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EDUCATION BACKGROUND

1998	Ph.D	Public Health (Molecular Biological & Bioelectromagnetics)	Medicine School of Zhejiang University, PRChina.
1989	M.S.	Public Health	Medicine School of Zhejiang University, PRChina
1985	M.D.	Medicine	Medicine School of Zhejiang University, PRChina

PROFESSIONAL EXPERIENCE

2009.4-present	Molecular Structural Biologist (706), Midwest Center for Structural Biology (MCSG), Biosciences Division, Argonne National Laboratory
2004.3 – 2009.4	Assistant Scientist (705), Midwest Center for Structural Biology (MCSG), Biosciences Division, Argonne National Laboratory
2001.2 – 2004.2	Post-doctoral Fellow, Supervisor: Dr. Andrzej Joachimiak Midwest Center for Structural Biology (MCSG), Biosciences Division, Argonne National Laboratory.
1998.7 – 2001.	Associate Professor; Medicine School of Zhejiang University, PRChina
1989.9 – 1994.7	Lecturer, Hangzhou high school of medicine, PRChina

GRANTS

2000 – 2003	A study of responsive genes to millimeter wave National Natural Science Foundation of PR China (NSFC)
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Grant # - 39970189

1998 – 2000 Use of differential display to identify differentially expressed mRNAs induced by ELF magnetic field
National Natural Science Foundation of PR China (NSFC)
Grant # - 39770633

SELECTIVE HONORS AND AWARDS

1. “Crystal Structure of *Bacillus anthracis* Transpeptidase Enzyme CapD” JBC, 284, 24406-24414 , 2009. This article was selected as a Paper of the Week by Journal of Biological Chemistry. (First Author) (2009)
2. Pacesetter Award by Argonne National Laboratory and The University of Chicago (2005)
3. 2nd place of the Zhejiang Provincial Natural Scientific and Technical Progress Prize awarded by Zhejiang Provincial Government, PR China (First Author) (2000)
4. 2nd place of the Zhejiang Provincial Natural Scientific and Technical Progress Prize awarded by Zhejiang Educational Bureau, PR China (First Author) (2000)
5. Excellent Ph.D. Dissertation Prize awarded by Zhejiang University, PR China (2000)
6. 1st place of the Natural Science Excellent Thesis Prize awarded by Zhejiang Provincial Scientific and Technical Society, PR China (First Author) (1999)
7. 2nd place of the Natural Science Excellent Thesis Prize awarded by Zhejiang Provincial Scientific and Technical Society, PR China (First Author) (1997)
8. Award for the Remarkable Achievements in Science and Technology Invention and Innovation by National Bureau in China Technological Information Promotion System United Nations (Fifth Author) (1996)

MEMBERSHIP AND/OR PROFESSIONAL ASSOCIATION

1. Member of American crystallographic Association (2011-2012)
2. Director of the Chinese Biomedical Engineering Society Bioeletromagnetics Society (2000)
3. Board Member of the Chinese Biomedical Engineering Society (2000)

4. Member of Youth Working Committee of Chinese Biomedical Engineering Society (1999)

PUBLICATIONS

1. **R. Wu**, M. Gu, R. Wilton, G. Babnigg, Y. Kim, P.R. Pokkuluri, H. Szurmant, A. Joachimiak, M. Schiffer Insight into signaling relay: crystal structure of the sensor domain of *Bacillus subtilis* histidine kinase, KinD to be submitted
2. M Makowska-Grzyska, Y. Kim, **R.Wu** , R.Wilton, DR. Gollapalli, XK. Wang, R. Zhang, R. Jedrzejczak, J.Mack, R.Mulligan, TA. Binkowski, P.Gornicki, M.Kuhn, W.Anderson, L. Hedstrom, Joachimiak A. Bacillus anthracis Inosine 5'-Monophosphate Dehydrogenase in Action: The First Bacterial Series of Structures of Phosphate Ion- , Substrate- , and Product-Bound Complexes . Biochemistry 2012, 51, 6148–6163
3. Y. Kim, Babnigg G , Jedrzejczak R, Eschenfeldt W , Li H, Maltseva N, Hatzos-Skintges C, Gu M, Makowska-Grzyska M, **R.Wu** , An H, Chhor G, Joachimiak A High-throughput protein purification and quality assessment for crystallization Methods 2011
4. **R.Wu**, Stefan Richter, Rong-guang Zhang, Valerie J. Anderson, Dominique Missiakas,¹ and Andrzej Joachimiak: Crystal Structure of *Bacillus anthracis* Transpeptidase Enzyme CapD J. Biol. Chem. 2009, 284: 24406-244143. **Cited 8 times**, selected as a Paper of the Week by Journal of Biological Chemistry
5. Kim Y, Quartey P, Li H, ... **R.Wu**, ... Zhang RG, Joachimiak A. Large-Scale Evaluation of Protein Reductive Methylation for Improving Protein Crystallization. Nature Methods. 2008. 5: 851-910. **Cited 41 times**
6. Susanne Gräslund, Pär Nordlund¹, Johan Weigelt¹,..., **R.Y. Wu**, Min Zhou, ..., Kristin C Gunsalus Protein Production and Purification Nature Methods 2008. 5:135. **Cited 162 times (reviews)**
7. Maresso, A.W., **R.Y. Wu**, Kern, J.W., Zhang, R., Janik, D., Missiakas, D.M., Duban, M.E., Joachimiak, A., Schneewind, O. Activation of Inhibitors b Sortase Triggers Irreversible Modification of the Active Site. J. Biol. Chem. 2007, 282: 23129-23139. **Cited, 32 times**
8. Petrova T, Cuff ME, **R.Y. Wu**, Kim Y, Holzle D, Andrzej Joachimiak: Novel Hexamerization Motif Discovered In A Conserved Cytoplasmic Protein From Salmonella Typhimurium. Journal of Structural and Functional Genomics, 2007, 8:19-25.
9. **R.Y. Wu**, Skaar EP, Zhang R, Joachimiak G, Gornicki P, Schneewind O, Joachimiak A *Staphylococcus aureus* IsdG and IsdI, Heme-Degrading Enzymes with Structural Similarity to Monooxygenases. J Biol Chem. 2005, 280:2840-6. **Cited 66 times**

