully at University of Marylan	ate Challenge Are intrusion and farmlands	<b>a</b> Total: \$1,129,250 Tully: \$566,888
2017-2019	Northeast Sustainable Agriculture Re Education Optimization of starter N fertilizer applic planted into a cereal rye cover crop Lead PI: K Tully at University of Marylan	cations for corn	Total: \$199,519 Tully: \$99,519
2017-2018	Maryland Grain Producers Utilization Evaluation of Cereal/Clover Cover Crop Production System Co-Pls: K Fisher, R Kratochvil, and K T Maryland	o <i>Mixtures in Corn</i> ully at University of	Total: \$6,000
2016-2019	United States Dept of Agriculture – C Innovation Grant Decision support tool for cover crops: C nitrogen conservation Lead PI Reberg-Horton at North Carolir Co-PI: K Tully at University of Maryland	Crediting water and na State University I	Total \$998,470 Tully \$350,250
2016-2019	Northeast Sustainable Agriculture Re Education The Northeast Cover Crops Council: Bu and online decision support tools Lead PI: K Tully at University of Marylan	uilding the network	Total \$144,860

Active Non-Competitive Funding

2015-2018	United States Dept of Agriculture – Beltsville Agricultural Research Center Special Cooperative Agreement: Effect of cover crop growth stage and quality on allelochemical bioavailability in soil rhizosphere Lead PI: K Tully at University of Maryland	PI \$48,000
2017-2022	United States Dept of Agriculture – Beltsville Agricultural Research Center Special Cooperative Agreement: Improved Description of Soil, Hydrologic, and Cover Crop Processes for Models Lead PI: K Tully at University of Maryland	PI \$180,000
Pending Com	petitive Funding	
2018-2023	National Science Foundation CAREER: Resist, Retreat, or Restore – a comparison of land management practices on the Eastern Shore in response to saltwater intrusion and their impacts of environmental outcomes for the Chesapeake Bay Lead PI: K Tully at University of Maryland	PI \$685,176
Past Competi	ive Funding MADE CLEAR Climate Change in Higher Education	
Past Competing 2017-2018	MADE CLEAR Climate Change in Higher Education Grant Climate Change in Maryland: Cross-institutional discovery of on-farm mitigation & adaptation	PI \$4,625
	MADE CLEAR Climate Change in Higher Education GrantClimate Change in Maryland: Cross-institutional discovery of on-farm mitigation & adaptationLead PI: K Tully at University of MarylandNational Socio-environmental Synthesis Center Workshop Funding: The effects of sea-level rise and saltwater intrusion on wetland nutrient transport and vegetation dynamics in the Atlantic Coastal Plain Co-PIs: K Tully and K Gedan	PI \$4,625 PI \$10,000
2017-2018	MADE CLEAR Climate Change in Higher EducationGrantClimate Change in Maryland: Cross-institutional discoveryof on-farm mitigation & adaptationLead PI: K Tully at University of MarylandNational Socio-environmental Synthesis CenterWorkshop Funding: The effects of sea-level rise andsaltwater intrusion on wetland nutrient transport andvegetation dynamics in the Atlantic Coastal Plain	

Past Non-Con	npetitive Funding	
United States Dept of Agriculture – Beltsville Agricultural Research Center2015-2017Special Cooperative Agreement: Evaluating cover crop for nitrogen recycling in Maryland Grain Crop Systems Lead PI: K Tully at University of Maryland		PI \$60,000
II.F.2. Co 2017-2018	ntracts <b>The Organic Center</b> Soil health on organic farms. Funds the research and writing of a scientific review article on management practices on organic farms that support soil health. Funds PI and student salary. Lead PI: K Tully at University of Maryland	PI \$22,109
II.F.3. Oth 2018-2020	ner Competitive Funding Awarded to my Students Northeast Sustainable Agriculture Research and Education Getting legume cover crops to work in Mid-Atlantic field crop rotations Awarded to MS student, Cara Peterson	\$14,000
2018	Annie's Homegrown Sustainable Agriculture Scholarship Awarded to MS student, Cara Peterson	\$10,000
2017-2019	Northeast Sustainable Agriculture Research and Education Effect of cover crops on nitrogen and soil water dynamics in no-till corn systems Awarded to PhD student, Resham Thapa	\$15,000
2017-2018	Maryland Sea Grant Fellowship Competition Saltwater intrusion and legacy nutrient release across coastal farmland Awarded to PhD student, Danielle Weissman	\$45,000
2016-2017	Garden Club of America Coastal Wetlands Scholarship Awarded to masters student, Danielle Weissman United States Dept of Agriculture – National Institute	\$5,000
2016-2019	for Food and Agriculture Postdoctoral Fellows program: Its time has come – Creation of multi-state, multi-agency council to support cover crop use in the mid-Atlantic region Supports postdoctoral research fellow, Victoria Ackroyd	\$76,000

