

Curriculum Vitae

Andrew H.-J. Wang

Present position: Vice President (Academic)
Academia Sinica
Distinguished Research Fellow
Institute of Biological Chemistry



Education

B.S., Chemistry, National Taiwan University, 1967
M.S., Chemistry, National Taiwan University, 1970
Ph.D., Chemistry, University of Illinois-Urbana, 1974

Positions

1974-88 Postdoctoral Research Associate (74-80), Research Scientist (80-82),
Principal Research Scientist (82-85), Senior Research Scientist (85-88),
Department of Biology, MIT
1-7/81 & Visiting Scientist, Gorlaeus Lab., Leiden State Univ., The Netherlands
3-4/83 (with Prof. J. H. van Boom)
9/87-2/88 Visiting Associate, Division of Chemistry, Caltech (with Prof. P. B. Dervan)
2/95-5/95 Visiting Professor, Department of Biophysical Chem., Nijmegen University
(with Prof. C. Hilbers)
1988-2000 Professor of Biophysics, Biochemistry, and Chemistry,
Dept. of Cell & Structural Biology, Biochemistry, UIUC
1996-97 Acting Head, Dept. of Cell & Structural Biology, UIUC
2000-2006 Distinguished Research Fellow and Director, Institute of Biological
Chemistry, Academia Sinica
2006-present Distinguished Research Fellow and Vice President (Academic), Academia
Sinica

Other Professional Activities

1983-94 Member, Editorial Board, *J. Biomol. Struct. Dyn.*
1984 Director, Second Summer School in Biophysics,
International Center for Theoretical Physics, Trieste, Italy
1984-94 Member, Organizing Committee for the SUNYA Conversation
in the Discipline of Biomolecular Stereodynamics
1988-present Member, Advisory Board (1988-1996); Adj. Research Fellow
(1992-2002); Adj. Distinguished Research Fellow (2002-present),
Institute of Mol. Biol., Taipei, Taiwan
1990-93 Member, Advisory Board, Biotechnology Center, UIUC
1991-94 Member, NIH BBKA Study Section
1993-96 Member, NSF Predoctoral Fellowship Review Panel
1995-2002 Editor, *European J. Biochem.*
1998-2002 Editorial Board, *Nucleic Acids Research*
2001-2007 President, Biophysics Society of ROC
2001-2004 President, Taiwan Society of Biochemistry and Molecular Biology
2003-2006 President, Taiwan Proteomics Society
2004-present Council Member, Taiwan Society of Biochemistry and Molecular
Biology
2003-2007 Council Member, AOHUPO
2003-present Council Member, Human Proteomic Organization (HUPO).
2006-present Council Member, Taiwan Proteomics Society
2006-present Chair Professor, National Chung Hsing University
2007-present Distinguished Research Chair Professor, National Taiwan University
2007-present Director, National Research Program for Genomic Medicine
2009-present President, The KT Wang Foundation

Membership & Honors

1987 Elected member, American Society for Biochemistry & Molecular Biology
1987 Fellow, American Institute of Chemists
1998 Fellow, American Association for the Advancement of Science
2000 Academician, Academia Sinica
2005 Fellow, The Third World Academy of Sciences (TWAS)
2007 Fellow, A-IMBN
2007 Science and Engineering Achievement Award, Taiwanese-American Foundation

Research interests

Structural proteomics, drug discovery, synchrotron crystallography, structure-function relationship of enzymes and DNA

Ten selected peer-reviewed publications (out of 350)

1. Huang, K.-F., Liu, Y.-L., Cheng, W.-J., Ko, T.-P. & Wang, A. H.-J. (2005) *Proc. Natl. Acad. Sci.* **102**, 13117-13122. "Crystal structures of human glutaminyl cyclase, an enzyme responsible for protein N-terminal pyroglutamate formation."
2. Lee, C.-C., Ko, T.-P., Chou, C.-C., Yoshimura, M., Doong, S.-R., Wang, M.-Y. and Wang, A. H.-J. (2006) *J. Struct. Biol.* **155**, 74-86. "Crystal structure of infectious bursal disease virus VP2 subviral particle at 2.6Å resolution: implications in virion assembly and immunogenicity."
3. Chang, T.-H., Guo, R.-T., Ko, T.-P., Wang, A. H.-J. and Liang, P.-H. (2006) *J. Biol. Chem.* **281**, 14991-15000. "Crystal structure of type-III geranylgeranyl pyrophosphate synthase from *Saccharomyces cerevisiae* and the mechanism of product chain length determination."
4. Pai, C.-H., Chiang, B.-Y., Ko, T.-P., Chou, C.-C., Chong, C.-M., Yen, F.-J., Chen, S., Coward, J. K., Wang, A. H.-J. and Lin, C.-H. (2006) *EMBO J.* **25**, 5970-82. "Dual binding sites for translocation catalysis by *Escherichia coli* glutathionylspermidine synthetase."
5. Sun, H.-T., Lin, S.-W., Ko, T.-P. Pan, J.-F., Liu, C.-L., Lin, C.-N., Wang, A. H.-J. and Lin, C.-H. (2007) *J. Bio. Chem.* **282**, 9973-82. "Structure and mechanism of *Helicobacter pylori* fucosyltransferase. A basis for lipopolysaccharide variation and inhibitor design." (**Featured on cover**)
6. Guo, R.-T., Cao, R., Liang, P.-H., Ko, T.-P., Chang, T.-H., Hudock, M.-P., Jeng, W.-Y., Chen, C.-K., Zhang, Y., Song, Y., Kuo, C.-J., Yin, F., Oldfield, E. and Wang, A. H.-J. (2007) *Proc. Natl. Acad. Sci.* **104**, 10022-10027. "Bisphosphonates target multiple sites in both cis- and trans-prenyltransferases."
7. Liu, C.-I., Liu, G.-Y., Song, Y., Yin, F., Hensler ME., Jeng WY., Nizet V., Wang, A. H.-J. and Oldfield E. (2008) *Science.* **319**, 1391-1394. "A cholesterol lowering agent inhibits *Staphylococcus aureus* virulence."
8. Jeng WY., Ko, T.-P., Liu, C.-I., Guo, R.-T., Liu, C.-L., Shr HL and Wang, A. H.-J. (2008) *Nucleic Acids Res.* **36**, 1567-1577. "Crystal structure of IcaR, a repressor of the TetR family implicated in biofilm formation in *Staphylococcus epidermidis*." (**Featured on Cover**)
9. Wang, H.-C., Wang, H.-C., Ko, T.-P., Lee, Y.-M., Leu, J.-H., Ho, C.-H., Huang, W.-P., Lo, C.-F. and Wang, A. H.-J. (2008) *Proc. Natl. Acad. Sci.* **105**, 20758-20763. "White spot syndrome virus protein ICP11: A histone-binding DNA mimic that disrupts nucleosome assembly."
10. Wu, Y.-H., Ko, T.-P., Guo, R.-T., Hu, S.-M., Chuang, L.-M. and Wang, A. H.-J. (2008) *Structure.* **16**, 1714-1723. "Structural basis for catalytic and inhibitory mechanisms of human prostaglandin reductase PTGR2."