# **UNIVERSITY CURRICULUM VITAE**

DATE: April 5th, 2023

**NAME:** Emily V. Merchant

PRESENT TITLE: Assistant Professor

# **EDUCATION**:

A. Undergraduate

Rutgers University New Brunswick, NJ

B.S (Ecology, Evolution and Natural Resource Management) 2011

B. Graduate

Rutgers University New Brunswick, NJ PhD (Plant Biology)

2023

# **ACADEMIC APPOINTMENTS:**

Urban-Global Public Health Rutgers University (School of Public Health) Assistant Professor July 2023

### **CERTIFICATION:**

Online Learning Skills, Rutgers University
Lifelong Learning in Inclusive and Equitable Teaching, Rutgers University
Agent Based Modeling Certificate, Transmitting Science, Barcelona Spain
Controlled Environmental Agricultural FarmTex Dyersville, IA
Better Process Control (food preservation), UC Davis

# MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

American Botanical Society Member 2021-Present

American Council of Medicinally Active Plants Student Ambassador 2020-Present

American Society for Nutrition Member 2018-Present

#### HONORS AND AWARDS:

School of Graduate Studies Travel Award Rutgers University 2023

Department of Plant Biology Travel Award Rutgers University 2022

Graduate Student Enhancement Award Rutgers University 2018

Teaching Assistant Professional Development Award Rutgers University 2018, 2017

Outstanding Senior Award Rutgers University 2011

Research Internship in Ocean Sciences REU Internship funded by NSF 2010

Class of 1944 Endowed Scholarship Rutgers University 2010

Associate Douglass Alumnae Scholarship Rutgers University 2010

#### **BOARDS OF DIRECTORS:**

Mirror of Hope Foundation Secretary 2022-Present

**SERVICE ON MAJOR COMMITTEES:** Page 2 of 3

**Editorial Boards** 

### TEACHING RESPONSIBILITIES:

- A. Lectures or Course Directorships
  - 1. Rutgers University, Sustainability: Tackling Food Waste, Agriculture and Food Systems Department, teaching assistant for entire course, Fall 2022
  - 2. Rutgers University, Introduction to Agriculture and Food Systems, Agriculture and Food Systems Department, teaching assistant for entire course, Fall 2022-Spring 2023
  - 3. Rutgers University, General Biology 115 and 116, Division of Life Sciences, teaching assistant for entire course, 2016-2022
  - 4. School of Public Health, Rutgers University, Global Food and Culture, Lecture: Case Studies from sub-Saharan Africa, Fall 2022
  - 5. School of Public Health, Rutgers University, Global and Public Health Nutrition, Lecture: The Influence of Food Environments on Food Security Resilience During the COVID-19 Pandemic: An Examination of Urban and Rural Differences in Kenya, Summer 2021, 22
  - 6. School of Public Health, Rutgers University, Global and Public Health Nutrition, Lecture: Food Systems: Case study in Kenya, Summer 2020
  - 7. Rutgers University, Agriculture and Food Systems Department, Feeding the World, Lecture: Barriers and Facilitators to Healthy Eating: Case study in Kenya, Fall 2019
  - 8. New Jersey Agricultural Extension Services 4-H, Global Food Security Presenter Series, Lecture: Experiences from Fieldwork in Nairobi, Kenya. Fall 2020
  - 9. Temple University, Horticulture Seminar, Lecture: Strengthening Vegetable Value Chains for Improved Nutrition in a Kenyan Slum, Fall 2020

## B. Research Training (other than Primary Mentorship)

Pre Doctoral Students:

- 1. Zahra Haiba, Rutgers University, Master of Public Health, 2022
- 2. Kevin Patel, Rutgers University, Master of Public Health, 2022
- 3. Kaeley Fiorentino, Rutgers University, George H. Cook Scholar, 2021-2022
- 4. Alyse Osher, Rutgers University, Master of Public Health, 2021
- 5. Iman Amer, Undergraduate thesis, Rutgers University, 2019
- 6. Han Nyuden, Undergraduate thesis, Rutgers University, 2018-2019

## **GRANT SUPPORT:**

- A. Principal Investigator
  - 1. Rutgers Center for Childhood Nutrition Research Seed Grant, Evaluation of a sack garden intervention on food security in Nairobi, Kenya, 2020, \$4,000
- B. Co-Investigator
  - 1. USDA 2022 Community Food Project, Interfaith-RISE Flouring Through Food Project. 2022-2026, \$373,000
  - Micronesia Conservation Trust, Climate-Resilient Food Security for Farming Households Across the Federated States of Micronesia. 2022-2023, \$245,000
     RUCAFE Seed Grant, Evaluation of an urban agriculture pilot program with recent immigrants and refugees in New Brunswick, NJ. 2020, \$3,000

