

Wenjin Jim Zheng, Ph.D.

135 Cannon Street, Suite 303E
Charleston, SC 29425
Web page: <http://people.musc.edu/~zhengw>

Email: zhengw@musc.edu
Phone: (843) 876-1123

Education

2000 M.S., Computer Science, University of Texas at Dallas
1997 Ph. D., Biochemistry & Molecular Biology, University of Texas
Southwestern Medical Center at Dallas
1989 M. S., Biophysics, Wuhan University, Wuhan, China
1986 B. S., Virology & Molecular Biology, Wuhan University, Wuhan, China

Experience

1/2006-present member of Editorial Board, Computational Biology and Chemistry
3/2005-present member of Editorial Advisory Board, Current Bioinformatics
10/2005-present member of Science Committee, National Center of Ontological Research
1/2004-present Assistant Professor, Dept. Biostatistics, Bioinformatics and Epidemiology,
Medical University of South Carolina, SC
3/2005-11/2006 member of NLM study section (Special Emphasis Panel, ad hoc reviewer)
1/2003-1/2004 Senior Scientist, Accelrys, San Diego, CA
7/2001-1/2003 Senior Scientist, Incyte Genomics, Palo Alto, CA
8/2001-8/2002 Bioinformatics Instructor, Mos Institute of Technology, Santa Clara, CA
2/1999-6/2001 Bioinformatic Analyst, Large Scale Biology, Corp., Vacaville, CA
8/1998-2/1999 Software Engineer, PageMart Inc., Dallas, TX
11/1997-7/1998 Postdoctoral fellow, U. T. Southwestern Medical Center at Dallas, TX
1992-1997 Research Assistant, U. T. Southwestern Medical Center at Dallas, TX
1989-1992 Assistant Professor, Wuhan University, Wuhan, China
1987-1989 Research Assistant, Institute of Microbiology, Academia Sinica, Beijing,
China

Publications:

- (1) Wenjin Zheng, Liangyi Kang, Guanying Qiu: Attenuation of the host symptom by CMV (Cucumber Mosaic Virus) satellite RNA (1-CARNA) is not related to the expression of viral coat protein, **Acta Agriculturae Nucleatae Sinica** 1992 6(2) p111-115
- (2) Wenjin Zheng, H. Eric Xu and Stephen Albert Johnston: The cysteine peptidase, bleomycin hydrolase, is a new component of the galactose regulon in yeast. **J. Biological Chemistry**, 272: 30350-30355, 1997
- (3) Wenjin Zheng, Stephen A. Johnston, Leemor Joshua-Tor: The unique active site of Gal6/bleomycin hydrolase can act as a carboxypeptidase, aminopeptidase and peptide ligase. **Cell**, 93: 103-109, 1998
- (4) Wenjin Zheng and Stephen A. Johnston: The nucleic acid binding activity of yeast bleomycin hydrolase is involved in bleomycin detoxification. **Molecular & Cellular Biology**, 18(6): 3580-3585, 1998
- (5) Paul A. O'Farrell, Fernando Gonzalez, Wenjin Zheng, Stephen Albert Johnston and Leemor Joshua-Tor: Crystal structure of human bleomycin hydrolase, a self-compartmentalizing cysteine protease. **Structure Fold Des.** 7(6):619-627, 1999
- (6) Lisa Yan, Mikhail Velikanov, Paul Flook, Wenjin Zheng, Sándor Szalma, and Scott Kahn: Assessment of Putative Protein Targets Derived from the SARS Genome. **FEBS Letters**. 554(3):257-63, 2003

- (7) W. Jim Zheng, Velin Z. Spassov, Lisa Yan, Paul K. Flook and Sándor Szalma: A hidden Markov model with molecular mechanics energy scoring function for transmembrane helix prediction. **Computational Biology and Chemistry**. 28(4):265-74 2004.
- (8) Daniel A Shegogue, W. Jim Zheng: Capturing Biological Information with Class-Responsibility-Collaboration Cards. **Bioinformatics**. 21(3):415-7. 2005
- (9) Daniel A Shegogue, W. Jim Zheng: Object-oriented biological system integration: a SARS coronavirus example. **Bioinformatics**. 21(10):2502-9. 2005
- (10) Daniel A Shegogue, W. Jim Zheng: Integration of the Gene Ontology into an object-oriented architecture. **BMC Bioinformatics**. 6(1):113. 2005
- (11) W. Jim Zheng: Engineering Approaches toward Biological Information Integration at the Systems Level. **Current Bioinformatics**. 1(1):85-93, 2006
- (12) Linyong Mao, W. Jim Zheng: Combining Comparative Genomics with de novo Motif Discovery to Identify Human Transcription Factor DNA-Binding Motifs. **BMC Bioinformatics**. 7 (Suppl 4):S21, 2006
- (13) Lam C. Tsoi, W. Jim Zheng: A Method of Microarray Data Storage Using Array Data Type. **Computational Biology and Chemistry**. 31(2):143. 2007
- (14) Sarah Bradshaw, W. Jim Zheng, Lam C. Tsoi, Gary S. Gilkeson, Xian K. Zhang: A role for Fli-1 in B cell proliferation: implications for SLE pathogenesis. **Clinical Immunology**, 129(1):19-30, 2008
- (15) Jingshan Huang, Jiangbo Dang, Michael N. Huhns, W. Jim Zheng: Using Artificial Neural Network to Align Biological Ontology. **BMC Genomics**, 2008, Accepted

