

Curriculum Vitae

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Education & Training

1990-1995 B.S., Chemistry, Department of Chemistry, Peking University, Beijing, China.
1995-1998 M.S., Chemistry, Department of Chemistry, Peking University, Beijing, China.
1998-2002 Ph.D., Physical Organic Chemistry, Department of Chemistry, University of Miami, Florida.
2002-2006 Postdoc, Chemical Biology & Pharmacology, Department of Pharmacology and Molecular Sciences, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Academic Employment and Positions

08/2018-present Professor, Department of Pharmaceutical and Biomedical Sciences, College of Pharmacy, University of Georgia.
05/2013-08/2018 Associate Professor, Department of Pharmaceutical and Biomedical Sciences, College of Pharmacy, University of Georgia.
05/2014-present Adjunct Professor, Department of Chemistry, University of Georgia.
07/2012-05/2013 Associate Professor, Department of Chemistry (joint appointment with Department of Biology), Georgia State University, Atlanta, Georgia.
08/2006-06/2012 Assistant Professor, Department of Chemistry (joint appointment with Department of Biology), Georgia State University, Atlanta, Georgia.
12/2002-08/2006 Postdoctoral Fellow, Department of Pharmacology and Molecular Sciences, Johns Hopkins University School of Medicine, Baltimore, Maryland.
08/1998-12/2002 Graduate Assistant, Department of Chemistry, University of Miami, Coral Gables, Florida.

Awards and Honors

1. Meritorious Service Award, College of Pharmacy, University of Georgia, 2024
2. Chemist of the Year for Research, Northeast Georgia Section of the American Chemical Society, 2023.
3. Award of Panoz Professorship in Pharmacy, University of Georgia, 2023
4. The Lamar Dodd Creative Research Award, University of Georgia, 2022
5. Focus on Faculty Recognition at University of Georgia, September 2016
6. Session Chair, Gordon Research Conference - Bioorganic Chemistry. June 2014.
7. Session Chair, BIT's 7th Annual Protein and Peptide Conference, Dalian, China. April 2014

8. Nominee for Camille Dreyfus Teacher-Scholar Award. February 2011.
9. Session Chair, Gordon Research Conference - Enzyme and Cofactor. July 2011.
10. Session Chair, 22nd Enzyme Mechanism Conference, Tampa, Florida. January 2011
11. Finalist for 2011 Georgia State University Outstanding Junior Faculty Award, January 2011.
12. News highlight in Georgia State University Villager Newspaper, December 1, 2010.
13. Georgia State University Faculty Award for Undergraduate Research. 2010
14. Georgia Cancer Coalition (GCC) Distinguished Scholar. 2007

Editorial Board Membership

2023—Present	Editorial board member, Journal of Biological Chemistry.
2023—2024	Associate Editor, Frontiers in Chemistry
2018—Present	Editorial board member, and Chemical Biology Section Editor-in-Chief (from 2023), Molecules.
2020—2022	Editorial board member, Frontiers in Chemistry
2015—2020	Editorial board member, Chinese Journal of Medicinal Chemistry
2009—2017	Editorial board member, BioMed Research International.
2015—2018	Scientific advisor board member, Chrysalis Therapeutics, Inc.
2015	Guest Editor, “Epigenetic Technological Applications”, Publisher: Elsevier.

Invited Reviewer for Scientific Journals (>275 times, 94 journals)

1. ACS Chemical Biology
2. ACS Medicinal Chemistry Letters
3. Acta Pharmaceutica Sinica B
4. Advances and Applications in Bioinformatics and Chemistry
5. Aging and Disease
6. Allergy
7. Analytical Biochemistry
8. Analytical Chemistry
9. Angewandte Chemie International Edition
10. Archives of Biochemistry and Biophysics
11. Biochimica Biophysica Acta - General Subjects
12. Biochimica Biophysica Acta - Gene Regulatory Mechanisms
13. Analyst
14. Biochimica Biophysica Acta - Proteins and Proteomics
15. Biomacromolecules
16. Biomolecules
17. Biochemistry
18. Biochemical Journal
19. Bioconjugate Chemistry
20. BioMed Research International
21. Biomedical Chromatography
22. Biomedicine & Pharmacotherapy
23. Bioorganic Chemistry
24. Bioorganic & Medicinal Chemistry Letters (BMCL)
25. Bioorganic & Medicinal Chemistry (BMC)