10. Zhang R, **R.Y. Wu**, Joachimiak G, Mazmanian SK, Missiakas DM, Gornicki P, Schneewind O, Joachimiak A . Structures of Sortase B From *Staphylococcus Aureus* and *Bacillus Anthracis* Reveal Catalytic Amino Acid Triad In The Active Site. Structure (Camb), 2004, 12:1147-56. **(Co-first author) Cited 42 times**
11. Kim Y, Dementieva I, Zhou M, **R.Y. Wu**, Lezondra L, Quartey P, Joachimiak G, Korolev O, Li H, Joachimiak A. Automation of Protein Purification for Structural Genomics. Journal of Structural and Functional Genomics. 2004, 5:111-118. **Cited 61 times**
12. Brunzelle JS, **R.Y. Wu**, Korolev SV, Collart FR, Joachimiak A, Anderson WF Crystal Structure of *Bacillus Subtilis* YdaF Protein: A Putative Ribosomal N-Acetyltransferase. Proteins 2004, 57: 850-853. **Cited 7 times**
13. Sanishvili R, **R.Y. Wu**, Kim DE, Watson JD, Collart F, Joachimiak A . Crystal Structure of *Bacillus Subtilis* YckF : Structural and Functional Evolution. J Struct Bio. 2004, 148:98-109. **Cited 6 times**
14. **R.Y. Wu**, Zhang, R., Zagnitko, O., Dementieva, I., Maltzev, N., Watson, J.D., Laskowski, R., Gornicki, P., Joachimiak, A. Crystal Structure of *Enterococcus Faecalis* SlyA-Like Transcriptional Factor. J Biol Chem. 2003, 278:20240-4. **Cited 59 times**
15. **R.Y. Wu**, Chiang, H., et al. The Effect of 50 Hz Magnetic Field on GCS mRNA Expression In *Lymphoma B* Cell by mRNA Differential Display. J Cell Biochem. 2000. 79, 460-70. **Cited 10 times**
16. **R.Y. Wu**, Jiang Huai, et al. Cloning and Identification of Magnetic Field-Responsive Genes in *Daudi* Cells. Chinese Science Bulletin. 2000. 45: 59-63. **Cited 6 times**
17. **R.Y. Wu**, H. yang, H.Chiang et al The Effects of Low-Frequency Magnetic Fields on DNA Unscheduled Synthesis Induced by Methylnitro-Nitrosoguanidine *in vitro*. Electro-and-Magnetobiology, 1998 17: 57-66. **Cited 6 times**
18. H.Chiang, **R.Y. Wu**, and BJ Shao Pulsed Magnetic Field Enhanced Teratogenic Effect of Mytosine Arabinoside in Mice Bioelectromagnetics 1995, 16:531-538. **Cited 25 times**
19. **R.Y. Wu**, H Chiang and B.J Shao Effect of 2.45-GHz Microwave Radiation and Phorbol Ester 12-O-Tetradecanoylphorbol-13-Acetate on Dimethylhydrazine induced Colon Cancer in Mice Bioelectromagnetics 1994, 15: 531-538. **Cited 55 times**