#### II.G. Gifts, and Funded Research not administered by ORA

#### Past Competitive Funding (not administered through ORA)

2017-2018	Integrated Agriculture and Natural Resources Extension and Research Program (seed grant) Best management practices for mitigating and adapting to saltwater intrusion on coastal farmlands in eastern Maryland Co-PIs: K Tully and J Miller at University of Maryland	PI \$40,000
2014-2015	ADVANCE – University of Maryland Seed Grant Rising sea-level effect on plant-nutrient interactions at a novel boundary between tidal marsh and chicken farm Co-PIs: K Tully and K Gedan at University of Maryland	PI \$20,000
2014-2015	Maryland Agricultural Experiment Station Mapping nitrogen storage and release from cover crops for variable rate fertilization in corn using multispectral imagery Co-PIs: K Tully and R Weil at University of Maryland	PI \$30,000

#### II.H. Research Fellowships, Prizes and Awards

- 1. 2018 UMD Research Scholarship Award (RASA) 1 semester of teaching relief
- 2. 2018 Excellence in Research Award for UMD College of Agriculture and Natural Resources
- 3. 2018 Junior Faculty Award for UMD College of Agriculture and Natural Resources

#### III. Teaching, Extension, Mentoring, and Advising

#### III.A. Courses Taught

Course ID	Course Name	Credits	Semester	# Enrolled
PLSC303	Global Food Systems	3	Fall 2015	19
PLSC405	Agroecology	3	Spring 2016	12
PLSC605	Advanced Agroecology	3	Spring 2016	4
PLSC405	Agroecology	3	Fall 2016	9
PLSC605	Advanced Agroecology	3	Fall 2016	4
PLSC619	Seminars in Plant Science	1	Fall 2016	7
ENST471	Capstone in ENST	3	Fall 2016	1
PLSC619	Seminars in Plant Science	1	Spring 2017	9
PLSC303	Global Food Systems	3	Spring 2017	21
ENST472	Capstone in ENST	3	Spring 2017	1
PLSC405	Agroecology	3	Fall 2017	9
PLSC605	Advanced Agroecology	3	Fall 2017	1

#### III.B. Advising: Research or Clinical

III.B.1. Undergraduate (research internships – paid and unpaid)			
Name	Years	Institution	Project Title
Courtney Garbee	2015-2016	UMD (PSLA)	Nitrogen cycling in cover crop systems
W. Jesse Wyner	2016-2017	UMD (ENST)	Soils in transition: nutrient release from coastal farms

Benjamin Swartz	2016	UMD (BIOL)	Soils in transition: nutrient release from coastal farms
Phil Evich	2017	UMD (PSLA)	Urban agriculture: building community farms
John Dietrich	2016-2018	UMD (ENST)	Saltwater intrusion on coastal farms
Edem Yevoo	2016	UMD (ENST)	Saltwater intrusion on coastal farms
Natalie Agee	2016	UMD (ENST)	Saltwater intrusion on coastal farms
Katrina Vaitkus	2016	UMD (ENST)	Nitrogen release from cover crop residues
Tony Pham	2017	Boston Univ.	Saltwater intrusion on coastal farms
Nicholas Clark	2017	UMD (PSLA)	Saltwater intrusion on coastal farms
Karla Rosales	2017	UMD	Saltwater intrusion on coastal farms
Alexis Boytim	2017	UMD (ENST)	Saltwater intrusion on coastal farms
Benjamin Clark	2017	UMD (PSLA)	Nitrogen release from cover crop residues
John Dietrich	2017-2018	UMD (ENST)	Nitrogen release from cover crop residues
Aubry Wiechecki	2018	UMD (ENST)	Saltwater intrusion on coastal farms
Christina Bychkov	2018	UMD (ENST)	Nitrogen cycling in cover crop systems
Avi Goldsmith	2017-2018	UMD (ENST)	Nitrogen cycling in cover crop systems
Andrew Mandich	2018	UMD (ESPM)	Saltwater intrusion on coastal farms
Bianca Noveno	2018	UMD (ENST)	Carbon storage in geographically isolated wetlands
Louisa Kimmell	2018	Tufts Univ	Saltwater intrusion on coastal farms
Taylor Brinks	2018	UMD (ENST)	Saltwater intrusion on coastal farms
Ethan Gaudmans	2018	UMD (ENST)	Saltwater intrusion on coastal farms
Kenny Polk	2018	UMD (ENST)	Saltwater intrusion on coastal farms
Zach Johnson	2018	UMD (ENST)	Saltwater intrusion on coastal farms