## **PUBLICATIONS:**

- A. Refereed Original Article in Journal
  - Merchant, E.V., Odendo, M., Maiyo, N., Govindasamy, R., Morin, X.K., Simon, J.E., Hoffman, D.J. From income generation to health and nutrition: An evaluation of nutrition, culinary, and production interventions on food security, diet quality, and consumption of African Indigenous Vegetables in Western Kenya. Frontiers in Nutrition. 2023
  - 2. Downs, S.M., Kapoor, R., **Merchant, E.V.**, Sullivan, T., Singh, G., Fanzo, J., Ghosh-Jerath, S. Leveraging nutrient-rich traditional foods to improve diets among Indigenous populations in India; value chain analysis of finger millet and Kionaar leaves. *Foods.* 2022; 11:23:5001.010:3390/foods11233774. 2022

- 3. **Merchant, E.V.,** Fatima, T., Fatima, A., Maiyo, N., Mutuku, V., Keino, S., Simon, J.E., Hoffman, D.J., Downs, S.M. The influence of food environments on food security resilience during the COVID-19 Pandemic: an examination of urban and rural difference in Kenya. *Nutrients Multidisciplinary Digital Publishing Institute*. 2022;14:2939. 2022
- Merchant, E.V., Odendo, M., Ndinya, C., Nyabinda, N., Onyango, E., Maiyo, N., Downs, S., Hoffman, D.J., Simon, J.E. Barriers and facilitators of African Indigenous Vegetable preparation and consumption: a qualitative exploration. *Frontiers in Sustainable Food Systems*. 6(801527). <a href="https://doi.org/10.3389/fsufs.2022.801527">https://doi.org/10.3389/fsufs.2022.801527</a>.
- 5. Zivkovic, A., **Merchant, E.V. (co-first author)**, Nyawir, T., Hoffman, D.J., Simon, J.E., Downs, S. Strengthening vegetable production and consumption in a Kenyan informal settlement: a feasibility assessment of a sack garden intervention. *Current Developments in Nutrition*, nzac036. Doi: 10.1093/cdn/nzac036. 2022
- 6. Downs, S.M., Fox, E.L., Zivkovic, A., Mavros, T., Sabbahi, M., **Merchant, E.V.**, Mutuku, V., Okumu-Camerra, K., Kimenju, S. Drivers of food choice among women living in informal settlements in Nairobi, Kenya. *Appetite* 168(105748). Doi: 10.1016/j.appet.2021.105748. 2021
- 7. Patel, M., Lee, R., **Merchant**, E.V., Juliani, H.R., Simon, J.E., Tepper, B.J. Descriptive aroma profiles of fresh sweet basil cultivars (*Ocimum spp.*): Relationship to volatile chemical composition. *Journal of Food Science* 86, 3228–3239. 2021
- 8. Simon, J.E., Acquaye, D., Govindasamy, R., Asante-Dartey, J., Juliani, R., Diouf, B., Diatta, M., Langenhoven, P., Van Wyk, E., Hitimana, N., Seidel, D.K., **Merchant**, **E.V.,** Amekuse, L., Weller, S., Hoffman, D., Wu, Q.L. Building community resiliency through horticultural innovation. *Scientia*, 134, 13–21. https://doi.org/10.33548/SCIENTIA601. 2021
- 9. Simon, J.E., Weller, S., Hoffman, D., Govindasamy, R., Morin, X.K., Merchant, E.V., Dinssa, F.F., van Wyk, E., Byrnes, D., Odendo, M., Ndinya, C., Mvungi, H.H.A., Ochieng, J., Maiyo, N., Mataa, M., Shindano, J., Moonga, H.B., Yaninek, S.J., Wu, Q.L., Nyabinda, N., Afari-Sefa, V. Improving income and nutrition of smallholder farmers in eastern Africa using a market-first science-driven approach to enhance value chain production of African Indigenous Vegetables. *Journal of Medicinally Active Plants* 9(4):289-309. https://doi.org/10.7275/sj66-1p84. 2020
- 10. Brindisi, L., **Merchant**, E.V., Eliver, B., Odhiambo, J., Night, E., Nyawir, T., Nyabinda, N., Weller, S., Simon, J.E., Hoffman, D. Comparative nutritional analysis between African Indigenous Vegetables grown by urban farmers and those available for purchase in Kibera, Nairobi, Kenya: A Case Study. *Journal of Medicinally Active Plants* 9(3):166-180. https://doi.org/10.7275/01s0-mg44. 2020
- 11. Dinssa, F.F., Nyabinda, N., Byrnes, D.R., Ndinya, C., **Merchant**, **E.V.**, Simon, J.E. Performances of vegetable amaranth entries in yield and nutrient contents in Tanzania and Kenya, and variety release. *Journal of Medicinally Active Plants* 9(3):181-194. <a href="https://scholarworks.umass.edu/jmap/vol9/iss3/9">https://scholarworks.umass.edu/jmap/vol9/iss3/9</a>. 2020
- 12. Odendo, M., Ndinya-Omboko, C., **Merchant**, **E.V.**, Nyabinda, N., Minyatta-Onyango, E., Maiyo, N., Hoffman, D., Simon, J.E. Do preferences for attributes of African Indigenous Vegetables recipes vary between men and women? A case from Western Kenya. *Journal of Medicinally Active Plants* 9(3):126-132. <a href="https://scholarworks.umass.edu/jmap/vol9/iss3/4">https://scholarworks.umass.edu/jmap/vol9/iss3/4</a>. 2020
- Aldercamp, A.C., van Dijken, G.L., Lowry, K.E., Connelly, T.L., Lagerström, M., Sherrell, R.M., Haskins, C., Rogalsky, E., Schofield, O., Stammerjohn, S.E., Yager, P.L., Arrigo. K.R. Fe availability drives phytoplankton photosynthesis rates during spring bloom in the Amundsen Sea Polynya, Antarctica. 2015 Elem. Sci. Anth. 3: 000043 web. 2015
- 14. Schofield, O., Miles, T., Alderkamp, C.A., Lee, S., Haskins, C., **Rogalsky**, E., Sipler, R., Sherrell, R.M., Yager, P.L. In situ phytoplankton distributions in the Amundsen Sea Polynya measured by autonomous gliders. *Elem. Sci. Anth.* 2015

