BIOGRAPHICAL SKETCH

Scott H. Brainard

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(a) Education & Training

University of Wisconsin Madison, WI Plant Breeding Ph.D, 2021

Wageningen University Wageningen, NL Plant Science M.Sc. cum laude, 2014

Swarthmore College Swarthmore, PA Philosophy B.A., 2009

(b) Research & Professional Experience

2021 – present Postdoctoral Researcher, University of Wisconsin–Madison

2018 – present Research Fellow, Savanna Institute

(c) Publications

Most closely related

- 1. S. H. Brainard, S. L. Ellison, P. W. Simon, J. C. Dawson, I. L. Goldman, Genetic characterization of carrot root shape and size using genome-wide association analysis and genomic-estimated breeding values, *Theoretical and Applied Genetics* (2021).
- 2. S. H. Brainard, J. A. Bustamante, J. C. Dawson, E. P. Spalding, I. L. Goldman, A digital image-based phenotyping platform for analyzing root shape attributes in carrot, *Frontiers in Plant Science* **12**, 1171 (2021).

Other significant publications

- 3. S. H. Brainard, K. J. Wolz, K. Keeley, A. Rodrigues, F.-J. Selosse, Overcoming Bottle-necks in the Midwest Hazelnut Industry: An Impact Investment Plan, https://www.savannainstitute.org/hazelnut-impact-investment-report/(2019).
- 4. S. H. Brainard, The impact of Indonesian agricultural policies on indigenous populations, natural resources and the economy, *U. Miami Inter-Am L. Rev* **43**, 165–193 (2011).

(d) Invited Talks

- 1. *The genetic control of market class in carrot* (Daucus carota *subsp.* sativus). Plant Animal Genome Conference XXIX. Virtual conference. January 8, 2022.
- 2. First chromosome-scale genome assemblies for Corylus americana. Plant Animal Genome Conference XXIX. Virtual conference. January 8, 2022.
- 3. *Improving the efficiency of hazelnut breeding using genomic data*. North American Agroforestry Conference. Virtual conference. July 1, 2021.
- 4. *Improving the efficiency of hazelnut breeding using genetic information*. Upper Midwest Hazelnut Development Initiative Annual Conference. Virtual conference. March 5, 2021.
- 5. Launching the Midwest Hazelnut Industry. Northern Nut Growers Association Annual Meeting. Iowa City, IA. July 28, 2019.

- 6. *Prospects and Bottlenecks in the Midwestern Hazelnut Industry*. Upper Midwest Hazelnut Development Initiative Annual Conference. Eau Claire, WI. March 9, 2019.
- 7. Using digital image-based phenotyping to investigate the genetic bases of root shape and market class in carrot. Vegetable Breeding Institute. Ithaca, NY. August 27, 2018.
- 8. Using digital image-based phenotyping to investigate the genetic bases of root shape and market class in carrot. 39th International Carrot Conference. Madison, WI. August 23, 2018.
- 9. Development of improved carrot germplasm for organic production systems through an understanding of market class genetics. Organic Seed Growers Conference. Corvallis, OR. February 18, 2018.

(e) Synergistic Activities

- 1. Reviewer for Frontiers in Ecology And Evolution, Plant Breeding Reviews
- 2. Lecturer in graduate-level courses for students in the Plant Breeding and Plant Genetics Program at the University of Wisconsin–Madison
- 3. Mentoring of graduate students in Horticulture (2) and Chemistry (1) PhD programs
- 4. Development of Java applications for pre-processing Illumina sequence data

(f) Selected funding

- 1. Ekhagastitelsen (Co PI), 2017–2020 Market Class Genetics and the Development of Improved Carrot Germplasm for Organic Production Systems \$162,000
- 2. USDA-CGC (Co PI), 2019–2020 Digital Root Phenotyping and Genotyping of the USDA-NPGS Carrot Collection \$27,500
- 3. Arnold Arboretum Jewett Prize (Co PI), 2020–2021 *De novo assembly of a draft genome for the American hazelnut (Corylus americana)* \$10,000
- 4. Wisconsin Specialty Crop Block Grant Program (Co PI), 2022–2023 *Breeding Cold Hardy Chestnuts for Wisconsin* \$81,000