26. Biophysical Journal
27. BioTechniques
28. Cancer Research
29. Canadian Journal of Chemistry
30. Carbohydrate Polymers
31. CCS Chemistry
32. Cell Biology International
33. Cell Biology and Toxicology
34. Cell Chemical Biology
35. Cellular and Molecular Life Sciences
36. Chemistry and Biology
37. ChemBioChem
38. Chemical Biology & Drug Design
39. Chemical Communications
40. Chemical Reviews
41. Chemical Society Reviews
42. ChemMedChem
43. Current Medicinal Chemistry
44. Current Opinion in Chemical Biology
45. Current Pharmaceutical Design
46. Current Protein and Peptide Science
47. Drug Discovery Today
48. EBioMedicine
49. eLife
50. European Journal of Chemistry
51. European Journal of Medicinal Chemistry
52. FEBS Journal
53. FEBS Letters
54. Food Reviews International
55. Free Radical Biology and Medicine
56. Frontiers in Molecular Biosciences
57. iScience
58. International Journal of Analytical Chemistry
59. International Journal of Biological Macromolecules
60. International Journal of Molecular Sciences
61. Journal of the American Chemical Society (JACS)
62. Journal of Biotechnology
63. Journal of Clinical Investigation
64. Journal of Food Biochemistry
65. Journal of Medicinal Chemistry
66. Journal of Molecular Structure
67. Journal of Physical Chemistry
68. Journal of Proteome Research
69. Journal of Zhejiang University-Science B
70. MedChemComm
71. Medicinal Research Reviews

72. Molecular Biology Reports
73. Molecular BioSystems
74. Molecular Cancer Therapeutics
75. Molecules
76. NAR Cancer
77. Nature Chemical Biology
78. Nature Communications
79. Nature Communications Biology
80. Nature Signal Transduction Targeted Therapy
81. Organic and Biomolecular Chemistry
82. Oncogene
83. Oncotarget
84. Organic Letters
85. Plos One
86. Protein
87. Protein Science
88. Science China Chemistry
89. Sensors
90. Signal Transduction Targeted Therapy
91. Trends in Pharmacological Sciences
92. World Journal of Surgical Oncology

Professional Memberships

- Member, American Society of Biochemistry and Molecular Biology (ASBMB)
- Member, American Chemical Society (ACS)
- Member, International Chemical Biology Society (ICBS)
- Member, American Association of Pharmaceutical Scientists (AAPS)
- Member, American Heart Association (AHA)
- Member, American Association for the Advancement of Science (AAAS)

Publications

1. Fu, Q.; Nguyen, T.; Kumar, B.; Azadi, P.; Zheng, Y. G. (2024) Identification of the Regulatory Elements and Protein Substrates of Lysine Acetoacetylation. *eLife*. In press.
2. Becht, D.C., Song, J., Selvam, K., Yin, K., Bai, W., Zhao, Y., Wu, R., Zheng, Y.G. & Kutateladze, T.G. (2025) The YEATS domain is a selective reader of histone methacrylation. *Structure* 33, 1233-1239.
3. Cao, M.; Trieschmann, C. W.; Samrat, S. K.; Li, H.; Wu, Y.; Maher, S. P.; Bae, A. A.; Xie, Z.; Hogan, R. J.; Zheng, Y. G. (2025) Assay development and screening of inhibitors targeting the SARS-CoV-2 2'-O-methyltransferase NSP16. 3, 100076.
4. Cao, M.; Nguyen, T.; Song, J.; Zheng, Y. G. (2025) Biomedical effects of protein arginine methyltransferase inhibitors. *J Biol Chem*. 301, 108201.
5. Swain, N. D.; George Zheng, Y. Design of a Bioluminescent Assay Platform for Quantitative Measurement of Histone Acetyltransferase Enzymatic Activity. (2025) *Chembiochem* 26, e202400692

