# Amy K. Webster

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## **EDUCATION**

Duke University

August 2015 - present
PhD candidate, Genetics and Genomics

Durham, NC

Research Advisor: Ryan Baugh NSF Graduate Research Fellow

University of Georgia

August 2011 - May 2015 Athens, GA

Bachelor of Science, Genetics

Bachelor of Science, Mathematics

Cumulative GPA: 3.97/4.00, summa cum laude with highest honors

Research Advisors: Kelly Dawe, Daniel Promislow

Goldwater Scholar

# **PUBLICATIONS**

**Webster AK**, Jordan JM, Hibshman JD, Chitrakar R, Baugh LR. 2018. Transgenerational Effects of Extended Dauer Diapause on Starvation Survival and Gene Expression Plasticity in *Caenorhabditis elegans*. *GENETICS*. Early online.

Hibshman JD, Doan AE, Moore BT, Kaplan REW, Hung A, **Webster AK**, Bhatt DP, Chitrakar R, Hirschey MD, Baugh LR. 2017. *daf-16*/FoxO promotes gluconeogenesis and trehalose synthesis during starvation to support survival. *eLife*. 6.

Burton NO, Furuta T, **Webster AK**, Kaplan RE, Baugh LR, Arur S, Horvitz HR. 2017. Insulin-like signaling to the maternal germline controls progeny response to osmotic stress. *Nature Cell Biology*. 19(3), 252-257.

**Webster AK**, Cieszewski R, Promislow DEL. 2014. The Role of Age-Structure in the Optimal Germination Fraction of Seeds. *Mathematical And Computational Forestry & Natural-Resource Sciences (MCFNS)*, 6(1), 26-35 (10).

# **PRESENTATIONS**

#### **Talks**

- Duke Epigenetics and Epigenomics Program Seminar (2017): "Proximal and transgenerational effects of long-term dauer diapause in *C. elegans*"
- Duke Development, Cell and Molecular Biology Department Seminar (2017): "Transgenerational effects of long-term dauer arrest in *C. elegans*"
- Duke Genetics Department Retreat (2017): "Regulation of gene expression during starvation in C. elegans"
- Duke Genetics Student Seminar (2017): "Transgenerational effects of dauer arrest in C. elegans"
- CURO Symposium at University of Georgia (2015): "Molecular and Genetic Analysis of the Ab10 Meiotic Drive Haplotype in Maize and Teosinte"
- CURO Symposium at the University of Georgia (2014): "Breaking Mendel's Laws: The Role of Abnormal Chromosome 10 in Meiotic Drive"

#### **Posters**

- Population, Evolutionary, and Quantitative Genetics Conference, Madison, Wisconsin (2018):
   "Ancestral life history and natural genetic variation shape starvation survival in *C. elegans*"
- International C. elegans Conference (2017): "Transgenerational effects of long-term dauer arrest"
- Aging, Metabolism, Stress, Pathogenesis, and Small RNAs in C. elegans Conference at the University
  of Wisconsin-Madison (2016): "Understanding persistent effects of L1 arrest, dauer arrest, and dietary
  restriction in the context of a fluctuating environment"
- Plant Center Retreat (2014): "Abnormal Chromosome 10 Exhibits Meiotic Drive in Zea mays parviglumis"

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- CURO Symposium at the University of Georgia (2014): "Breaking Mendel's Laws: The Role of Abnormal Chromosome 10 in Meiotic Drive"
- Summer Undergraduate Research Experience Symposium at Emory University (2012): "Characterization of *sig-1*-mediated Transgene Desilencing in *C. elegans*"

### **SELECTED AWARDS**

- NSF Graduate Research Program Fellowship (2015-2020)
- Preparing Future Faculty Program (2018-2019)
- Outstanding Undergraduate Thesis Award One genetics major chosen (2015)
- Cynthia Kenyon Outstanding Undergraduate Award One genetics major chosen (2015)
- Joy P. Williams Science Award One of two honors students (2015)
- Goldwater Scholarship (2014)

### MENTORING AND OUTREACH

- Mentor two undergraduates on research projects in lab (2017)
- Duke Outreach in Genetics and Genomics (DOinGG), Member (2015 present)
  - o SciTech Expo NC Museum of Natural Science (2018)
  - o Duke Alumni Weekend (2016, 2018)
  - o Creekside Elementary Science Night (2018)
  - NC Elementary Science Olympiad (2017)
  - o "Lean In" Women in Science NC School of Science and Math (2017)
  - o DNA Day 5K (2016, 2017)
  - Little River Elementary Science Night (2016)
  - Campout Carnival at Duke (2015, 2016)
  - Museum of Life and Science (2016)
- Duke Genetics Retreat Committee, Member (2017)
- Duke Genetics Recruitment Committee, Member (2015-2016)
- MathCOUNTS Outreach, Member (2011-2012), Head Coach (2012-2014), Executive Board (2014-2015)
- Journal of Young Investigators, Associate Editor (2012-2013), Biology Research Editor (2013-2015)

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