

Multiple Postdoctoral Positions Available in Yeast Evolutionary and Synthetic Biology



How are yeast metabolic functions genetically encoded? How did they evolve? How can they be manipulated for sustainable human benefit?

Modern DNA sequencing and synthesis allow us to read and write from genomes at a breathtaking pace, and yeasts are leading the way. Budding yeasts of the subphylum Saccharomycotina are as genetically diverse as animals or plants and have evolved myriad energy management strategies to process and store carbon. They compete vigorously for nutrients in every continent and biome, but most species are minimally characterized. You can be among the first to study yeast evolution, ecology, or bioenergy applications using data from Y1000+ Project (<http://www.y1000plus.org>), which has now sequenced the genomes of all ~1000 known budding yeast species. Projects are available to study basic and fundamental principles of evolution using this dataset, as well as to mine it for bioenergy research. Metabolic engineering and multiomic projects to produce advanced biofuels and bioproducts using *Saccharomyces cerevisiae* and non-conventional yeasts are also available. I also want to hear your ideas!

The ideal postdoctoral applicant will be highly motivated to develop an independent research project in the Hittinger Lab. The candidate should have a strong background in molecular genetics, molecular evolution, phylogenetics, evolutionary genomics, bioinformatics, microbiology, metabolic engineering, and/or synthetic biology. Experience in metabolic engineering, machine learning, yeast genetics, or synthetic biology are particularly desirable.

Please send a CV, p/reprints, and contact information for 3 references to cthittinger@wisc.edu. Specifically mention why you are interested in the position(s) in your email. Apply by 18th September 2022 for full consideration. Start date is negotiable, but sooner is better. In addition to regular postdoctoral training positions funded by [NSF](#) and [GLBRC](#), an integrative [Keegstra Postdoctoral Researcher](#) position based in the Hittinger Lab is also available.

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Laboratory of Genetics, DOE Great Lakes Bioenergy Research Center, J. F. Crow Institute for the Study of Evolution, Wisconsin Energy Institute, Center for Genomic Science Innovation

The Hittinger Lab (<http://hittinger.genetics.wisc.edu>, [@HittingerLab](#)) belongs to the oldest genetics department in the country and is located on the vibrant UW-Madison campus (above), which is a major hub for research in biotechnology, microbiology, genomics, synthetic biology, metabolic engineering, and evolutionary biology.

Legal: The University of Wisconsin-Madison is an Affirmative Action/Equal Opportunity Employer. This is a postdoctoral training opportunity, which does not require a UW PVL#.