POSTERS AND PRESENTATIONS

1. **R.Wu**, S. Clancy, Andrzej Joachimiak Structures of Glutamate Decarboxylase from *Sphaerobacter thermophilus* in Complex with PLP and GABA at Atomic Resolution Portien Society Meeting San Diego 2012 (presentation)
2. **R. Wu**, H. Li, Y.C Kim, G. Babnigg, and A. Joachimiak A Salvage Protein Purification Approach in MCSG High Throughput Pipeline ACA meeting New Orleans 2011 (presentation)
3. **R.Y. Wu**, M.Y. Gu, A. Joachimiak and M. Schiffer Crystal Structure of *Bacillus subtilis* Histidine Kinase KinD Sensor Domain ACA meeting . Chicago 2010. (Presentation)
4. **R.Y. Wu**, RG. Zhang, H. Li, M. Gu, S. Clancy, A. James, A. Joachimiak and M. Schiffer The Crystal Structures of Sensor Domains from *Bacillus subtilis* and *Vibrio parahaemolyticus* Structural Genomics and Frontiers in Structural Biology. Keystone, Salt lake 2010. (Presentation)
5. **R.Y. Wu**, Anthony W. Maresso^{§, †}, Justin W. Kern[§], Mark-Eugene Duban[‡], Rongguang Zhang[†], Dominique M. Missiakas[§], Andrzej Joachimiak[†] and Olaf Schneewind[¶] Activation of Inhibitors by Sortase Triggers Irreversible Modification of the Active Site Symposium of the Protein Society. San Diego, 2008 (Presentation)
6. **R.Y. Wu**, Y. Kim, L. E. Volkart and A. Joachimiak An Efficient Approach to Early Screen Protein Quality by Analytic Size Exclusion Chromatography Protein Structure Initiative Bottlenecks Workshop. Maryland, 2008. (Presentation)
7. Rongguang Zhang, **R.Y. Wu**, Atafan Richter, Ann Elmer, Domininique Missiakas and A. Joachimiak The Crystal Structural of Capsule Synthesis Protein CapD, a Major Virulence Factor in *Bacillus anthracis* XXI Congress of the International Union of Crystallography. Osaka, Japan. 2008
8. **R.Y. Wu**, A. Binkowski, S. Clancy and A. Joachimiak: Crystal Structure of *Pseudomonas syringae* YaeQ protein (MP572) Symposium of the Protein Society. Boston, 2007. (Presentation)
9. Youngchang Kim, **R.Y. Wu**, Osipiuk Jerzy, Moy Shiu, Joachimiak Andrzej: Structure Of EF0647 From *Enterococcus Faecali*, A Putative Hxlr Family Transcriptional Regulator. Meeting of the American Crystallographic Association. Salt Lake City, 2007
10. **R.Y. Wu**, RongGuang Zhang, Shiu F. Moy, Andrzej Joachimiak. Structure of *B. subtilis* NrdI - an Auxiliary Protein of Class Ib Ribonucleotide Reductase has Flavodoxin Fold and Binds FMN. Annual Meeting of the American Crystallographic Association. Hawaii, 2006. (Presentation)

11. Rongguang Zhang, **RY. Wu**, Lour Volkart, Grazyna Joachimiak, Piotr Gornicki, Andrzej Joachimiak : Crystal Structure of IMP Dehydrogenase from *Bacillus anthracis*. Annual Meeting of the American Crystallographic Association. Hawaii, 2006
12. Marianne E. Cuff, **RY. Wu**, Tatiana Petrova, Andrzej Joachimiak: Structure of STM3548 Cytoplasmic Protein from *Salmonella typhimurium*. Annual Meeting of the American Crystallographic Association. Hawaii, 2006
13. Dominika Borek, Jerzy Osipiuk, **RY. Wu**, Shiu F. Moy, Andrzej Joachimiak, Zbyszek Otwinowski. Determination of ytrI Architecture. Annual Meeting of the American Crystallographic Association. Hawaii, 2006
14. **RY. Wu**, Erik Skaar, RG Zhang, Grazyna Joachimiak, Piotr Gornicki, Olaf Schneewind, Andrzej Joachimiak *Staphylococcus aureus* IsdG and IsdI , Heme Degrading Enzymes with Structural Similarity to Monooxygenases International Conference on Structural Genomics. Washington DC, 2004. (Presentation)
15. Rongguang Zhang, **RY. Wu**, Grazyna Joachimiak, Sarkis K., Mazmanian , Dominique M. Missiakas, Piotr Gornicki, Olaf Schneewind , Andrzej Joachimiak, Crystal Structures of Sortase B from *staphylococcus aureus* and *bacillus anthracis* Reveal Catalytic Amino Acid Triad in the active Site International Conference on Structural Genomics. Washington DC, 2004
16. Marianne E. Cuff, **RY. Wu**, Irina Dementieva, Andrzej Joachimiak, The Structure of Xanthine Phosphoribosyltransferase from *Bacillus Subtilis* International Conference on Structural Genomics. Washington DC, 2004
17. **R.Y. Wu**, RongGuang Zhang, O.Zagnitko, I.Dementieva, N.miak, J.D. Watson, R.laskowski, P.Gornicki and A. Joachimiak Crystal structure of SlyA-like Transcriptional Factor. Annual Meeting of the American Crystallographic Association. Kentucky, 2003. (Presentation)
18. **R.Y. Wu**, and H. Chiang: Cloning and identification of magnetic field-responsive genes in *Daudi* cells using differential display. The 21th Annual Meeting of the Bioelectromagnetics Society (BEMS). Los Angeles , 1999 (Presentation)
19. **R.Y. Wu**, H. Chiang and Y.D. Fu: Use of differential display to identify differentially expressed genes induced by ELF magnetic field. The 20th Annual Meeting of the Bioelectromagnetics Society (BEMS). Florida, 1998. (Presentation)
20. **R.Y. Wu**, H. Chiang and Y.D. Fu: The effects of 50 Hz magnetic fields and/or phorbol ester TPA on proto-oncogene expression. 20th Annual International Conference of the IEEE Engineering in Medicine and Biology Society. Hong Kong, 1998. (Presentation)

