ZHIHAO ZHUANG, PH.D.
Associate Professor
Department of Chemistry & Biochemistry
University of Delaware
Drake Hall 214A
Newark, DE 19716
(302) 831-8940, zzhuang@udel.edu
http://sites.udel.edu/zhuanggroup/

EDUCATION AND TRAINING

2003 - 2007	Postdoctoral Fellow, Chemical Biology, Pennsylvania State University, Mentor: Professor Stephen J. Benkovic
1998 - 2003	Ph.D., Biochemistry, University of New Mexico Advisor: Professor Debra Dunaway-Mariano
1993 - 1997	B.S., Chemistry, Sichuan University, China

PROFESSIONAL EXPERIENCE

2013- present	University of Delaware, Department of Chemistry and Biochemistry. Associate Professor
2007- 2013	University of Delaware, Department of Chemistry and Biochemistry. Assistant Professor

INSTITUTIONAL AFFILIATION

2007 - present	University of Delaware, Department of Chemistry and Biochemistry
2007 - present	Delaware Biotechnology Institute (DBI)
2009 - present	Nemours Center for Childhood Cancer Research, Nemours/Alfred I. duPont Hospital for Children

HONORS AND AWARDS

Guest editor *Frontiers in Chemistry*, 2019
NIH study section ZRG1 BCMB-H ad hoc member, 2018
Molecules, journal editorial board, 2018
National Science Foundation Review Panel Member, 2016
American Cancer Society Research Scholar Award, 2014
NIH study section SBCA ad hoc member, 2014
Faculty of 1000 member in Chemical Biology, 2011-now
National Science Foundation CAREER Award, 2010
American Chemical Society Young Investigator Symposium, 2009
Selected as a member of Sigma Xi, 2005
Outstanding Teaching Assistant Award, 1999

Honored Senior Undergraduate Student, Sichuan University, 1997
National Baogang Award for outstanding undergraduates, 1996

PUBLICATIONS

52. Weijun Gui, Christine A. Ott, Kun Yang, Jedidiah Chung, Zhihao Zhuang, Cell-Permeable Activity-based Ubiquitin Probes Enable Intact Intracellular Profiling of Deubiquitinases, *J. Am. Chem. Soc.*, 2018, 140 (39), 12424–12433
51. Ping Gong, Gregory A. Davidson, Weijun Gui, Kun Yang, William P. Bozza, Zhihao Zhuang, Activity-Based Ubiquitin-Protein Probes Reveal Target Protein Specificity of Deubiquitinating Enzymes, *Chem. Sci.*, 2018, 9, 7859-7865
50. Ott C, Baljinnyam B, Zakharov A, Jadhav A, Simeonov A, Zhuang Z. Cell Lysate-Based AlphaLISA Deubiquitinase Assay Platform for Identification of Small Molecule Inhibitors. *ACS Chem Biol*. 2017 12(9):2399-2407
49. Li G, Yuan L, Zhuang Z. Chemical Synthesis of Activity-Based Diubiquitin Probes. *Methods Mol Biol*. 2017;1513:223-232
48. Tencer A, Liang Q, and Zhuang Z. Divergence in ubiquitin interaction and catalysis among the ubiquitin-specific protease family DUBs. (2016) *Biochemistry*, Aug 23;55(33):4708-19.
47. Yang K, Li G, Gong P, Gui W, Yuan L, Zhuang Z. Chemical Protein Ubiquitination with Preservation of the Native Cysteines. (2016) *ChemBioChem*. 17(11):995-8.
45. Tsutakawa SE, Yan C, Xu X, Weinacht CP, Freudenthal BD, Yang K, Zhuang Z, Washington MT, Tainer JA, Ivanov I. Structurally Distinct Ubiquitin- and Sumo-Modified PCNA: Implications for Their Distinct Roles in the DNA Damage Response. (2015) *Structure*. 23(4):724-33.
44. Dexheimer TS, Rosenthal AS, Luci DK, Liang Q, Villamil MA, Chen J, Sun H, Kerns EH, Simeonov A, Jadhav A, Zhuang Z, Maloney DJ. Synthesis and structure-activity relationship studies of N-benzyl-2-phenylpyrimidin-4-amine derivatives as potent USP1/UAF1 deubiquitinase inhibitors with anticancer activity against nonsmall cell lung cancer. (2014) *J Med Chem*. 57(19):8099-110
43. Yang K, Gong P, Gokhale P, Zhuang Z. Chemical Protein Polyubiquitination Reveals the Role of a Noncanonical Polyubiquitin Chain in DNA Damage Tolerance (2014) *ACS Chemical Biology*. 9(8):1685-91.
42. Liang Q, Dexheimer TS, Zhang P, Rosenthal AS, Villamil MA, You C, Zhang Q, Chen J, Ott CA, Sun H, Luci DK, Yuan B, Simeonov A, Jadhav A, Xiao H, Wang Y, Maloney DJ, Zhuang Z. A selective USP1-UAF1 inhibitor links deubiquitination to DNA damage responses. (2014) *Nature Chemical Biology*. 10(4):298-304.
    [Highlights: News and Views in Nature Chemical Biology; Editorial Picks in Chemistry & Biology; and SciBX.]
41. Li G, Liang Q, Gong P, Tencer A and Zhuang Z. Activity-based diubiquitin probes for elucidating the linkage specificity of deubiquitinating enzymes. (2014) *Chem. Comm*. 50(2):216-8.
40. Villamil M, Liang Q, and Zhuang Z. The WD40-Repeat Protein-Containing Deubiquitinase Complex: Catalysis, Regulation, and Potential for Therapeutic Intervention (2013) *Cell Biochemistry and Biophysics*, 67(1):111-126.
39. Richard A. Burkhart, Yu Peng, Zoë A. Norris, Renée Tholey, Vanessa A. Talbott, Qin Liang, Yongxing Ai, Kathy Miller, Shruti Lal, Joseph A. Cozzitorto, Agnieska K. Witkiewicz, Charles

