Nathalia Graf Grachet, Ph.D.

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SUMMARY OF COMPUTATIONAL BIOLOGY EXPERIENCE

- Taught 9+ programming-related workshops, including 7 Data/Software Carpentry Workshops on Python as a certified instructor
- Built 10+ data analysis pipelines in Python, R, and Unix/Linux/HPC, and sped up my data analysis performance
- Resourceful person that bridges bioinformatics, programming skills, and sequencing topics to those who do not have an extensive understanding in these tools and technologies

SCAN ME
My webpage

Proficient: Python, Jupyter | R, RStudio | Linux, Unix, Bash shell | Git, GitHub | Markdown | Cloud computing, HPC
Basic: Containers: Docker, Singularity | Databases: SQL | Frameworks: Hugo

PROFESSIONAL EXPERIENCE

Postdoctoral Research Associate I, University of Arizona, Tucson, AZ **September 2019 - present**

- Analyzed 8+ collaborative projects in environmental and plant metabolomics
  - Resulted in 1 paper submitted, 2 accepted or published, 1 grant-proposal awarded to Principal Investigator (Dr. Malak Tfaily)
- Built data analysis pipelines in Python, R, and Unix/HPC, and sped up my data analysis time
  - Resulted in 4 first-author publications in preparation, and 1 grant-proposal in preparation

Graduate Research Assistant, Oklahoma State University, Stillwater, OK **January 2013 - August 2019**

- Conducted many molecular techniques such as DNA/RNA extraction, PCR/RT-PCR, and cloning
- Built data analysis pipelines in Python, R, and Unix/Linux/HPC for analysis of microbial and plant genomics and transcriptomics data from technologies Illumina, PacBio, and 10X Genomics
- Trained 8+ international interns in laboratory safety, organization, and general procedures

LEADERSHIP

XSEDE Student Campus Champion, OSU campus in Stillwater, OK **August 2018 - August 2019**

- Mentored 2 researchers of different backgrounds to accomplish their research goals using HPC

President, EPPGSA - Graduate Student Association in Stillwater, OK **August 2016 - May 2017**

- Obtained $2,000 in grants campus-wide and led fundraising activities
- Prioritized and delegated tasks to 5 officers, and initiated a graduate student seminar exchange program

MOST RECENT SCIENTIFIC PUBLICATIONS

Statistics: Peer-review: Total: 7 | First-author: 2 • Non-peer reviewed or extension: Total: 5 | First-author: 1

1. Tfaily, M. M., Fudyma, J., Toyoda, J., Chu, R., Weitz, K., Heyman, K., Eder, E., Hoyt, D., Gieschen, H., **Graf Grachet, N.**, Wilson, R. Sequential abiotic-biotic processes drive organic carbon transformation in peat bogs. *(Accepted in Journal of Geophysical Research)*
2. Fudyma, J., Chu, R. K., **Graf Grachet, N.**, Stegen, J., Tfaily, M. M. 2020. Front. Water doi: 10.3389/frwa.2020.574692

SOFT SKILLS

Self-motivated | Collaborator | Adaptable | Problem-solver | Good communicator

LANGUAGES

Portuguese | English | Spanish

EDUCATION

PhD, Plant Pathology, Oklahoma State University, Stillwater, OK **August 2019**