

## Curriculum Vitae (20 SEPTEMBER 2024)

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### BIRTH/CITIZENSHIP

Indiana, USA (details available on request)

### EMPLOYMENT

2024 – present: Departmental Property Administrator for Wisconsin Energy Institute.  
2019-present: Curator of the yHStrain Collection (<https://yhstrains.wei.wisc.edu/>)  
2019-present: Lab Manager, Sato Lab, EFL Lab @ GLBRC.  
2011-present: Lab Manager, lab technician, website manager, research assistant for lab of Chris Todd Hittinger, University of Wisconsin-Madison, Madison, WI.  
2016-May 2017: LTE for Department of Genetics, performing various tasks as needed (Temporary for Financial Specialist, Special Projects)  
Feb 2014-Jan 2015: Lab Manager, lab technician, Skop Lab, University of Wisconsin-Madison, Madison, WI.  
2006-2012: Technology Assistant, Membership Coordinator, Conference Registrar, and Administrative Assistant, The Rees Group, Inc. Madison, WI.  
2002-2006: Music, Children's Book Specialist, Events Assistant, and Salesperson, Borders, Madison, WI.  
2001-2002: Special Education and Math Teacher, Stoughton High School, Stoughton, WI.

### EDUCATION

1998-2001: Bachelor of Science in Education, Southeast Missouri State University (Department of Education); Specialization in Special Education (Learning Disabilities and Mental Handicaps).  
1996-1998: Ball State University, Muncie, Indiana (Department of Education) Specialization in Deaf Education.

### TEACHING/OUTREACH

2011-present: Lab skills, research skills, computer skills pertaining to lab needs, Hittinger Lab, UW-Madison, Madison, WI.  
Sum 2015-Spr 2017: Website designer and manager for Greenwood Montessori Children's House, Greenwood, IN.  
2007-2012: Technology Education Specialist, The Rees Group, Inc., Madison, WI.  
2001-2002: Teacher, Special Education and Math, Stoughton High School, Stoughton, WI.  
2000-2001: Computer and Technology Introduction and Training for local community, Cape Girardeau Civic Center, Cape Girardeau, MO.

### Research Publications

- 12) Opulente DA&, LaBella AL&, Harrison MC&&, Wolters JF&&, Liu C, Li Y, Kominek J, Steenwyk JL, Stoneman HR, VanDenAvond J, Miller CR, Langdon QK, Silva M, Gonçalves C, Ubbelohde EJ, Li Y, Buh KV, Jarzyna M, Haase MAB, Rosa CA, Čadež N, Libkind D, DeVirgilio JH, Hulfachor AB, Kurtzman CP, Sampaio JP, Gonçalves P, Zhou X, Shen XX, Groenewald M, Rokas A@, Hittinger CT@. 2024. Genomic factors shape carbon and nitrogen metabolic niche breadth across *Saccharomycotina* yeasts. *Science* 384: eadj4503.
- 11) Chavez CM, Groenewald M, Hulfachor AB, Kpurubu G, Huerta R, Hittinger CT, Rokas A. 2024. The cell morphological diversity of *Saccharomycotina* yeasts. *FEMS Yeast Res* 24: foad055.
- 10) Peris D@, Ubbelohde EJ, Kuang MC, Kominek J, Langdon QK, Adams M, Koshalek JA, Hulfachor AB, Opulente DA, Hall DJ, Hyma K, Fay JC, Leducq JB, Charron G, Landry CR, Libkind D,