6. Dang, T.; EswarKumar, N.; Tripathi, S. K.; Yan, C.; Wang, C. H.; Cao, M.; Paul, T. K.; Agboluaje, E. O.; Xiong, M. P.; Ivanov, I.; Ho, M. C.; Zheng, Y. G. Oligomerization of protein arginine methyltransferase 1 and its functional impact on substrate arginine methylation. *J Biol Chem* 2024, 300, 107947.
7. Bae, A. A.; Zheng, Y. G. (2024) Biomedical effects of protein arginine methyltransferase inhibitors. *Biochem Soc Trans.* 52, 2193–2201.
8. Bae, A. A.; Zheng, Y. G. (2024) Biomedical effects of protein arginine methyltransferase inhibitors. *Biochem Soc Trans.* 52, 2193–2201.
9. Cao, M.; Feng, Y.; Zheng, Y. G. (2023) Protein Arginine Methyltransferase 6 (PRMT6) is a Novel Substrate of Protein Arginine Methyltransferase 1 (PRMT1). *World J. Biol. Chem.* 14, 84–98.
10. Brown, T.; Nguyen, T.; Zhou, B.; Zheng, Y. G. (2023) Chemical Probes of Protein Arginine Methylation. *RSC Chem Biol* 2023, 4, 647-669.
11. Samrat, S. K., Bashir, Q., Huang, Y., Trieschmann, C. W., Tharappel, A. M., Zhang, R., Chen, K., Zheng, Y. G., Li, Z., Li, H. (2023) Broad-Spectrum Small-Molecule Inhibitors Targeting the SAM-Binding Site of Flavivirus NS5 Methyltransferase. *ACS Infect Dis.* 9, 1319-1333.
12. Samrat, S. K., Bashir, Q., Zhang, R., Huang, Y., Liu, Y., Wu, X., Brown, T., Wang, W., Zheng, Y. G., Zhang, Q. Y., Chen, Y., Li, Z., Li, H. (2023) A universal fluorescence polarization high throughput screening assay to target the SAM-binding sites of SARS-CoV-2 and other viral methyltransferases. *Emerg Microbes Infect.* 12, 2204164.
13. Fu, Q., Cat, A., Zheng, Y. G. (2023) New Histone Lysine Acylation Biomarkers and Their Roles in Epigenetic Regulation. *Curr Protoc.* 3, e746. *(top 10% of most-viewed papers published by the journal in 2023)*
14. Tan, D.; Wei, W.; Han, Z.; Ren, X.; Yan, C.; Qi, S.; Song, X.; Zheng, Y. G.; Wong, J.; Huang, H. (2022) HBO1 catalyzes lysine benzoxylation in mammalian cells. *iScience*, 25, 105443.
15. Gu, X.; He, M.; Lebedev, T.; Lin, C. H.; Hua, Z. Y.; Zheng, Y. G.; Li, Z. J.; Yang, J. Y.; Li, X. G. (2022) PRMT1 is an important factor for medulloblastoma cell proliferation and survival. *Biochem Biophys Rep.* 32, 101364.
16. Brown, T., Cao, M., Zheng, Y. G. (2022) Synthesis and Activity of Triazole-Adenosine Analogs as Protein Arginine Methyltransferase 5 Inhibitors. *Molecules*, 27.
17. Song, J., Han, Z., Zheng, Y. G. (2022) Labeling Protein Substrates of Individual Histone Acetyltransferases with Bioorthogonal Reporters. *Curr Protoc.* 2, e497.
18. Song, J., Ngo, L., Bell, K., Zheng, Y. G. (2022) Chemoproteomic Profiling of Cellular Substrates of the Lysine Acetyltransferase HAT1 Using Cell Permeable Bioorthogonal Reporters. *ACS Chem Biol.* 17, 1092-1102.
19. Delaney, K., Tan, M., Zhu, Z., Gao, J., Dai, L., Kim, S., Ding, J., He, M., Halabelian, L., Yang, L., Nagarajan, P., Parthun, M. R., Lee, S., Khochbin, S., Zheng, Y. G., Zhao, Y. (2021) Histone lysine methacrylation is a dynamic post-translational modification regulated by HAT1 and SIRT2. *Cell Discov.* 7, 122.
20. Su, H.; Jiang, M.; Senevirathne, C.; Aluri, S.; Zhang, T.; Guo, H.; Xavier-Ferruccio, J.; Jin, S.; Tran, N. T.; Liu, S. M.; Sun, C. W.; Zhu, Y.; Zhao, Q.; Chen, Y.; Cable, L.; Shen, Y.; Liu, J.; Qu, C. K.; Han, X.; Klug, C. A.; Bhatia, R.; Chen, Y.; Nimer, S. D.; Zheng, Y. G.; Iancu-Rubin, C.; Jin, J.; Deng, H.; Krause, D. S.; Xiang, J.; Verma, A.; Luo, M.; Zhao, X. Methylation of dual-specificity phosphatase 4 controls cell differentiation. *Cell Rep* 2021, 36, 109421.

