Christopher Hann-Soden

213 Hillside Ave, Piedmont, CA, 94611

I recently earned my PhD for studying the evolution of sex by comparing mold genomes. I develop and employ algorithms and statistical tools to analyze complex data. I'm interested in analyzing and presenting data of all types, as well as teaching these skills to others.

Scheduled graduation: December 2018.

Experience

UC Berkeley, CA

Domain Consultant, Berkeley Research Computing

Jan 2018-Present

- Providing technical support and consulting services to researchers in data-driven domains.
- Developing training and documentation for campus IT services and infrastructure, including HPC, cloud services, and Docker.

UC Berkeley Berkeley, CA

Graduate Student Researcher, Taylor Lab

Jul 2012-Dec 2018

- Developing a statistical framework and algorithm for the measurement of genomic rearrangement rates.
- Investigating the evolutionary consequences of breeding system transitions in *Neurospora* using statistical and machine learning methods of population and comparative genomics.
- Modeling the transcriptional response of Neurospora to acclimation and adaptation to warmer temperatures.
- Administering and maintaining the laboratory's Linux server.

UC Berkeley, CA

Instructor 2014–2018

- Introduction to Programming for Bioinformatics (Summers 2014-2017, Winters 2016-2018)
- BIO 1A: General Biology (Spring 2015, Spring 2018)
- PMB 112L: Microbiology Laboratory (Spring 2014)

UC Berkeley Berkeley, CA

Laboratory Assistant I, Glaunsinger Lab

Aug 2011-May 2012

- Mapping interactions between human and viral proteins.
- Developing and implementing workflows for cloning, heterologous gene expression, coimmunoprecipitation, and blotting.

Oakland Science and Math Outreach

Oakland, CA

Mentor

2013-2015

- Tutoring high school math & science.
- Providing guidance and developing life skills.

Education

UC Berkeley	Berkeley, CA
Microbiology, Doctorate of Philosophy	2012–2018
Philomathia Scholars Graduate Fellowship	2015–2017
Webmester, Microbiology Student Group	2016
Symposium Chair, Microbiology Student Group	2015
Humboldt State University	Arcata, CA
Biology & Zoology, Bachelor of Science	2008–2010
GPA: 3.62 (cum laude)	

Publications

Christopher Hann-Soden, Lilliam A. Montoya, Pierre Gladieux, and John W. Taylor. New reproductive and ecological diversity in the model genus, neurospora. in prep.

Christopher Hann-Soden, Lilliam A. Montoya, Pierre Gladieux, and John W. Taylor. Lack of linkage and efficient selection evince outcrossing in self-fertile neurospora. in prep.

Christopher Hann-Soden, Ian Holmes, and John W. Taylor. Estimation of rearrangement break rates across the genome. in prep.

Pierre Gladieux, Fabien De Bellis, Christopher Hann-Soden, Jesper Svedberg, Hanna Johannesson, and John W Taylor. Neurospora from natural populations: Population genomics insights into the life history of a model microbial eukaryote. in press.

Arturo Casadevall, Joudeh B. Freij, Christopher Hann-Soden, and John Taylor. Continental drift and speciation of the cryptococcus neoformans and cryptococcus gattii species complexes. *mSphere*, 2:e00103–17, 2017.

Pierre Gladieux, Benjamin A. Wilson, Fanny Perraudeau, Liliam A. Montoya, David Kowbel, Christopher Hann-Soden, Monika Fischer, Iman Sylvain, David J. Jacobson, and John W. Taylor. Genomic sequencing reveals demographic, historical, and selective factors associated with the diversification of the fire-associated fungus neurospora discreta. *Molecular Ecology*, 24:5657–75, 2015.

John W. Taylor, Christopher Hann-Soden, Sara Branco, Iman Sylvain, and Chris Ellison. Clonal reproduction in fungi. *PNAS*, 112(29):8901–8, 2015.