J. Yeo, Matthew Gehrmann, Andrew Napper, Jordan M. Winter, Janet A. Sawicki, Zhuang Z, and Jonathan R. Brody. Mitoxantrone targets human ubiquitin-specific peptidase 11 (USP11) and is a potent inhibitor of pancreatic cancer cell survival (2013) *Molecular Cancer Research*, 11(8):901-11.

38. Yang K, Weinacht CP, Zhuang Z. The regulatory role of ubiquitin in eukaryotic DNA translesion synthesis. (2013) *Biochemistry*, 52 (19):3217–3228
37. Bozza WP, Liang Q, Ping Gong, Zhuang Z. Transient kinetic analysis of USP2 catalyzed deubiquitination reveals a conformational rearrangement in the K48-linked diubiquitin substrate. (2012) *Biochemistry*, 51(50):10075-86.
36. Villamil M, Liang Q, Chen J, Choi Y, Hou S, Lee K, and Zhuang Z. Serine phosphorylation is critical for the activation of USP1 and its interaction with a WD40-repeat protein UAF1. (2012) *Biochemistry*, 51: 9112–23.
35. Juhasz S, Balogh D, Hajdu I, Burkovics P, Villamil MA, Zhuang Z and Haracska J. Identification of human RZF1, a ubiquitin-PCNA interacting regulator of DNA damage tolerance. (2012) *Nucleic Acids Research*. 40(21):10795-808.
34. Bozza WP, Yang K, Wang J, Zhuang Z. Developing peptide-based multivalent inhibitors of proliferating cell nuclear antigen and a fluorescence-based PCNA binding assay. (2012) *Anal. Biochem*. 427(1):69-78.
33. Villamil MA, Chen J, Liang Q, Zhuang Z. A noncanonical cysteine protease USP1 is activated through active site modulation by USP1-associated factor 1. (2012) *Biochemistry*, 51:2829-39.
32. Chen J, Dexheimer T, Ai Y, Liang Q, Villamil M, Inglese J, Maloney D, Jadhav A, Simeonov A, and Zhuang Z. Selective and cell-active inhibitors of the USP1/UAF1 deubiquitinase complex reverse cisplatin resistance in non-small cell lung cancer cells. (2011) *Chemistry and Biology*, 18(11): 1390-1400.
31. Tsutakawa SE, van Wynsberghe AW, Freudenthal BD, Weinacht CP, Gakhar L, Washington MT, Zhuang Z, Tainer JA, Ivanov I. Solution X-ray scattering combined with computational modeling reveals multiple conformations of covalently bound ubiquitin on PCNA. (2011) *PNAS*, 108(43):17672-77.
30. Bozza WP, and Zhuang Z. Biochemical characterization of a multidomain deubiquitinating enzyme Ubp15 and the regulatory role of its terminal domains. (2011) *Biochemistry*, 50(29):6423-32.
29. Ai Y, Wang J, Johnson RE, Haracska L, Prakash L, Zhuang Z. A novel ubiquitin binding mode in the S. cerevisiae translesion synthesis DNA polymerase η. (2011) *Molecular BioSystems*, 7(6): 1874-82. (Featured as the front cover in the June issue of Molecular BioSystems)
28. Chen J, Bozza W, and Zhuang Z. Ubiquitination of PCNA and its essential role in eukaryotic translesion synthesis. (2011) *Cell Biochemistry and Biophysics*, 60:47-60.
27. Chen J, Ai Y, Wang J, Haracska L, Zhuang Z. Chemically ubiquitylated PCNA as a probe for eukaryotic translesion DNA synthesis. (2010) *Nature Chemical Biology*, 6(4):270-272.
26. Zhuang Z, Ai Y. Processivity factor of DNA polymerase and its expanding role in normal and translesion DNA synthesis. (2010) *BBA-Proteins and Proteomics*, 1804(5): 1081-1093.
25. Zhuang Z*, Johnson RE, Haracska L, Prakash L, Prakash S, Benkovic SJ*. Regulation of polymerase exchange between Polη and Polδ by monoubiquitination of PCNA and the movement of DNA polymerase holoenzyme. (2008) *PNAS*, 105(14):5361-5366. (* corresponding author)