21. Qian, K., Yan, C., Su, H., Dang, T., Zhou, B., Wang, Z., Zhao, X., Ivanov, I., Ho, M., Zheng, Y. G. (2021) Pharmacophore-based screening of diamidine small molecule inhibitors for protein arginine methyltransferases. *RSC Med Chem* 12, 95–102.
22. Fulton, M. D., Cao, M., Ho, M. C., Zhao, X., Zheng, Y. G. (2021) The Macromolecular Complexes of Histones Affect Protein Arginine Methyltransferase Activities. *J. Biol. Chem.* 297, 101123
23. Zhu, Z., Han, Z., Halabelian, L., Yang, X., Ding, J., Zhang, N., Ngo, L., Song, J., Zeng, H., He, M., Zhao, Y., Arrowsmith, C. H., Luo, M., Bartlett, M. G. and Zheng, Y. G. (2021) Identification of lysine isobutyrylation as a new histone modification mark. *Nucleic Acids Res.* 49, 177-189.
24. Fulton, M. D., Dang, T., Brown, T. and Zheng, Y. G. (2020) Effects of substrate modifications on the arginine dimethylation activities of PRMT1 and PRMT5. *Epigenetics*, 1-18
25. Hua, Z. Y., Hansen, J. N., He, M., Dai, S. K., Choi, Y., Fulton, M. D., Lloyd, S. M., Szemes, M., Sen, J., Ding, H. F., Angelastro, J. M., Fei, X., Li, H. P., Wu, C. R., Yang, S. Y., Malik, K., Bao, X., George Zheng, Y., Liu, C. M., Schor, N. F., Li, Z. J. and Li, X. G. (2020) PRMT1 promotes neuroblastoma cell survival through ATF5. *Oncogenesis.* 9, 50
26. Song, J. Zheng, Y. G. (2020) Bioorthogonal Reporters for Labeling and Profiling Substrates of Lysine Acetyltransferases. *SLAS Discov.* 25, 148 –162
27. Zhang, D., Tang, Z., Huang, H., Zhou, G., Cui, C., Weng, Y., Liu, W., Kim, S., Lee, S., Perez-Neut, M., Ding, J., Czyz, D., Hu, R., Ye, Z., He, M., Zheng, Y. G., Shuman, H. A., Dai, L., Ren, B., Roeder, R. G., Becker, L. and Zhao, Y. (2019) Metabolic regulation of gene expression by histone lactylation. *Nature.* 574, 575-580
28. Tewary, S. K., Zheng, Y. G. and Ho, M. C. (2019) Protein arginine methyltransferases: insights into the enzyme structure and mechanism at the atomic level. *Cell Mol Life Sci.* 76, 2917-2932
29. Fulton, M. D., Brown, T. and Zheng, Y. G. (2019) The Biological Axis of Protein Arginine Methylation and Asymmetric Dimethylarginine. *Int J Mol Sci.* 20, 3322.
30. Chen, S., Wiewiora, R. P., Meng, F., Babault, N., Ma, A., Yu, W., Qian, K., Hu, H., Zou, H., Wang, J., Fan, S., Blum, G., Pittella-Silva, F., Beauchamp, K. A., Tempel, W., Jiang, H., Chen, K., Skene, R. J., Zheng, Y. G., Brown, P. J., Jin, J., Luo, C., Chodera, J. D. and Luo, M. (2019) The dynamic conformational landscape of the protein methyltransferase SETD8. *Elife.* 8.
31. Ngo, L., Brown, T. and Zheng, Y. G. (2019) Bisubstrate inhibitors to target histone acetyltransferase 1. *Chem. Biol. Drug Des.* 93, 865-873.
32. Yu-Jen Lee, Wen-Wei Chang, Chien-Ping Chang, Tsung-Yun Liu, Chun-Yi Chuang, Kun Qian, Y. George Zheng, and Chuan Li. (2019) Downregulation of PRMT1 promotes the senescence and migration of a non-MYCN amplified neuroblastoma SK-N-SH cells. *Sci Rep.* 9, 1771.
33. Fulton, M. D., Brown, T. and Zheng, Y. G. (2018) Mechanisms and Inhibitors of Histone Arginine Methylation. *Chem Record.* 18, 1792-1807.
34. Hairui Su, Chiao-Wang Sun, Szu-Mam Liu, Xin He, Hao Hu, Kevin M. Pawlik, Tim M. Townes, Xiaosi Han, Christopher A. Klug, Maged Henary, Yabing Chen, Ling Li, Y. George Zheng and Xinyang Zhao. (2018) Defining the epigenetic status of blood cells using a cyanine-based fluorescent probe for PRMT1. *Blood Advances* 2018 2:2829-2836