# III.B.2. Master's students

\*indicates graduated

### Primary Advisor

Years	Name	Project Title
2017-present	Joshua Gaimaro	Nitrogen losses from rye and radish cover crop mixtures
2017-present	Anna Kottkamp	Carbon storage and release from upland soils in a freshwater wetland
2017-present	Elizabeth de la Reguera	Carbon dynamics in coastal farmlands undergoing saltwater intrusion
2018-present	Cara Peterson	Getting legume cover crops to work in the Mid- Atlantic
2015-2018	Briana Otte*	Managing Water and Nitrogen in No-till Corn Production with a Cereal Rye Cover Crop Graduated Jan 2018

<u>Committee</u>	Member	
Years	Name	Project Title

2018-2021	Dana Rushovich	Enhancing yield and nutritional content of grain legumes with sulfur management
2017-2020	Nate Richards	High residue cover crop systems and its influence on soil health, soil fertility, and grain yield
2013-2015	Claire Muerdter*	Multi-criteria vegetation selection for Maryland bioretention, with nitrogen focus

III.B.3. Doctoral students \*indicates graduated

Years	Name	Project Title
2016-present	Resham Thapa	Decomposition and nitrogen release from cover crops: Timing supply with demand
2015-present	Danielle Weissman	Advanced to candidacy The effects of salt-water intrusion on release of legacy phosphorous from coastal farmland Advanced to candidacy

# Committee Member

Years	Name	Project Title
2017-present	Alec Armstrong	Dissolved organic matter functions of depressional freshwater wetland ecosystems on the Delmarva Peninsula Advanced to candidacy
2016-present	Carrie Perkins	Historical genetic diversity of Vallisneria Americana in the Chesapeake Bay
2016-present	Dietrich Epp-Schmidt	Microbial agroecology: community assembly from the aggregate to the landscape Advanced to candidacy
2016-present	Dr. Jason Berg*	Genetic diversity and evolution in a mixed-mating plant, Mimulus guttatus, during the invasion process
2014-2018	Dr. Sarah Hirsh*	Deep soil nitrogen: Benefits of cover crop mixtures with forage radish

### III.B.4. Post-doctoral

# Primary Advisor

Years	Name	Research
2015-present	Dr. Victoria Ackroyd	Activities related to the formation of the Northeast
		Cover Crops Council (NECCC), uniting the cover crop councils around the USA, student mentorship.
2017-present	Dr. Zhuangji Wang	Research related to modifying and improving existing models of water and heat flow in soils, development of plant root dynamic models in soils.

# IV. Service and Outreach

# IV.A. Editorships, Editorial Boards, and Reviewing Activities Include participation for journals and other learned publications (print and electronic).

#### IV.A.1. Reviewing Activities for Journals and Presses

Agriculture, Ecosystems & Environment, Agricultural and Forest Meteorology, Agricultural Systems, Agroforestry Systems, Ecological Applications, Ecological Economics, Ecosystems, Environmental Research Letters, Field Crops Research, Geoderma, Journal of Applied Ecology, Journal of Environmental Management, Journal of Ecology, Nutrient Cycling in Agroecosystems, Oecologia, Renewable Agricultural and Food Systems, Science, Soil Science Society of America Journal, and Sustainability.