24. Song F, Thoden JB, Zhuang Z, Latham J, Trujillo M, Holden HM, Dunaway-Mariano D. The catalytic mechanism of the hotdog-fold enzyme superfamily 4-hydroxybenzoyl-CoA thioesterase from Arthrobacter sp. strain SU. (2012) *Biochemistry*. 51(35):7000-16
23. Dong J, Zhuang Z, Song F, Dunaway-Mariano D, Carey PR, A thioester substrate binds to the enzyme Arthrobacter thioesterase in two ionization states: evidence from Raman difference spectroscopy. (2012) *Journal of Raman Spectroscopy*, 43(1):65-71
22. Zhuang Z, Latham J, Song F, Zhang W, Trujillo M, Dunaway-Mariano D. Investigation of the catalytic mechanism of the hotdog-fold enzyme superfamily Pseudomonas sp. strain CBS3 4-hydroxybenzoyl-CoA thioesterase. (2012) *Biochemistry*, 51(3):786-94.
21. Manosas M, Spiering MM, Zhuang Z, Benkovic SJ, Croquette V. Coupling DNA unwinding activity with primer synthesis in the bacteriophage T4 primosome. (2009) *Nature Chemical Biology*, 5:904-12.
20. Li Z, Song F, Zhuang Z, Dunaway-Mariano D, Anderson KS. Monitoring enzyme catalysis in the multimeric state: direct observation of Arthrobacter 4-hydroxybenzoyl-coenzyme A thioesterase catalytic complexes using time-resolved electrospray ionization mass spectrometry. (2009) *Anal. Biochem*. 394:209-16.
19. Zhuang Z, Song F, Zhao H, Li L, Cao J, Eisenstein E, Herzberg O and Dunaway-Mariano1 D. Divergence of Function in the Hotdog-Fold Enzyme Superfamily: The Bacterial Thioesterase YciA. (2008) *Biochemistry*, 47: 2789-2796
18. Willis MA, Zhuang Z, Song F, Howard A, Dunaway-Mariano D and Herzberg O. Structure of YciA from Haemophilus influenzae (HI0827), a hexameric broad specificity acyl-coenzyme A thioesterase. (2008) *Biochemistry*, 47: 2797-2805
17. Song F, Zhuang Z, Dunaway-Mariano D. Structure-activity analysis of base and enzyme-catalyzed 4-hydroxybenzoyl coenzyme A hydrolysis. (2007) *Bioorg. Chem*. 35:1-10.
16. Zhuang Z, Berdis AJ, Benkovic SJ. An alternative clamp loading pathway via the T4 clamp loader gp44/62-DNA complex. (2006) *Biochemistry*, 45, 7976-7989.
15. Smiley RD, Zhuang Z, Benkovic SJ, Hammes GG. Single-molecule investigation of the T4 bacteriophage DNA polymerase holoenzyme: multiple pathways of holoenzyme formation. (2006) *Biochemistry*, 45:7990-7997.
14. Zhuang Z, Yoder BL, Burgers PM, Benkovic SJ. The structure of a ring-opened proliferating cell nuclear antigen-replication factor C complex revealed by fluorescence energy transfer. (2006) *PNAS*, 103:2546-2551.
13. Song F, Zhuang Z, Finci L, Dunaway-Mariano D, Kniewel R, Buglino JA, Solorzano V, Wu J, Lima C. Structure, function and mechanism of the phenylacetate pathway hotdog-fold thioesterase PAAI. (2006) *J. Biol. Chem*. 281:11028-11038.
