

Christopher Hann-Soden

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🌐 <https://github.com/channsoden>

I'm a PhD candidate who studies 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**

Domain Consultant, Berkeley Research Computing

Berkeley, CA
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**

Graduate Student Researcher, Taylor Lab

Berkeley, CA
Jul 2012–Present

 - 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**

Instructor

Berkeley, CA
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**

Laboratory Assistant I, Glaunsinger Lab

Berkeley, CA
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**

Mentor

Oakland, CA
2013–2015

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

Education

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

Publications

Christopher Hann-Soden, Lilliam A. Montoya, Pierre Gladieux, and John W. Taylor. Geography and demography of clonal and sexual populations of 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 prep.

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 Perraudieu, Lilliam 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.