Book Review: W. Jim Zheng: Book review: "Statistical Methods in Bioinformatics: An Introduction" (2nd ed.) by Warren J. Ewens and Gregory Grant. *JASA*. 101(473):393. March 2006

Presentations: International Conference on Molecular Systems Biology(ICMSB'04)
W. Jim Zheng: Modeling Viral Infection Using UML

9th World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2005). W. Jim Zheng: Object-Oriented Behavior Modeling for Biological Systems

Symposium of Computations in Bioinformatics and Bioscience – SCBB06, June 22, 2006, Hangzhou, China, Linyong Mao, W. Jim Zheng: Combining Comparative Genomics with de novo Motif Discovery to Identify Human Transcription Factor DNA-Binding Motifs.

Patents and Pending Patents (1) U.S. Patent Application No. 09/864637
 Filed: May 23, 2001
 Inventors: Wei, C., Ruan, Y., **Zheng, W.**
 Title: Colony Array-Based cDNA Library Normalization by Hybridization of Complex RNA Probes and Gene Specific Probes
 Status: Pending

(2) International Patent Application No. PCT/US01/23315
Filed: July 20, 2001
Inventors: Pogue, G., della-Cioppa, G, **Zheng, W.**, Wolfe, G.
Title: Methods of Creating Dwarf Phenotypes in Plants
Status: Pending

(3) International Patent Application No. PCT/US02/32851
Filed: October 12, 2001
Inventors: Becha, S. D., Bhatia, U., Blake, J. J., Borowsky, M. L., Burrill, J. D., Chang, H., Chawla, N. K., Elliott, V. S., Emerling, B. M., Forsythe, L. J., Gorvad, A. E., Griffin, J. A., Hafalia, A. J. A., Ho, A., Ison, C. H., Kable, A. E., Khare, R. Lal, P. G., Lee, S., Lee, E. A., Lee, S. Y., Lehr-Mason, P. M., Li, J. X., Lindquist, E. A., Luo, W., Marquis, J. P., Ramkumar, J., Richardson, T. W., Sprague, W. W., Swarnakar, A., Tang, Y. T., Warren, B. A., Yang, J, Yue, H., Zebarjadian, Y., **Zheng, W.**
Title: Structural and cytoskeleton-associated proteins
Status: Pending

(4) International Patent Application No: PCT/US02/38445
Filed: November 27, 2001
Inventors: Baughn, M. R., Becha, S. D., Bhatia, U., Blake, J. J., Burford, N., Burrill, J. D., Chang, H., Chawla, N. K., Elliott, V. S., Emerling, B. M., Forsythe, L. J., Gandhi, A. R., Gietzen, K. J., Gorvad, A. E., Griffin, J. A., Hafalia, A. J. A., Jackson, J.L., Ho, A., Ison, C. H., Jackson, A. A., Jiang, X., Jin, P., Kable, A. E., Khare, R. Lal, P. G., Lee, S., Lee, E. A., Lee, S. Y., Li, J. X., Lu, D. A. M., Ramkumar, J., Richardson, T. W., Sprague, W. W., Swarnakar, A., Tang, Y. T., Warren, B. A., Xu, Y., Yao, M. G., Yue, H., **Zheng, W.**
Title: Nucleic acid-associated proteins
Status: Pending

(5) International Patent Application No: PCT/US02/32850
Filed: October 12, 2001
Inventors: Ramkumar, J., Gorvad, A. E., Baughn, M. R., Emerling, B. M., Yang, J, Lee, S. Y., Tran, U. K., Becha, S. D., Duggan, B. M., Lee, E. A., Griffin, J. A., Li, J. X., Sprague, W. W., Hafalia, A. J. A., Chawla, N. K., Lehr-Mason, P. M., Kable, A. E., Yue, H., Marquis, J. P., Yao, M. G., Richardson, T. W., Tang, Y. T., Jin, P., Chien, D., Bhatia, U., Burrill, J. D., Lee, S., Blake, J. J., Ho, A., **Zheng, W.**
Title: Protein modification and maintenance molecules
Status: Pending