12. Xi J, Zhang Z, Zhuang Z, Yang J, Spiering MM, Hammes GG, Benkovic SJ. Interaction between the T4 helicase loading protein (gp59) and the DNA polymerase (gp43): unlocking of the gp59-gp43-DNA complex to initiate assembly of a fully functional replisome. (2005) *Biochemistry*, 44:7747-7756.
11. Yang J, Xi J, Zhuang Z, Benkovic SJ. The oligomeric T4 primase is the functional form during replication. (2005) *J. Biol. Chem*. 280:25416-25423.
10. Xi J. Zhuang Z. Zhang Z. Selzer T. Spiering M. Hammes G. Benkovic SJ. The interaction between the T4 Helicase loading Protein (gp59) and the Polymerase (gp43): a locking mechanism to delay replication during replisome assembly. (2005) *Biochemistry*, 44:2305-2318.

9. Willis MA, Song F, Zhuang Z, Krajewski W, Chalamasetty VR, Reddy P, Howard A, Dunaway-Mariano D, and Herzberg O. Structure of YciI from Haemophilus influenzae (HI0828) reveals a ferredoxin-like alpha/beta-fold with a histidine/aspartate centered catalytic site. (2005) *Proteins*, 59:648-652.
8. Zhuang Z., Spiering MM, Berdis AJ, Trakselis MA, Benkovic SJ. 'Screw-cap' clamp loader proteins that thread. (2004) *Nature Structural and Molecular Biology*, 11:580-581.
7. Yang J, Zhuang Z. Roccasecca RM, Trakselis MA, and Benkovic SJ. The Dynamic Processivity of the T4 DNA Polymerase during Replication. (2004) *PNAS*, 101:8289-8294. (This paper is the subject of a commentary paper in the same issue written by Joyce CM. from Yale University, in the title of "T4 replication: what does 'processivity' really mean?")
6. Zhuang Z, Song F, Takami, H. and Dunaway-Mariano D. The BH1999 protein of Bacillus halodurans C-125 is Gentisyl-Coenzyme A thioesterase. (2004) *J. Bacteriol*. 186:393-399.
5. Thoden JB, Zhuang Z, Dunaway-Mariano D, Holden HM. The structure of 4-hydroxybenzoyl-CoA thioesterase from Arthrobacter sp. strain SU. (2003) *J. Biol. Chem*. 278:43709-43716.
4. Zhuang Z, Gartemann KH, Eichenlaub R, Dunaway-Mariano D. Characterization of the 4-hydroxybenzoyl-coenzyme A thioesterase from Arthrobacter sp. strain SU. (2003) Appl. Environ. *Microbiol*. 69:2707-2711.
3. Zhuang Z, Song F, Zhang W, Taylor K, Archambault A, Dunaway-Mariano D, Dong J, Carey PR. Kinetic, Raman, NMR and Site-Directed Mutagenesis Studies of the Pseudomonas Sp. Strain CBS3 4-Hydroxybenzoyl-CoA Thioesterase Active Site. (2002) *Biochemistry*, 41:11152-11160.
2. Thoden JB, Holden HM, Zhuang Z, Dunaway-Mariano D. X-ray Crystallographic Analyses of Inhibitor and Substrate Complexes of Wild-type and Mutant 4-Hydroxybenzoyl CoA Thioesterase. (2002) *J. Biol. Chem*. 277:27468-27476.
1. Zhuang Z, Song F, Martin BM, Dunaway-Mariano D. The YbgC protein encoded by the ybgC gene of the tol-pal gene cluster of Haemophilus influenzae catalyzes acyl-coenzyme A thioester hydrolysis. (2002) *FEBS Lett*. 516:161-163.