- Gonçalves C, Gonçalves P, Sampaio JP, Wang QM, Bai FY, Wrobel RL, Hittinger CT<sup>®</sup>. 2023. Macroevolutionary diversity of traits and genomes in the model yeast genus *Saccharomyces*. Nat Commun 14: 690.
- 9) Spurley WJ<sup>&</sup>, Fisher KJ<sup>&</sup>, Langdon QK<sup>&</sup>, Buh KV, Jarzyna M, Haase MAB, Sylvester K, Moriarty RV, Rodriguez D, Sheddan A, Wright S, Sorlie L, Hulfachor AB, Oplente DA<sup>&</sup>, Hittinger CT<sup>®</sup>. 2022. Substrate, temperature, and geographical patterns among nearly 2000 natural yeast isolates. Yeast 39: 55-68.
  - 8) Haase MAB<sup>&</sup>, Kominek J<sup>&</sup>, Oplente DA, Shen XX, LaBella AL, Zhou X, DeVirgilio J, Hulfachor AB, Kurtzman CP, Rokas A<sup>®</sup>, Hittinger CT<sup>®</sup>. 2021. Repeated horizontal gene transfer of GALactose metabolism genes violates Dollo's law of irreversible loss. Genetics 217: iyaa012.
  - 7) Steenwyk JL, Oplente DA, Kominek J, Shen XX, Zhou X, Labella AL, Bradley NP, Eichman BF, Čadež N, Libkind D, DeVirgilio J, Hulfachor AB, Kurtzman CP, Hittinger CT<sup>®</sup>, Rokas A<sup>®</sup>. 2019. Extensive loss of cell-cycle and DNA repair genes in an ancient lineage of bipolar budding yeasts. PLoS Biol 17: e3000255.
  - 6) Kominek J<sup>&</sup>, Doering DT<sup>&</sup>, Oplente DA, Shen XX, Zhou X, DeVirgilio J, Hulfachor AB, Groenewald M, Mcgee MA, Karlen SD, Kurtzman CP, Rokas A, Hittinger CT<sup>®</sup>. 2019. Eukaryotic acquisition of a bacterial operon. Cell 176: 1356-66.
  - 5) Shen XX<sup>&</sup>, Oplente DA<sup>&</sup>, Kominek J<sup>&</sup>, Zhou X<sup>&</sup>, Steenwyk JL, Buh KV, Haase MAB, Wisecaver JH, Wang M, Doering DT, Boudouris JT, Schneider RM, Langdon QK, Ohkuma M, Endoh R, Takashima M, Manabe RI, Čadež N, Libkind D, Rosa CA, DeVirgilio J, Hulfachor AB, Groenewald M, Kurtzman CP, Hittinger CT<sup>®</sup>, Rokas A<sup>®</sup>. 2018. Tempo and mode of genome evolution in the budding yeast subphylum. Cell 175: 1533-45.
  - 4) Krause DJ, Kominek J, Oplente DA, Shen XX, Zhou X, Langdon QK, DeVirgilio J, Hulfachor AB, Kurtzman CP, Rokas A, Hittinger CT<sup>®</sup>. 2018. Functional and evolutionary characterization of a secondary metabolite gene cluster in budding yeasts. Proc Natl Acad Sci USA 115: 11030-5.
  - 3) Oplente DA, Rollinson EJ, Bernick-Roehr C, Hulfachor AB, Rokas A<sup>®</sup>, Kurtzman CP, Hittinger CT<sup>®</sup>. 2018. Factors driving metabolic diversity in the budding yeast subphylum. BMC Biol 16: 26.
  - 2) Baker E, Wang B, Bellora N, Peris D, Hulfachor AB, Koshalek JA, Adams M, Libkind D, Hittinger CT<sup>®</sup>. 2015. The genome sequence of *Saccharomyces eubayanus* and the domestication of lager-brewing yeasts. Mol Biol Evol 32: 2818-31. (MBE Best Graduate Student Paper of 2015, MBE Citation Classic 2017-9)
  - 1) Sylvester K, Wang QM, James B, Mendez R, Hulfachor AB, Hittinger CT<sup>®</sup>. 2015. Temperature and host preferences drive the diversification of *Saccharomyces* and other yeasts: a survey and the discovery of eight new yeast species. FEMS Yeast Res 15: fov002.

### SCIENTIFIC JOURNAL COVERS

- 3) *Yeast*, Vol 36 Issue 2, February and March 2019
- 2) *Molecular Biology and Evolution*, Vol 35 Issue 12, December 2018.
- 1) *PLoS Genetics*, Vol 12 Issue 7, July 2016

### SCIENTIFIC FIGURE PREPARATION (Credited)

- 3) Hittinger CT, Steele JL, Ryder DS. 2018. Diverse yeasts for diverse fermented beverages and foods. Curr Opin Biotechnol 49: 199-206.
- 2) Alexander WG, Wisecaver JH, Rokas A, Hittinger CT. 2016. Horizontally acquired genes in early-diverging pathogenic fungi enable the use of host nucleosides and nucleotides. Proc Natl Acad Sci USA 113: 4116-21.
- 1) Hittinger CT. 2012. Endless rots most beautiful. Science 336: 1649-50.

### COMPUTER SKILLS/PROGRAMMING

Perl (Basic Intermediate), Filemaker (Advanced), Adobe CS5: Fireworks, Photoshop, Illustrator, Dreamweaver (Advanced), Microsoft Office (Advanced).

### LAB SKILLS

Media Preparation (Yeast, Bacterial), Stock and Supply Organization (Inventory and Ordering), Data Entry, Yeast Culturing and Maintenance, Next Generation Sequencing, Sanger Sequencing, PCR, Wild Yeast Isolation, Website Design and Maintenance, Database Design and Maintenance.