STRUCTURES DEPOSITED IN PDB

1SQE 1XBW 1LJ9 1M3S 1NSL 1RLJ 1Y0B 1S3J 1XDZ 2FPN

<u>3FOS</u>	<u>1RZ2</u>	<u>3CPN</u>	<u>1YLF</u>	<u>2GK3</u>	<u>1YB4</u>	<u>2FUV</u>	<u>1T5B</u>	<u>2FQ4</u>	<u>1T06</u>
<u>2GRE</u>	<u>1ZWY</u>	<u>1U9D</u>	<u>1ZVP</u>	<u>1XFK</u>	<u>1XMX</u>	<u>2H7K</u>	<u>2OTD</u>	<u>2IAC</u>	<u>1Z7U</u>
<u>2P25</u>	<u>2NN5</u>	<u>3EHD</u>	<u>3CEX</u>	<u>2OQT</u>	<u>2OEQ</u>	<u>1RFZ</u>	<u>1T6A</u>	<u>1RZ3</u>	<u>3DO8</u>
<u>3ED5</u>	<u>3D6J</u>	<u>3F5B</u>	<u>3DS8</u>	<u>2PPW</u>	<u>2IDL</u>	<u>2QYT</u>	<u>3CP3</u>	<u>2R2A</u>	<u>2OT9</u>
<u>2GBO</u>	<u>2I5U</u>	<u>3DOA</u>	<u>3B85</u>	<u>2R5R</u>	<u>3BK5</u>	<u>3BUU</u>	<u>3E7H</u>	<u>2QQY</u>	<u>3B8F</u>
<u>2QOZ</u>	<u>2R9I</u>	<u>2R5S</u>	<u>2QSX</u>	<u>2P7J</u>	<u>3C85</u>	<u>3CQB</u>	<u>2QQW</u>	<u>2QQZ</u>	<u>3G7G</u>
<u>3GA9</u>	<u>3G9K</u>	<u>3H2Z</u>	<u>3H9P</u>	<u>3HF7</u>	<u>3ICY</u>	<u>3IRA</u>	<u>3IVL</u>	<u>3JUW</u>	<u>3K32</u>
<u>3K2N</u>	<u>3KDQ</u>	<u>3LDU</u>	<u>3LM7</u>	<u>3LUP</u>	<u>3MFN</u>	<u>3MUQ</u>	<u>3MXQ</u>	<u>3N7Z</u>	<u>3NJA</u>
<u>3NRT</u>	<u>3NRV</u>	<u>3NZN</u>	<u>3O5V</u>	<u>3ONQ</u>	<u>3OOO</u>	<u>3GYG</u>	<u>3LAX</u>	<u>3GDZ</u>	<u>3RQZ</u>
<u>3QSG</u>	<u>3R0V</u>	<u>3QSJ</u>	<u>3RAC</u>	<u>3RAG</u>	<u>3U27</u>	<u>3TVA</u>	<u>3RPJ</u>	<u>3SQN</u>	<u>4DBJ</u>
<u>4DAH</u>	<u>4DAK</u>	<u>4DBI</u>	<u>4GAK</u>	<u>4GAK</u>	<u>4EWF</u>	<u>4EW7</u>	<u>4ESY</u>	<u>4ERU</u>	<u>4ERH</u>
<u>4DIM</u>	<u>3U27</u>								