35. Huang, H.; Zhang, D.; Wang, Y.; Perez-Neut, M.; Han, Z.; Zheng, Y. G.; Hao, Q.; Zhao, Y. (2018) Lysine benzoylation is a histone mark regulated by SIRT2. *Nat Commun*, 2018, 9, 3374.
36. He, M., Han, Z., Qiao, J., Ngo, L., Xiong, M. P., Zheng, Y. G. (2018) A Bioorthogonal Turn-On Fluorescence Strategy for the Detection of Lysine Acetyltransferase Activity. *Chem Commun*, 54, 5594-5597.
37. Yang, X., Naughton, S. X., Han, Z., He, M., Zheng, Y. G., Terry, A. V., Jr. and Bartlett, M. G. (2018) Mass Spectrometric Quantitation of Tubulin Acetylation from Pepsin-Digested Rat Brain Tissue Using a Novel Stable-Isotope Standard and Capture by Anti-Peptide Antibody (SISCAPA) Method. *Anal Chem*. 90, 2155-2163.
38. Qian, K.; Hu, H.; Xu, H.; Zheng, Y. G. (2018) Detection of PRMT1 inhibitors with stopped flow fluorescence. *Signal Transduct Target Ther*, 3, 6.
39. Han, Z., Wu, H., Kim, S., Yang, X., Li, Q., Huang, H., Cai, H., Bartlett, M. G., Dong, A., Zeng, H., Brown, P. J., Yang, X. J., Arrowsmith, C. H., Zhao, Y. and Zheng, Y. G. (2018) Revealing the protein propionylation activity of the histone acetyltransferase MOF (males absent on the first). *J Biol Chem*. 293, 3410-3420
40. He, M., Han, Z., Liu, L. and Zheng, Y. G. (2018) Chemical Biology Approaches for Investigating the Functions of Lysine Acetyltransferases. *Angew Chem Int Ed Engl*. 57, 1162-1184.
41. Kim, S., Alsaidan, O. A., Goodwin, O., Li, Q., Sulejmani, E., Han, Z., Bai, A., Albers, T., Beharry, Z., Zheng, Y. G., Norris, J. S., Szulc, Z. M., Bielawska, A., Lebedyeva, I., Pegan, S. D. and Cai, H. (2017) Blocking Myristoylation of Src Inhibits Its Kinase Activity and Suppresses Prostate Cancer Progression. *Cancer Res*. 77, 6950-6962.
42. Hansen, J. N., Li, X., Zheng, Y. G., Lotta, L. T., Dedhe, A., Schor, N. F. (2017) Using Chemistry to Target Neuroblastoma. *ACS Chem NeuroSci*. 8, 2118-2123.
43. Fulton, M., Zhang, J., He, M., Zheng, Y. G. (2017) The Intricate Effects of Lysine Modifications on Arginine Methylation on the Histone H4 N-terminal Tail. *Biochemistry*. 56, 3539-3548.
44. Han, Z., Chou, C., Yang, X., Bartlett, M. G., Zheng, Y. G. (2017) Profiling Cellular Substrates of Lysine Acetyltransferases GCN5 and p300 With Bioorthogonal Labeling and Click Chemistry. *ACS Chem Biol*. 12, 1547-1555.
45. Madaia, V. N., Benedetti, R., Barreca, M. L., Ngo, L., Pescatori, L., Messori, A., Pupo, G., Saccoliti, F., Valente, S., Mai, A., Zheng, Y. G., et al. (2017) Structure-Activity Relationships on Cinnamoyl Derivatives as Inhibitors of p300 Histone Acetyltransferase. *ChemMedChem*. 12, 1359-1368.
46. Valerioli, D. G., Xu, H., Chen, C., Hoshii, T., Eisold, M. E., Delaney, C., Cusan, M., Deshpande, A. J., Huang, C., Lujambio, A., Zheng, Y. G., Zuber, J., Pandita, T. K., Lowe S. W., Armstrong, S. A. (2017) Histone acetyltransferase activity of MOF is required for MLL-AF9 leukemogenesis. *Cancer Res*. 77, 1753-1762.
47. Zhang, J., Qian, K., Yan, C., He, M., Jassim, B., Ivanov, I., Zheng, Y. G. (2017) Discovery of Decamidine as a New and Potent PRMT1 Inhibitor. *MedChemComm*. 8, 440-444.
48. Blazer, L. L., Li, F., Kennedy, S., Zheng, Y. G., Arrowsmith, C. H. and Vedadi, M. (2017) A Suite of Biochemical Assays for Screening RNA Methyltransferase BCDIN3D. *SLAS Discov*. 22, 32-39.
49. Hu, H., Luo, C., Zheng, Y. G. (2016) Transient Kinetics Define a Complete Kinetic Model for Protein Arginine Methyltransferase 1. *J Biol Chem*. 291, 26722-26738.