# B. Books, Monographs and Chapters

- 1. **Merchant, E.V.** and Simon, J.E. *Traditional and Indigenous Foods for Food Security and Food Sovereignty* in Encyclopedia of Human Nutrition, 4th Edition. 2022
- Hoffman, D.J, Merchant, E., Byrnes D.R., Simon, J.E. Preventing micronutrient deficiencies using African Beigenbus Vegetables in Kenya and Zambia. Sight and Life 32(2):177-181. 2018

#### PRESENTIONS:

- A. Scientific (Basic Science):
  - 1. 2022. **Merchant E.V.**, Odendo, M., Maiyo, N., Morin, X., Govindasamy, R., Simon, J.E., Hoffman, D. Improving consumption and production of African Indigenous Vegetables. International Union of Nutritional Sciences International Congress of Nutrition. Tokyo, Japan. December 3-10<sup>th</sup>, 2022. (Oral Presentation).
  - 2. **2021. Merchant,** E.V. Barriers and Facilitators of African Indigenous Vegetable Preparation and Consumption: A Qualitative Exploration, Power on Your Plate. World Vegetable Center. January 25-28th, 2021. (Oral Presentation)
  - 3. **2019.** Simon, J.E., Hoffman, D.J., Govindasamy, R., Weller, S., **Merchant**, **E.V.** Improving Nutrition with African Indigenous Vegetables, USAID Annual Meeting, Washington, D.C. (Poster)
  - 4. **2019.** Simon, J.E., Hoffman, D.J., Govindasamy, R., Weller, S., **Merchant**, **E.V.** Improving Nutrition with African Indigenous Vegetables: Nutrition Impact in Zambia and Kenya, USAID Annual Meeting, Washington, D.C. (Poster)
  - 2018. Merchant, E.V., Byrnes, D.R., Ondego, N., Downs, S., Weller, S., Hoffman, D.J. Simon, J.E. Training Women in Urban Agricultural Methods to Increase Access and Consumption of African Indigenous Vegetables, International Research Conference, University of California Davis, 2018 (Poster)
  - 6. **2018. Merchant, E.V.** Challenges in International Research, International Research Conference, University of California Davis, 2018 (Flash Talk)
  - 7. **2018.** Merchant, E.V., Carrieri, A., Odendo, M., Ondego, N., Chali, K., Van Wyk, E., Mbewe, M., Simon, J.E., Hoffman, D.J. Vegetable preferences in sub-regions of Zambia and Kenya, American Society for Nutrition Annual Meeting, Boston, MA, 2018 (Poster)
  - 8. **2018. Merchant,** E.V., Carrieri, A., Odendo, M., Ondego, N., Chali, K., Van Wyk, E., Mbewe, M., Simon, J.E., Hoffman, D.J. Women's Dietary Diversity in Kenya and Zambia, American Society for Nutrition Annual Meeting, Boston, MA, 2018 (Poster)