INVITED CONFERENCE TALKS:

1. Gordon Research Conference (GRC), Enzymes, Coenzymes and Metabolic Pathways Metabolic Pathways, July 26, 2018, Waterville Valley, NH
2. The 14th SINO-US Chemistry Professors Conference, Wuhan, Hubei, China, June 21, 2018.
3. The 13th SINO-US Chemistry Professors Conference, Nantong, Jiangsu, China, June 20, 2017
4. Keystone Symposia on ubiquitin signaling, Whistler, British Columbia, Canada, March 13 - 18, 2016
5. The 13th Annual Discovery on Target Conference, Targeting Proteostasis Series, Sep. 21-24, 2015, Boston
6. The 250th ACS National Meeting, Aug 16, 2015, Boston, MA
7. The 12th Annual Discovery on Target Conference, Oct 8-10, 2014, Boston, MA
8. The 7th International SUMO, Ubiquitin, UBL Proteins Conference, May 2014, Shanghai, China,
9. The 5th Ubiquitin Drug Discovery and Diagnostics Conference, July 2013, Philadelphia, PA
10. The 9th SINO-US Chemistry Professors Conference, July 2013, Chengdu, Sichuan, China
11. The 23rd Enzyme Mechanisms Conference, January 2013, Coronado, CA

12. 244th ACS National Meeting, August 2012, Philadelphia, PA
13. Gordon Research Conference (GRC), Enzymes, Coenzymes and Metabolic Pathways Metabolic Pathways, July 2012, Waterville Valley, NH
14. American Chemical Society (ACS) Regional Meeting, May 2011, College Park, MD
15. Delaware Health Science Alliance Symposium, May 2011, Philadelphia, PA
    Johns Hopkins University, Department of Pharmacology and Molecular Sciences, Baltimore, MD, Dec 14 2011
17. Ubiquitin Drug Discovery and Diagnostics Conference, August 2010, Philadelphia, PA
18. FASEB Nucleic Acid Enzymes, June 2010, Saxtons River, VT
19. Frontiers at the Chemistry-Biology Interface Symposium, May 2010, Johns Hopkins University, Baltimore, MD
20. 4th Baltimore Area DNA Repair Symposium, March 2010, Baltimore, MD
21. Chemical Biology Interface/CTCR symposium, Jan. 2009, Delaware Biotechnology Institute, Newark, DE
22. American Chemical Society (ACS) National Meeting, March 2009, Salt Lake City, Utah

INVITED SEMINARS:

1. University of Chicago, Department of Chemistry, Chicago, IL, April 5, 2019
2. Northwestern University, Department of Chemistry, Chicago, IL, April 4, 2019
3. State University of New York at Buffalo, Department of Chemistry, Buffalo, NY, September 25, 2018
4. Peking University, School of Pharmaceutical Sciences, Beijing, June 12, 2018
5. Tsinghua University, Department of Chemistry, Beijing, June 13, 2018
6. Wuhan University, School of Pharmaceutical Sciences, Wuhan, China, June 20, 2018
7. Zhengzhou University, School of Life Sciences, Zhengzhou, China, June 14, 2018
8. Purdue University, Department of Chemistry, West Lafayette, Indiana, February 5, 2018
9. Tianjin Institute of Biotechnology, Chinese Academy of Sciences, Tianjin, China, June 16, 2017
10. Hunan University, Institute of Chemical Biology and Nanomedicine, Changsha, China, June 8, 2017
11. University of Maryland School of Medicine, Baltimore, Maryland, May 19, 2017
12. Henan University of Technology, Department of Chemistry, Zhengzhou, Henan, Dec. 28. 2016
13. Southeast University, Institute of Life Science, Nanjing, Jiangsu, Dec. 25 2016
14. Sidney Kimmel Medical College at Thomas Jefferson University, Department of Biochemistry & Molecular Biology and the Department of Cancer Biology, Philadelphia, PA, Oct. 24 2016
15. City University of Hong Kong, Department of Biology and Chemistry, Hong Kong, June 27 2016
16. South China University of Technology, School of Chemistry and Chemical Engineering, Guangzhou China, June 20 2016
17. Temple University, Department of Chemistry, Philadelphia, PA, Oct 2 2014
18. Wadsworth Center, New York State Department of Health, NY, Sept 25 2014
19. University of Maryland, Department of Chemistry and Biochemistry, College Park, MD, Sept 9 2014

20. Shanghai Institute of Material Medica, Shanghai, China, May 23, 2014
21. Fudan University, Department of Chemistry, Shanghai, China, May 22, 2014
22. Wuhan University, College of Chemistry and Molecular Sciences, Wuhan, China, May 19, 2014
23. Millennium, The Takeda Oncology Company, Boston, Mar. 28 2014
24. Penn State College of Medicine, Department of Biochemistry & Molecular Biology, Hersey, PA, Sep. 30 2013
25. Sichuan University, College of Chemistry, Chengdu, Sichuan, July 12, 2013
26. National Institute of Biological Sciences (NIBS), Beijing, China, June 17, 2013
27. Beijing Key Laboratory of DNA Damage Response, Capital Normal University, Beijing, China, June 14, 2013
28. Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, June 13, 2013
29. Fudan University, Department of Biochemistry and Molecular Biology, Shanghai, China, June 3rd 2013
30. University of Maryland Baltimore County, Department of Chemistry and Biochemistry, Baltimore County, MD, Apr. 16 2013
31. National Institutes of Health, NIDDK, Bethesda, MD, Feb 28 2013
32. Penn State University, Department of Biochemistry and Molecular Biology, State College, PA, Sep. 24 2012
33. Cornell University, Department of Chemistry and Chemical Biology, Ithaca, NY, Sep. 6 2012
34. University of Minnesota, Chemistry Biology Interface Program, Minneapolis, MN, May 14, 2012
35. Rice University, Department of Biochemistry and Cell Biology, Houston, TX, Apr 30 2012
36. Texas A&M University, Department of Chemistry, College Station, TX, Apr 27 2012
37. National Institutes of Health, NIA, Baltimore, MD, Apr 24 2012
38. Boston University, Department of Chemistry, Boston, MA, Apr 18 2012
39. University of New Mexico, Department of Chemistry, Albuquerque, NM, Apr 13 2012
40. Albert Einstein College of Medicine, Department of Biochemistry, New York, NY, Apr 3 2012
41. Emory University, Department of Chemistry, Atlanta, GA, Mar 19, 2012
42. Georgia State University, Department of Chemistry, Atlanta, GA, Mar 16, 2012
43. University of Pennsylvania, Department of Biochemistry and Biophysics, Philadelphia, PA, Mar 1 2012
44. University of Miami, Department of Biochemistry, Miami, Feb 24, 2012
45. Scripps Florida, Department of Chemistry, Jupiter, FL, Feb 23, 2012
46. University of Maryland, Department of Chemistry and Biochemistry, MD, Feb. 7, 2012
47. University of Kentucky, Department of Biochemistry, Lexington, KY, Jan 30, 2012
48. Duke University, Department of Biochemistry, Durham, NC, Jan 20, 2012
49. North Carolina State University, Department of Chemistry, NC, Jan 19, 2012
50. Beckman Research Institute of City of Hope, Duarte, CA, October, 7, 2011
51. University of California Davis, Department of Chemistry, CA, October, 6, 2011
52. University of California Riverside, Department of Chemistry, CA, October, 5, 2011
53. University of California San Diego, Skaggs School of Pharmacy and Pharmaceutical Science, October 4, 2011
54. Stanford University, Department of Chemical and Systems Biology, October 3 2011