(6) International Patent Application No: PCT/US02/35151
Filed: November 7, 2002
Inventors: Kable, A. E., Swarnakar, A., Gorvad, A. E., Hafalia, A. J. A., Duggan, B. M., Warren, B. A., Emerling, B. M., Ison, C. H., Nguyen, D. B., Lindquist, E. A., Lee, E. A., Yue, H., Yue, H., Forsythe, I. J., Ramkumar, J., Griffin, J. A., Li, J. X., Marquis, J. P., Gietzen, K. J., Baughn, M. R., Borowsky, M. L., Yao, M. G., Chawla, N. K., Lehr-Mason, P. M., LAL, P. G., Gururajan, R., Khare, R., Batra, S., Becha, S.

D., Lee, S. Y., Tran, U. K., Elliott, V. S., Sprague, W. W., Tang, Y.T., Zebarjadian, Y., Jiang, X., Jackson, A. A., Bhatia, U., Burrill, J. D., Lee, S., Blake, J. J., Ho, A., **Zheng, W.**,
Title: Intracellular signaling molecules
Status: Pending

(7) International Patent Application No: PCT/US02/38446
Filed: November 25, 2002
Inventors: Tang, Y. T., Chawla, N. K., Lu, D. A. M., Khan, F. A., Gandhi, A. R., Swarnakar, A., Azimzai, Y., Marquis, J. P., Sprague, W. W., Emerling, B. M., Yue, H., Borowsky, M. L., Becha, S. D., Ison, C. H., Elliott, V. S., Hafalia, A. J. A., Ring, H. Z., Warren, B. A., Gietzen, K. J., Tran, U. K., Lee, S. Y., Lee, E. A., Richardson, T. W., Kable, A. E., Burford, N., Lehr-Mason, P. M., Gorvad, A. E., Lee, S., Blake, J. J., Honchell, C. D., Thangavelu, K., Ramkumar, J., Chien, D., Jin, P., Chang, H., Baughn, M. R., Nguyen, D. B., Khare, R., Bhatia, U., Burrill, J. D., Ho, A., **Zheng, W.**
Title: Molecules for disease detection and treatment
Status: Pending

(8) International Patent Application No: PCT/US02/29979
Filed: September 19, 2002
Inventors: Ho, A., Baughn, M., R., Becha, S. D., Burford, N., Elliott, V. S., Emerling, B. M., Forsythe, I. J., Gorvad, A. E., Griffin, J. A., Hafalia, A. J. A., Honchell, C. D., Ison, C. H., Burrill, J. D., Blake, J. J., Lal, P. G., Lee, E. A., Marquis, J. P., Lehr-Mason, P. M., Lee, S., Sprague, W. W., Swarnakar, A., Tang, Y. T., Tran, B., Tran, U. K., Bhatia, U., Chawla, N. K., Warren, B. A., **Zheng, W.**, Xu, Y., Yue, H.
Title: Immune response associated proteins
Status: Pending

(9) International Patent Application No: PCT/US02/29980
Filed: September 19, 2002
Inventors: Warren, B. A., Emerling, B. M., Lee, E. A., Chang, H., Forsythe, I. J., Griffin, J. A., Baughn, M. R., Chawla, N. K., Khare, R., Reedy, R., Lee, S., Bulloch, S. A., Lee, S. Y., Tran, U. K., Elliott, V. S., Tang, Y. T., Bhatia, U., Burrill, J. D., Blake, J. J., Ho, A., **Zheng, W.**
Title: Lipid-associated molecules
Status: Pending

(10) International Patent Application No: PCT/US02/31096
Filed: September 26, 2002
Inventors: Yang, J., Lu, D. A. M., Yue, H., Elliott, V. S., Warren, B. A., Duggan, B. M., Forsythe, I. J., Lee, E. A., Hafalia, A. J. A., Ramkumar, J., Chawla, N. K., Baughn, M. R., Becha, S. D., Gorvad, A. E., Tran, U. K., Li, J. X., Yao, M. G., Ison, C. H., Griffin, J. A., Lee, S. Y., Chang, H., Emerling, B. M., Tang, Y. T., Lal, P. G., Kable, A. E., Marquis, J. P., Jing, X., Jackson, A. A., Zebarjadian, Y., Swarnakar, A., Wilson, A. D., Jin, P., Richardson, T. W., Bhatia, U., Burrill, J. D., Lee, S., Blake, J. J., Ho, A., **Zheng, W.**, Gao, J.
Title: Enzymes

