

DEREK MICHAEL WRIGHT

I graduated with a BSc in Biology from the [University of Regina](#) in 2012, followed by a MSc in Agrobiotechnology from [Justus-Liebig-Universität Gießen](#) (University of Giessen, Germany) in 2015. I now work in the Plant Sciences department at the [University of Saskatchewan](#) and have been involved in four research projects ([AGILE](#), [EVOLVES](#), [P2IRC](#) & [ACTIVATE](#)) with lentil (*Lens culinaris*).

I have done extensive work with a lentil diversity panel, NAM and inter-specific RIL populations. I am very fluent in  and have plenty of experience with data analysis such as modeling, PCA, GxE, GWAS and QTL analyses. I have recently been working with data acquisition from UAV and seed imaging systems and can handle data wrangling and visualization of large, high-throughput data sets.



RESEARCH EXPERIENCE & EDUCATION

Current
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2015

- **University of Saskatchewan**
Research Assistant  Saskatoon, Saskatchewan, Canada
 - Coordinate field trials
 - Seed setup
 - Post-harvest processing
 - Data collection & analysis
 - Presentations
 - Collaborations

2015

- **Cargill Specialty Seeds and Oils**
Research Assistant (Internship)  Aberdeen, Saskatchewan, Canada
 - Data collection & analysis
 - Pathology (blackleg)

2015
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2013

- **M.Sc. in Agrobiotechnology**
University of Giessen  Giessen, Hesse, Germany
 - Biotechnology and Genomics
 - Molecular Phytopathology
 - Plant Microbe Interactions
 - Plant Protection and Bioengineering
 - Microbial-Food-Biotechnology
 - Applied Statistics and Bioinformatics
 - Molecular Plant Breeding
 - Molecular Entomology
 - Tissue Culturing and Genetic Transformation

2012
|
2007

- **B.Sc. Biology**
University of Regina  Regina, Saskatchewan, Canada
 - Limnology
 - Environmental Microbiology
 - Global Biogeochemistry
 - Stable Isotope Ecology
 - Vertebrate Animal Biology
 - Advanced Plant Physiology
 - Molecular Genetics
 - Bacterial Genetics

PACKAGES

- **agData: an  package containing agricultural data sets**
<https://derekmichaelwright.github.io/agData/>
devtools::install_github("derekmichaelwright/agData")
- **gwaspr: an  package for plotting GWAS results**
<https://derekmichaelwright.github.io/gwaspr/>
devtools::install_github("derekmichaelwright/gwaspr")

View CV as:  [PDF](#)  [HTML](#)

Skills

-  Photography
-  Biology &Genomics
-  Data Analytics & Visualization
-  The R Project

Contact

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-  [@DerekMWright](https://twitter.com/@DerekMWright)
-  github.com/derekmichaelwright

Website

derekmichaelwright.github.io/dblogr/



PUBLICATIONS

- **Disecting lentil crop growth across multi-environment trials using unoccupied aerial vehicles and genome-wide association studies**
The Plant Phenome Journal. 8(1): e70040.
[GitHub](#) [Script](#)
- **Breeding potential of cultivated lentil for increased protein and amino acid concentrations in the Northern Great Plains**
Crop Science. 65(3): e70085.
[GitHub](#) [Script](#)
- **Grazing preferences of three species of amoebae on cyanobacteria and green algae**
The Journal of Eukaryotic Microbiology. e13018: 1-14.
- **Mass Spectrometry-Based Untargeted Metabolomics Reveals the Importance of Glycosylated Flavones in Patterned Lentil Seed Coats**
Journal of Agricultural and Food Chemistry. 71(7): 3541–3549.
- **Focusing the GWAS Lens on days to flower using latent variable phenotypes derived from global multi-environment trials**
The Plant Genome. 16(1): e20269.
[GitHub](#) [Script](#)
- **Strategic Identification of New Genetic Diversity to Expand Lentil (*Lens culinaris* Medik.) Production (Using Nepal as an Example)**
Agronomy. 11(10): 1933.
[GitHub](#) [Script](#)
- **Genomic selection for lentil breeding: Empirical evidence**
The Plant Genome. 13(1):e20002.
- **Understanding photothermal interactions can help expand production range and increase genetic diversity of lentil (*Lens culinaris* Medik.)**
Plants, People, Planet. 3(2): 171-181.
[GitHub](#) [Script](#)
- **Influence of heterozygosity on nitrogen use efficiency in hybrid and purebred lines of *Brassica napus* (L.)**
University of Giessen MSc Thesis
[Script](#)
- **Investigating seed size, shape, color, and patterning in a lentil using high throughput imaging**
unpublished

