Xuan Yi Butzin, Ph.D

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Education and Training

Postdoctoral fellow in Department of Molecular, Microbial and Structural Biology, University of Connecticut Health Center (2009 - 2012)

Ph.D. in Biological Sciences, University of Wisconsin-Milwaukee (2009)

B.E. in Biological Engineering, China Agricultural University, Beijing, China (2004)

Teaching Experience

Teaching Assistant Coordinator, Plants in Today's World, Dept. of Biological Sciences, University of Wisconsin-Milwaukee (2007 - 2009)

Teaching Assistant, Plants in Today's World, Dept. of Biological Sciences, University of Wisconsin-Milwaukee (2005 - 2009)

Academic Awards

Chancellor's Fellowship, University of Wisconsin-Milwaukee, 2004-2009

Ruth Walker Travel Award, University of Wisconsin-Milwaukee, 2008

Professional Memberships

Member of the American Society for Microbiology, 2008-2012

Member of Milwaukee Microbiology Society, 2004-2009

Professional Development

American Society for Microbiology Kadner Institute, 2010

Grant Preparation Workshops:
Overview of the Grant Making Enterprise
NSF Submission Process/Writing Your Own Grant (NIH style)
Viewing Your Grant from the Reviewer's Perspective
Mock Review (NIH style)

Career Development Workshops:
Pathways to the Professoriate/Setting Up Your Lab/Lab Management Skills
How People Learn…and How We Don't
The Ethical Dimensions of Science
Ethical Case Studies in Authorship and Mentoring

Mentoring Experience

University of Connecticut Health Center (2009-2012): Mentored graduate and undergraduate students in research and oral presentations

Publications

Rahman KMT, Amaratunga R, **Butzin XY**, Singh A, Hossain T, Butzin NC. Rethinking dormancy: antibiotic persisters are metabolically active, non-growing cells. Int. J. Antimicrob. Angents. 2024. Online ahead of print

Ramirez-Peralta A, Gupta S, **Butzin XY**, Setlow B, Korza G, Leyva-Vazquez MA, Christie G, Setlow P. Identification of new proteins that modulate the germination of spores of *Bacillus* species. J. Bacteriol. 2013. 195 (13): 3009-21.

Li Y, **Butzin XY**, Davis A, Setlow B, Korza G, Üstok FI, Christie G, Setlow P, Hao B. Activity and regulation of various forms of CwlJ, SleB, and YpeB proteins in degrading cortex peptidoglycan of spores of *Bacillus* species *in vitro* and during spore germination. J. Bacteriol. 2013. 195 (11): 2530-40.

Butzin XY, Troiano AJ, Coleman WH, Griffiths KK, Doona CJ, Feeherry FE, Wang G, Li YQ, and setlow P. Analysis of the effects of a *gerP* mutation on the germination of spores of *Bacillus subtilis*. J. Bacteriol. 2012. 194 (21): 5749-58.

Stewart KA*, **Yi X***, Ghosh S, and Setlow P. Germination protein levels and rates of germination of spores of *Bacillus subtilis* with overexpressed or deleted genes encoding germination proteins. J. Bacteriol. 2012. 194 (12): 3156-64. (*These authors contributed equally to this work)

Yi X, Liu J., Faeder JR, and Setlow P. Synergism between different germinant receptors in the germination of *Bacillus subtilis* spores. J. Bacteriol. 2011. 193 (18): 4664-71.

Yi X, Bond C, Sarker MR, and Setlow P. Efficient inhibition of germination of coat-deficient bacterial spores by multivalent metal cations, including terbium (Tb^{3+}). Appl. Environ. Microbiol. 2011. 77 (15): 5536-9.

Ma J, Ibekwe AM, **Yi X**, Wang H, Yamazaki A, Crowley DE, and Yang CH. Persistance of *Escherichia coli* O157:H7 and its mutants in soils. PLoS One. 2011. 6(8):e23191.

Wang G, **Yi X**, Li YQ, and Setlow P. Germination of individual *Bacillus subtilis* spores with alterations in the GerD and SpoVA proteins, which are important in spore germination. J.Bacteriol. 2011. 193 (9): 2301-11.

Zhang P, Garner W, **Yi X**, Yu J, Li YQ, and Setlow P. Factors affecting variability in time between addition of nutrient germinants and rapid dipicolinic acid release during germination of spores of *Bacillus* species. J.Bacteriol. 2010. 192 (14): 3608-19.

Yi X, and Setlow P. Studies of the commitment step in the germination of spores of *Bacillus* species. J. Bacteriol. 2010. 192:3424-3433.

Yi X, Yamazaki A, Biddle E, Zeng Q, and Yang CH. Genetic analysis of two phosphodiesterase reveals cyclic diguanylate regulation on virulence factors in *Dickeya dadantii*. Mol. Microbiol. 2010. 77:787-800.

Yang S, Peng Q, Zhang Q, **Yi X**, Choi CJ, Reedy RM, Charkowski AO, Yang CH. Dynamic regulation of GacA in type III secretion, pectinase gene expression, pellicle formation, and pathogenicity of *Dickeya dadantii* (*Erwinia chrysanth*emi 3937). Mol. Plant Microbe Interact. 2008. 21:133-42.

Glasner JD, Marquez-Villavicencio M, Kim HS, Jahn CE, Ma B, Biehl BS, Rissman AI, Mole B, **Yi X**, Yang CH, Dangle JL, Grant SR, Perna NT, Charkowski AO. Niche-specificity and the variable fraction of the *Pectobacterium* pan-genome. Mol. Plant Microbe Interact. 2008. 21:1549-60.

Speaking Engagements

Yi X. 2012. Analysis of the effects of a *gerP* mutation on *Bacillus subtilis* spore germination. New York Bacillus Interest Group Meeting.

Yi X. 2010. Studies on the commitment step in spore germination. New York Bacillus Interest Group Meeting.

Yi X. 2010. Investigating the cooperativity and synergy in *Bacillus* spore germination. American Society for Microbiology Kadner Institute.

Published Abstracts

Liu J, **Yi X**, Setlow P and Faeder JR. 2011. A receptor model of bacterial spore germination.

Stewart KV, **Yi X,** Ghosh S, and Setlow P. 2012. Effects of overexpression of germinant receptors on *Bacillus subtilis* spore germination rates and germination protein levels. Abstract of the 112th General Meeting of the American Society for Microbiology.

Yi X, and Yang CH. 2008. Lipopolysaccharide affects type III secretion system and pectinase production in *Dickeya dadantii*. Abstract of the 108th General Meeting of the American Society for Microbiology. B338.