

Pete Heinzelman

Professional Preparation

University of Wisconsin-Madison, B.S. Chemical Engineering, 1999

Massachusetts Institute of Technology, M.S. Chemical Engineering, 2002

Massachusetts Institute of Technology, Ph.D. Chemical Engineering, 2006

Appointments

2010-present Assistant Professor, Department of Chemical, Biological & Materials Engineering,
University of Oklahoma, Norman, OK

2007-2010 Postdoctoral Research Fellow, California Institute of Technology

Publications

1. **Heinzelman P**, Komor R, Kanaan A, Snow CD, Romero P, Yu X, Mohler S, Arnold FH (2010). Efficient screening of fungal cellobiohydrolase class I enzymes for thermostabilizing mutations via SCHEMA recombination. *Submitted*.

2. **Heinzelman P**, Snow CD, Smith MA, Yu X, Kanaan A, Boulware K, Villalobos A, Govindarajan S, Minshull J, Arnold FH (2009). SCHEMA recombination of a fungal cellulase uncovers a single mutation that contributes markedly to stability. *J Biol Chem* 284:26229-33. [doi:10.1074/jbc.C109.034058](https://doi.org/10.1074/jbc.C109.034058)

3. **Heinzelman P**, Snow CD, Wu I, Nguyen C, Villalobos A, Govindarajan S, Minshull J, Arnold FH (2009). A family of thermostable fungal cellulases created by structure-guided recombination. *Proc Natl Acad Sci USA* 106:5610-5615. [doi:10.1073/pnas.0901417106](https://doi.org/10.1073/pnas.0901417106)

4. Feldhaus MJ, Siegel RW, Opresko LK, Coleman JR, Feldhaus JM, Yeung YA, Cochran JR, **Heinzelman P**, Colby D, Swers J, Graff C, Wiley HS, Wittrup KD (2003). Flow-cytometric isolation of human antibodies from a nonimmune *Saccharomyces cerevisiae* surface display library. *Nat Biotechnol* 21:163-70. [doi:10.1038/nbt785](https://doi.org/10.1038/nbt785)

5. Pallitto MM, Ghanta J, **Heinzelman P**, Kiessling LL, Murphy RM (1999). Recognition sequence design for peptidyl modulators of beta-amyloid aggregation and toxicity. *Biochemistry* 38: 3570-8. [doi:10.1021/bi982119e](https://doi.org/10.1021/bi982119e)

Industrial Experience

Distillation Equipment Assembly Technician, Pope Scientific Inc., Milwaukee, WI, 5/96-8/96

Microbiologist Co-op Researcher, Procter & Gamble Co., Cincinnati, OH, 5/97-12/97

Process Engineering Summer Intern, Pillsbury Company, Minneapolis, MN, 5/98-8/98

Product Development Summer Intern, S.C. Johnson Wax, Racine, WI, 6/99-8/99

Honors & Recognition

National Science Foundation Graduate Research Fellow, 1/00-8/01

National Defense Science & Engineering Graduate Research Fellow, 9/01-9/04

American Chemical Society Green Chemistry Institute Joseph Breen Award, 5/09

Invited speaker, Engineering cellulases for biofuel applications. 31st Symposium on Biotechnology for Fuels & Chemicals; 5/09, San Francisco, CA.

Invited speaker, Engineered cellulases for biofuel production. Novozymes, Inc; 9/09, Davis, CA.

Invited speaker, Engineering Cellulolytic Yeast. Mascoma Corp. 10/09, Lebanon, NH.

Proposal review panelist, National Science Foundation Biotechnology, Biochemical & Biomass Engineering Program, 5/10, Arlington, VA.

Graduate & Postdoctoral Advisors

Dane Wittrup, Chemical Engineering, Massachusetts Institute of Technology

Greg Stephanopoulos, Chemical Engineering, Massachusetts Institute of Technology

Frances Arnold, Chemical Engineering, California Institute of Technology