

## CONTACT INFORMATION

phone: (515)783-4242

email: [keo.corak@gmail.com](mailto:keo.corak@gmail.com)

LinkedIn: <https://www.linkedin.com/in/keo-corak-b5764242/>

## EDUCATION

### **University of Wisconsin-Madison**

Ph.D. Plant Breeding and Plant Genetics, 2021

Title: Strategies to identify and introgress production and quality traits from genetic resources to elite carrot cultivars

*Advisor: Julie Dawson, Ph.D.*

### **University of Wisconsin-Madison**

M.S. Agroecology, 2018

### **Macalester College**

B.S. Biology, 2015 (*cum laude*)

## EMPLOYEMENT

**ORISE Post-Doctoral Fellow**, USDA-ARS Genomics and Bioinformatics Research Unit, Duration: June 2021-Present

**Post-Doctoral Research Associate**, Horticulture Department, University of Wisconsin-Madison, Duration: Jan 2021-May 2021

**Graduate Research Assistant**, Horticulture Department, University of Wisconsin-Madison, Duration: 2016-2020

**Research Assistant**, Section of Plant Biology, University of California-Davis, Duration: June 2014-August 2014

**Laboratory Intern**, Institute of Plant Molecular Biology National Scientific Research Center, Strasbourg, France, Duration: Jan 2014-May 2014

## PUBLICATIONS

1. **Corak, K. E.**, S. L. Ellison, P. W. Simon, D. M. Spooner, and J. C. Dawson. 2019. Comparison of Representative and Custom Methods of Generating Core Subsets of a Carrot Germplasm Collection. *Crop Sci.* 59:1107-1121. doi:10.2135/cropsci2018.09.0602

2. Ellison, S.L.\*, C. H. Luby\*, **K. E. Corak\***, K. M. Coe, D. Senalik, M. Iorizzo, I. L. Goldman, P. W. Simon, and J. C. Dawson. 2018. Carotenoid presence is associated with the *OR* gene in domesticated carrot. *Genetics*, 210(4):1497, 12. <https://doi.org/10.1534/genetics.119.301299>

## PRESENTATIONS

- 1. Corak, K.E.,** Genomic prediction for screening and selection from a carrot (*Daucus carota*) germplasm collection. Cornell University Graduate Student Plant Breeding Symposium. 2020. Online. Invited Speaker.
- 2. Corak, K. E.,** S. L. Ellison, C. H. Luby, P. W. Simon, D. M. Spooner, and J. C. Dawson. Development of genomic-prediction strategies for top height and flavor in a carrot (*Daucus carota*) germplasm collection. International Carrot Conference. 2018. Madison, WI. Oral presentation.
- 3. Corak, K. E.,** S. L. Ellison, C. H. Luby, P. W. Simon, D. M. Spooner, and J. C. Dawson. Genomic-based strategies for screening and selection of accessions from a Carrot (*Daucus carota*) germplasm collection. Populations, Evolutionary and Quantitative Genetics Conference. 2018. Madison, WI. Poster presentation.
- 4. Corak, K. E.,** S. L. Ellison, P. W. Simon, D. M. Spooner, and J. C. Dawson. Development of genomic-based strategies for screening and selection of accessions from a Carrot (*Daucus carota*) germplasm collection. National Association of Plant Breeders Annual meeting. 2017. Davis, CA. Invited speaker.

## HONORS & AWARD

- Roger Blobaum Student Travel Scholarship, 2016 & 2019**  
*\$800 in travel funding to present research at an academic conference. Awarded twice*
- Macalester Data Scientists.** HHMI grant to Macalester College, 2015  
*\$4400 awarded to conduct summer research at UC-Davis*
- Grant in Aid of Research.** Sigma Xi, 2013  
*\$500 awarded to fund an independent project at UMN-Twin Cities*
- Molecular Genetics and Proteomics REU.** NSF grant to the University of Minnesota, 2013  
*\$4500 awarded to conduct summer research at UMN-Twin Cities*

## MEMBERSHIPS & AFFILIATIONS

National Association of Plant Breeders  
Teaching Assistants Association, UW-Madison

## SERVICE ACTIVITIES

**Teaching Assistants Association, UW-Madison**  
*Chair, Contract Enforcement Committee (2020)*  
*Secretary, Executive Board (2019-2020)*  
*Chair, Bargaining Team (2018-2019)*

**Plant Sciences Graduate Student Council.** UW- Madison. 2018.  
*Journal Club Chair*

**Graduate Assistant Policies and Procedures Working Group.** UW-  
Madison. 2018-2020  
*Graduate Assistant Representative*

## TECHNICAL PROFICIENCIES

Statistical programming, genetic analysis, data management and visualization with R, TASSEL, LaTeX, Adobe Suite, Microsoft Office, SQL (beginner) and python (beginner). Working proficiency in French.