CURRICULUM VITA

SHENGDE ZHOU

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EDUCATION:

Postdoc, University of Florida (Microbial molecular genetics/biotechnology)
Ph.D., Auburn University (Microbiology), 1997
M.S., Hua-zhong Agricultural University, (Plant Pathology), 1987
B.S., Hua-zhong Agricultural University (Horticulture), 1984

PROFESSIONAL EXPERIENCE:

Associate Professor, Dept. of Biological Sciences, Northern Illinois University, 2012-
Director/PI, Division of molecular genetics, Bioenergy International LLC, 2008
Assistant Professor, Dept. of Biological Sciences, Northern Illinois University, 2005-2012
Associate Scientist, Dept. of Microbiology & Cell Science, University of Florida, 2002-2005
Assistant Scientist, Dept. of Microbiology & Cell Science, University of Florida, 2001
Postdoc, Dept. of Microbiology & Cell Science, University of Florida, 1997-2000

AREAS OF INTEREST:

Microbial physiology, biochemistry, metabolism and fermentation technology
Molecular genetics and metabolic engineering
Biotechnology

PUBLICATIONS (* corresponding author or first author):

41*. Lu HY, Zhao X, Wang YZ, Ding XR, Wang JH, Garza E, Manow R, Iverson A, Zhou S. 2016. Enhancement of D-lactic acid production from a mixed glucose and xylose substrate by the Escherichia coli strain JH15 devoid of the glucose effect. BMC Biotechnology. DOI 10.1186/s12896-016-0248-y.

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37*. Iverson A., E. Garza, J. Zhao, Y. Wang, X. Zhao, J. Wang, R. Manow, S. Zhou. 2013. Increasing reducing power output (NADH) of glucose catabolism for reduction of xylose to xylitol by genetically engineered *Escherichia coli* AI05. World J. Microbiol. Biotechnol. 29(7):1225-1232.

36*. Wang Y., Tian T., Zhao J., Wang J., Yan T., Xu L., Liu Z., Garza E., Iverson A., Manow R., Finan C., and S. Zhou. 2012. Homofermentative production of D-lactic acid from sucrose by a metabolically engineered *Escherichia coli*. Biotechnol Lett. 34(11):2069-2075.

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33*. Wang, Y., R. Manow, C. Finan, J. Wang, E. Garza, and S. Zhou. 2011. Adaptive evolution of non-transgenic *Escherichia coli* KC01 for improved ethanol tolerance and homoethanol fermentation from xylose. J. Industrial Microbiol. Biotechnol. 38:1371-1377.

32*. Li, Q., L Zheng, H. Cai, E. Garza, Z. Yu, S. Zhou. 2011. From organic waste to biodiesel: black soldier fly, Hermetia illucens, makes it feasible. Fuel. 90:1545-1548.

31*. Garza E., C. Finan, A. Iverson and S. Zhou. 2011. Extension temperature of 60^0C required for PCR amplification of large DNA fragments (> 5 kb) from a low GC bacterium *Clostridium acetobutylicum*. World Journal of Microbiology and Biotechnology. 27:449-451.

30*. Li, Q., H. Cai, B. Hao, C. Zhang, Z. Yu and S. Zhou. 2010. Enhancing clostridial acetone-butanol-ethanol (ABE) production and improving fuel properties of ABE-enriched biodiesel by extractive fermentation with biodiesel. Appl. Biochem. Biotechnol. 162:2381-2386.

29*. Zhou, S., A. G. Iverson, and W. S. Grayburn. 2010. Doubling the catabolic reducing power (NADH) output of *Escherichia coli* fermentation for production of reduced products. Biotechnol Progress. 26(1):45-51.

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glucose to 1.2 M lactate by *Escherichia coli* strain SZ194 using mineral salts medium. Biotechnol. Lett. 28(9):663-670

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2. Wei Y.D., S.Zhou, and M.F. Zhou. 1988. Production of furanoterpenoid phytoalexin in different sweet potato varieties with resistance to root rot diseases. Journal of Hua-Zhong Agricultural University No.2

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PATENTS:

13. Japanese patent No. 5,798,441, issued on Aug. 28, 2015. Materials and methods for efficient lactic acid production. S. Zhou, L.O. Ingram, KT Shanmugam, L. Yomano, T.B. Grabar and J. Moore

12. Malaysia patent No. MY-154509-A, issued on June 30, 2015. Reengineering bacteria for ethanol production. L.P. Yomano, S.W. York, S. Zhou, K.T. Shanmugam, and L.O. Ingram.

11. US patent No. 8,716,002, issued on May 6, 2014. L.P. Yomano, S.W. York, S. Zhou, K.T. Shanmugam, and L.O. Ingram.

10. US patent No. 8,426,191, issued on April 23, 2013. S. Zhou, L.O. Ingram, K.T. Shanmugam, L. Yomano, T.B. Grabar and J. Moore

9. US patent No. 8,383,374, issued on Feb. 26, 2013. Thomas B. Causey, L.O. Ingram, K.T. Shanmugam and S. Zhou

8. EPO patent No. 1760156, issued on Dec. 19, 2012. S. Zhou, L.O. Ingram, K.T. Shanmugam, L. Yomano, T.B. Grabar and J. Moore

7. Chinese patent No. 200610109332.9, issued on Nov. 14, 2012. S. Zhou, L.O. Ingram, K.T. Shanmugam, L. Yomano, T.B. Grabar and J. Moore

6. Japanese patent No. 4,991,205, issued on May 11, 2012. S. Zhou, L.O. Ingram, K.T. Shanmugam, L. Yomano, T.B. Grabar and J. Moore

5. US patent No. 7,977,075, issued on July 12, 2011. Thomas B. Causey, L.O. Ingram, K.T. Shanmugam and S. Zhou

4. US patent No. 7,629,162, issued on Dec. 12, 2009. S. Zhou, L.O. Ingram, K.T. Shanmugam, L. Yomano, T.B. Grabar and J. Moore

3. US patent No. 7,226,776 B2, issued on June 5, 2007. L. O. Ingram and S. Zhou

2. US patent No. 7,026,152, issued on April 11, 2006. L.O. Ingram and S. Zhou

1. New Zealand patent No. 516345, issued on June 8, 2004. L.O. Ingram and S. Zhou