

Principal Investigator:

Reynolds, Todd, B.

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Todd B. Reynolds		POSITION TITLE Assistant Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Western Kentucky University Vanderbilt University	BS PhD	1989-1993 1993-1999	Recombinant Genetics Molecular Biology

A. Positions and Honors

Positions and Research Experience

1992 Summer undergraduate research program with Dr. Mary Ann Thompson, Vanderbilt University, Nashville, TN, Transcriptional regulation in developing neurons.

1993-1999 PhD research with Todd R. Graham, Vanderbilt University, Nashville, TN, Localization mechanism of glycosyltransferases in the Golgi complex in yeast

1999-2003 Postdoctoral Fellow with Gerald R. Fink at the Whitehead Institute, Cambridge, MA, Genomic and genetic analysis of biofilm formation in bakers' yeast

2003-present Assistant Professor, Department of Microbiology, University of Tennessee, Genomic and genetic analysis of biofilm formation in yeast & role of metabolic regulation in the pathogenesis of *Candida* species

Other Experience and Professional Memberships

American Society of Microbiology
Peer Reviewer for American Heart Association
Ad hoc Reviewer for National Science Foundation
Panel Reviewer for NIH special emphasis panel for SCORE grants
Co-organizer of Southeast Regional Yeast Meeting, Gatlinburg, TN, March 2008

Honors

2008-2009 Outstanding Undergraduate Teacher in Microbiology, University of Tennessee

Invited speaker

37th American Society for Cell Biology Annual Meeting. Washington, DC, December 1997.
DARPA Biofilms Workshop, Arlington, VA, August, 2001
Western Kentucky University, Bowling Green, KY, March 2002.
2002 Yeast Genetics and Molecular Biology Meeting. Madison, WI, August 2002.
Western Kentucky University, Bowling Green, KY, January, 2005

Syracuse University, Department of Biology, Syracuse, New York, April, 2005
3rd International Conference on Molecular Mechanisms Fungal Cell Wall Biogenesis, Heidelberg, Germany, August 2006
Stony Brook University, Stony Brook, NY, March 2007
Vanderbilt University, Nashville, TN, May 2007
CSHL Yeast Cell Biology Meeting. Cold Spring Harbor, NY, August 2007.
University of Michigan, Ann Arbor, MI, February 2008
University of Tennessee Health Sciences Center, Memphis, TN, May 2008
4th Molecular Mechanisms Fungal Cell Wall Biogenesis Meeting, Warsaw, Poland, August 2009

B. Selected Peer-reviewed Publications

* indicates that T. B. Reynolds is corresponding author

Song, K., K. E. Mach, C.Y. Chen, T. Reynolds, and C. F. Albright. 1996. A novel suppressor of *ras1* in fission yeast, *byr4*, is a dosage-dependent inhibitor of cytokinesis. *J. Cell Biol.* 133(6):1307-19.

Reynolds, T. B., B. D. Hopkins, M. R. Lyons, T. R. Graham 1998. The HOG MAPkinase pathway controls localization of a yeast Golgi glycosyltransferase. *J. Cell Biol.* 143: 935-946..

Reynolds, T. B. and G. R. Fink. 2001. Bakers' yeast, a model for fungal biofilm formation. *Science* 291: 878-881.

Verstrepen, K. J., T. B. Reynolds, G. R. Fink. Origins of variation in the fungal cell surface. 2004. *Nat. Rev. Microbiol.* 2: 533-540.

*Reynolds, T. B. The Opi1p transcription factor affects *FLO11* expression, mat formation, and invasive growth in *Saccharomyces cerevisiae*. *Eukaryot. Cell* 2006 5: 1266-1275.

*Reynolds, T. B., A. Jansen, X. Peng, G. R. Fink, Mat formation in *Saccharomyces cerevisiae* requires nutrient and pH gradients. *Eukaryot Cell.* 2008 Jan;7(1):122-30.

*Chen, Y-L., S. Kauffman, T. B. Reynolds, *Candida albicans* uses multiple mechanisms to acquire the essential metabolite inositol during infection. *Infect Immun*, 2008 76(6):2793-801.

*Reynolds T. B. Strategies for acquiring the phospholipid metabolite inositol in pathogenic bacteria, fungi and protozoa: making it and taking it. *Microbiol* 2009 155:1386-96.

*Bethea, E. K., B. J. Carver, T. B. Reynolds, The inositol regulon controls viability in *Candida glabrata*
Submitted

*Chen, Y.-L., S. Kauffman, J. R. Dunlap, T. B. Reynolds, Phosphatidylserine synthase is essential for virulence and cell wall integrity in *Candida albicans* **Submitted**

C. Research Support

Ongoing support

National Science Foundation: Regulation of sliding motility during biofilm formation in fungi,
MCB-0919787, Project Period: 8/15/09-7/31/12

National Institutes of Health: The role of the *OPI1* gene in regulating viability in *Candida glabrata*
R03-AI071863-01A1, Project Period: 6/1/07-5/31/09, No cost extension granted to 5/31/10

American Heart Association: The role of the inositol regulon in adhesion and virulence in fungi
Beginning Grant-in-Aid, AHA 0765366B, Project Period: 7/1/07-6/30/09. No cost extension
granted to 6/30/10

Completed support

National Institutes of Health, National Research Service Award, 5 F32 GM20565-02,
Project Period: 07/01/2000-06/30/2003