55. University of Texas at Austin, College of Pharmacy, Austin, TX, September 29, 2011
56. Virginia Common Wealth University, Department of Chemistry, Richmond, VA, September 20, 2011
57. University of Delaware, Department of Biological Sciences, Newark, DE, April 27, 2011
58. DuPont Haskell Global Centers for Health and Environmental Sciences, February 2, 2011
59. Thomas Jefferson University, Philadelphia, PA, January 10, 2011
60. Hauptman-Woodward Medical Research Institute, Buffalo, NY, December, 10, 2010
61. University of Iowa, Department of Biochemistry, Iowa City, Iowa, September 30, 2010
62. Cancer Working Group (CWG), Department of Biological Sciences, University of Delaware. Newark, DE, November, 2009
63. Nobel Symposium on the 2009 Nobel Prize in Physiology or Medicine, Newark, DE, Oct. 2009
64. NIH Workshop in Chemical Biology and Organic Chemistry in Dallas, Texas, March, 2009
65. American Chemical Society Enzymology Topical Group, Dec. 2008, Media, PA
66. National Institute of Health, Chemical Genomics Center, Bethesda, MD, Aug. 2008
67. Helen F. Graham Cancer Center, Christiana Care Hospital, Newark, DE, May 2008
68. University of Delaware, Dept. of Biological Science, Newark, DE, Feb. 2008
69. Fudan University, College of Medicine, Shanghai, China, Jan. 2008
70. Tsinghua University School of Medicine, Peking Union Medical University, Beijing, China, Jan. 2008
71. Sichuan University, College of Chemistry, Chengdu, China, Dec. 2007
72. University of Delaware, Chemistry & Biology Interface program, Oct. 2007

SERVICE

NIH study section ZRG1 BCMBH ad hoc member
NIH Study Section Member SBCA ad hoc member
National Science Foundation (NSF), Panel Reviewer
National Science Foundation (NSF), Proposal Reviewer
American Association for the Advancement of Science (AAAS) Research Competitiveness Program, Proposal Reviewer
UK Biotechnology and Biological Sciences Research Council (BBSRC), Proposal Reviewer
Israel Ministry of Science, Technology and Space, Proposal Reviewer
US-Israel Binational Science Foundation
NIH Idea Network for Biomedical Research Excellence (Delaware INBRE), Proposal Reviewer
Referee on Promotion, Albert Einstein College of Medicine, Yeshiva University
Session Chair, Gordon Research Conference (GRC), Enzymes, Coenzymes and Metabolic Pathways, 2014
Molecules, Editorial Board
Chinese-American Chemistry & Chemical Biology Professors Association (CAPA), Executive Committee Member, 2014-2016
Chinese-American Chemistry & Chemical Biology Professors Association (CAPA), Board member 2018-present

Peer Reviewer for the following journals
Nature Chemical Biology

Nature Communications
Nature Protocols
Journal of the American Chemical Society
Proceedings of the National Academy of Sciences (PNAS)
ACS Chemical Biology
Journal of Biological Chemistry
Biochemistry
Biochimie
Bioorganic & Medicinal Chemistry
Bioorganic & Medicinal Chemistry Letters
Chemical Communications
Chemistry and Biology
Expert Opinion on Therapeutic Patents
Organic & Biomolecular Chemistry
DNA repair
Journal of Bacteriology
ASSAY and Drug Development Technologies
RNA
Protein Science
ISRN Biochemistry
Journal of Biocatalysis and Biotransformation
Cell Biochemistry and Biophysics
PLoS ONE
Neoplasia
International Journal of Molecular Sciences
Science China Chemistry
Tetrahedron Letters
Molecular Biosystems
Molecular Cancer
Trends in Biochemical Sciences