#### IV.A.2. Reviewing Activities for Agencies and Foundations

Served on Panel

Nov 1-3 2017	National Institute for Food and Agriculture, Bioenergy & Multifunctional
	Landscapes Panel Meeting, Full proposals. Washington, DC.
Oct 15-16 2015	National Science Foundation, Division of Environmental Biology,
	Ecosystems Cluster Full proposals. Washington, DC.
Apr 20-22 2015	National Science Foundation, Division of Environmental Biology,
	Ecosystems Cluster Pre-proposals. Washington, DC.

#### Ad-hoc Reviewer

Mar 2019 Oct 2018	Israel Science Foundation, New Investigator Grant Program Foundation for Food and Agriculture Research (FFAR), Seeding Solutions
	Grants
Dec 2017	Biotechnology and Biological Sciences Research Council (UK), Standard
	Program Grants
July 2017	Natural Sciences and Engineering Research Council of Canada, Strategic
	Partnership Grants

### IV.B. Committees, Professional & Campus Service

#### IV.B.1. Campus Service – Department

- 1. PSLA Weekly Seminar Social organizer- Fall 2015-2016
- 2. PSLA Seminar in Plant Science Committee member Fall 2014 to present
- 3. PSLA Graduate Admissions Committee member Spring 2015 to present
- 4. PSLA Merit Pay Committee Spring 2016-Fall 2017
- 5. PSLA Graduate Student Award Committee Spring 2015 to present
- 6. ENST Faculty Search Committee Soil Fertility Specialist, Fall 2016
- 7. PSLA Faculty Search Committee Agronomist, Spring 2017

#### IV.B.2. Campus Service – College Implementation Team: HEAH Strategic Initiative

1. Chair of the Soils and Environmental Quality Division of the Soil Science Society of America (2019)

# IV.C. Media Contributions

IV.C.1. TV

1. <u>Maryland Farm and Harvest</u>. Episode 509, 9 Jan 2018. Episode focused on my research on saltwater intrusion on the Lower Eastern Shore of Maryland and how farmers are adapting to rising seas.

# IV.C.2. Radio

- <u>National Public Radio.</u> Flooding And Rising Seas Threaten America's Oldest Farmland, 2 Jun 2018. Episode focused on my research on saltwater intrusion on the Lower Eastern Shore of Maryland and potential alternative crop rotations.
- 2. <u>WNYC's The Takeaway.</u> Sea-Level Rise Endangers Centuries-Old Farms in Maryland, 5 April 2018. Episode was a follow-up with reporter, Virginia Gewin, on a piece she wrote for The Atlantic on my research on saltwater intrusion and sea-level rise on the Lower Eastern Shore of Maryland.
- I.A.1. Digital Media
  - 1. <u>The Atlantic</u>, *The Slow-Motion Catastrophe Threatening 350-Year-Old Farms* by Virginia Gewin. 2 Mar 2018. Article focuses on my research on saltwater intrusion and sea-level rise on the Lower Eastern Shore of Maryland as well as other regions on the eastern seaboard.
  - <u>Hakai magazine</u>. Sea Level Rise Is Unlocking Decades-Old Pollution by Roberta Kwok. 10 Jan 2018. Article focuses on my research on the potential release of agricultural nutrients from farms as they are subjected to saltwater intrusion and sea-level rise.
  - 3. <u>Voice of America</u>: *Rising seas forcing changes on Maryland's historic Eastern Shore farms* by Steve Baragona. 29 Oct 2018. Includes a 3 minute video of research farm and farmer partner, Bob Fitzgerald. Article focuses on my research on the potential release of agricultural nutrients from farms as they are subjected to saltwater intrusion and sealevel rise.
  - 4. <u>Civil Eats</u>: Turning Salt-Damaged Fields into Marshes Could Save Maryland Farmland and The Chesapeake Bay.

# I.A.2. Blogs

1. My lab maintains a monthly blog: http://www.agroecologylab.com/agroecolab-blog

# I.B. Community & Other Service

- 1. I am the Community Coordinator of the Columbia Heights Green, a ¼-acre urban farm located in northwest Washington, DC. I direct weekly gardening activities, educational programs, and community service activities. We donate produce to local soup kitchens and other DC feeding programs. <u>www.columbiaheightsgreen.org</u>
- I.C. Service Awards and Honors
  - 1. Park Champion Award 2018 Washington Parks and People

# II. Other Information

Advanced Spanish Intermediate Swahili Beginning French Intermediate programming in R Registered Yoga Teacher