Status: Pending

(11) International Patent Application No: PCT/US03/02500

Filed: January 23, 2003

Inventors: Hafalia, A. J. A., Li, J. X., Gorvad, A. E., Chawla, N. K., Sprague, W. W., Lee, S. Y., Chang, H., Elliot, V. S., Ramkumar, J., Khare, R., Emerling, B. M., Kable, A. E., Tang, Y. T., Yue, H., Gietzen, K. J., Lee, S., Swarnakar, A., Baughn, M. R., Wilson, A. D., Jin, P., Chien, D., Hawkins, P. R., Jiang, X., Jackson, A. A., Bhatia, U., Burrill, J. D., Blake, J. J., Ho, A., **Zheng, W.**, Ison, C. H., Marquis, J. P., Tran, U. K., Lal, P. G., Warren, B. A., Xu, Y., Honchell, C. D., Becha, S. D., Lehr-Mason, P. M.

Title: Protein modification and maintenance molecules

Status: Pending

(12) International Patent Application No: PCT/US02/39133

Filed: December 4, 2002

Inventors: Griffin, J. A., Ramkumar, J., Emerling, B. M., Kable, A. E., Elliott, V. S., Marquis, J. P., Baughn, M. R., Gorvad, A. E., Yue, H., Lee, E. A., Becha, S. D., Tang, Y. T., Tran, U. K., Swarnakar, A., Lee, S., Ison, C. H., Hafalia, A. J. A., Tran, B., Sprague, W. W., Khare, R., Gandhi, A. R., Gietzen, K. J., Bhatia, U., Burrill, J. D., Blake, J. J., **Zheng, W.**, Lee, S. Y., Ho, A.

Title: Proteins associated with cell growth, differentiation, and death

Status: Pending

(13) International Patent Application No: PCT/US02/38437

Filed: November 26, 2002

Inventors: Baughn, M. R., Becha, S. D., Bhatia, U., Blake, J. J., Borowsky, M. L., Burrill, J. D., Delegeane, A. M., Elliott, V. S., Gandhi, A. R., Gietzen, K. J., Gorvad, A. E., Griffin, J. A., Ho, A., Jin, P., Kable, A. E., Lal, P. G., Lee, E. A., Lee, S., Lee, S. Y., Lehr-Mason, P. M., Marquis, J. P., Ramkumar, J., Richardson, T. W., Sprague, W. W., Swarnakar, A., Tang, Y. T., Tran, B., Tran, U. K., Chawla, N. K., Warren, B. A., Xu, Y., Yue, H., **Zheng, W.**

Title: Cell adhesion and extracellular matrix proteins

Status: Pending

(14) International Patent Application No: PCT/US02/40059

Filed: December 12, 2002

Inventors: Baughn, M. R., Bhatia, U., Blake, J. J., Burrill, J. D., Elliott, V. S., Emerling, B. M., Forsythe, I. J., Gietzen, K. J., Gorvad, A. E., Griffin, J. A., Hafalia, A. J. A., Ho, A., Jackson, A. A., Jiang, X., Kable, A. E., Kearney, L., Khare, R., Lee, E. A., Lee, S., Lu, D. A. M., Marquis, J. P., Lehr-Mason, P. M., Ramkumar, J., Richardson, T. W., Sprague, W. W., Tran, U. K., Chawla, N. K., Warren, B. A., Yue, H., **Zheng, W.**

Title: Neurotransmission-associated proteins

Status: Pending

(15) United States Patent Application No. 20040259125

Filed: February 25, 2004

Inventors: Bhatia, U. G., Erndt, N., **Zheng, W.**, Montgomery, J., Vainer, M., Tong, V.

Title: Methods, systems and apparatus for identifying genetic differences in disease and drug response

Status: Pending

Professional Societies:

American Society of Human Genetics

International Society of Computational Biology (ISCB)

Honors/Fellowships

2008	PhRMA Foundation Research Starter Award
2003	Accelrys Excellence Award
2002	Inventor Recognition Award, Incyte Genomics
1997	NHLBI Fellowship (Training In Cardiovascular Research)
1996	American Society of Microbiology Travel Award
1995	27th Sigma Xi graduate student research forum, UT Southwestern Chapter
1991	Award for teaching Excellency, Wuhan University
1988	Outstanding graduate student research Award, Wuhan University