

Nathalia Graf Grachet, Ph.D.

Tucson, AZ •  nathalia.grachet@gmail.com •  (405) 334-1746



My webpage

PROFESSIONAL EXPERIENCE

Postdoctoral Research Associate I, University of Arizona, Tucson, AZ
Graduate Research Assistant, Oklahoma State University, Stillwater, OK

September 2019 - present
January 2013 - August 2019

LEADERSHIP

XSEDE Student Campus Champion, OSU campus in Stillwater, OK
Board Member, Mobile Meals, non-profit org. in Stillwater, OK

August 2018 - August 2019
April 2017 - September 2019

SUMMARY OF TECHNICAL EXPERIENCE

Applied agricultural research

- Conducted field and greenhouse research with sugarcane, winter wheat, chilli pepper, turfgrass, and lettuce
- Practical experience with foliar fungicides application to winter wheat, turfgrass, and pecans

Laboratory research

- Trained interns in laboratory safety, organization, and general procedures (microbiology and phytopathological assays)
- Mentored interns to develop research projects in the laboratory
- Conducted phytopathological assays (inoculation of plants with fungi, bacteria, viruses and nematodes)
- Molecular techniques such as DNA/RNA/metabolite extraction protocols, DNA amplification, and cloning

Computational biology

- Analyzed genomics and transcriptomics data from technologies Illumina, PacBio, and 10X Genomics
- Analyzed metabolomics data by untargeted mass spectrometry techniques such as DI-MS, and LC-MS/MS
- Built data analysis pipelines for amplicon sequencing, multivariate statistical analysis, and multi-omics data integration (genomics, transcriptomics, metabolomics)

COMPUTATIONAL SKILLS

Proficient: Python/Jupyter | Linux/Bash | R/RStudio | Git/GitHub/GitLab | Markdown

Basic: Docker | Singularity | SQL • Cloud computing/HPC • Frameworks: Hugo

SOFT SKILLS

Self-motivated | Collaborator | Adaptable | Persistent | Honest | Good communicator

LANGUAGES

Portuguese | English | Spanish

EDUCATION

PhD, Plant Pathology, Oklahoma State University, Stillwater, OK

August 2019

MS, Entomology and Plant Pathology, Oklahoma State University, Stillwater, OK

May 2015

BS, Agricultural Engineering, Federal University of Sao Carlos, Araras, Sao Paulo, Brazil

May 2012