50. Li, R., Xu, J., Fu, C., Zhang, J., Zheng, Y. G. Jia, H, Liu, J. (2016) Regulation of mTORC1 by Lysosomal Calcium and Calmodulin. *eLife*. 5, e19360.
51. Qian, K., Zheng, Y. G. (2016) Current Development of Protein Arginine Methyltransferase Inhibitors. In *Epi-Informatics: Discovery and Development of Small Molecule Epigenetic Drugs and Probes* (Medina-Franco, J. L., ed.), Academic Press, Waltham. pp. 231-256.
52. Eberhardt, A., Hansen, J. N., Koster, J., Lotta, L. T., Jr., Wang, S., Livingstone, E., Qian, K., Valentijn, L. J., Zheng, Y. G., Schor, N. F. and Li, X. (2016) Protein arginine methyltransferase 1 is a novel regulator of MYCN in neuroblastoma. *Oncotarget*. 7, 63629-63639.
53. Hu, H., Qian, K., Ho, M. C. and Zheng, Y. G. (2016) Small Molecule Inhibitors of Protein Arginine Methyltransferases. *Expert Opin Inv Drug*. 2016, 25, 335-58.
54. Evich, M., Stroeva, E., Zheng, Y. G., Germann, M. W. (2016) Effect of methylation on the side-chain pKa value of arginine. *Protein Sci*. 25, 479-86.
55. Zhang, J., Zheng, Y. G. (2016) SAM/SAH Analogs as Versatile Tools for SAM-dependent Methyltransferases. *ACS Chem Biol*. 11, 583-97.
56. Zhou, R., Xie, Y., Hu, H., Hu, G., Patel, V. S., Zhang, J., Yu, K., Huang, Y., Jiang, H., Liang, Z., Zheng, Y. G. and Luo, C. (2015) Molecular Mechanism underlying PRMT1 Dimerization for SAM Binding and Methylase Activity. *J Chem Inf Model*. 55, 2623-2632
57. Zhang, L., Wang, R., Trans, N. T., Tang, H., Guo, A., Su, H., Placzek, W., Han, X., Hricik, T., Laha, S., Morettin, A., Abdel-Wahab, O., Côté, J., Levine, R., Wang, H., Raffel, G., Deng, H., Liu, Y., Zheng, Y. G., Luo, M., Zhao, X. (2015) Cross-talk between PRMT1-mediated methylation and ubiquitylation on RBM15 controls RNA splicing. *eLife*. 4, e07938.
58. Lee, W. C., Lin, W. L., Matsui, T., Chen, E. S., Wei, T. Y., Lin, W. H., Hu, H., Zheng, Y. G., Tsai, M. D. and Ho, M. C. (2015) Protein Arginine Methyltransferase 8: Tetrameric Structure and Protein Substrate Specificity. *Biochemistry*. 54, 7514-7523.
59. Luan, Y., Blazer, L. L., Hu, H., Hajian, T., Zhang, J., Wu, H., Houliston, S., Arrowsmith, C. H., Vedadi, M. and Zheng, Y. G. (2015) Design of a fluorescent ligand targeting the S-adenosylmethionine binding site of the histone methyltransferase MLL1. *Org Biomol Chem*. 14, 631-638.
60. Han, Z., Luan, Y., Zheng, Y. G. (2015) Integration of Bioorthogonal Probes and Q-FRET for the Detection of Histone Acetyltransferase Activity. *ChemBioChem*. 16, 2605-2609.
61. Zheng, Y. G. (2015) The State of the Art of Epigenetic Technologies. In *Epigenetic Technological Applications* (Zheng, Y. G., ed.), Academic Press, Waltham. p. 1-18.
62. Luan, Y., Ngo, L., Han, Z., Wang, X., Qu, M., Zheng, Y. G. (2015) Histone Acetyltransferases: Enzymes, Assays, and Inhibitors. In *Epigenetic Technological Applications* (Zheng, Y. G., ed.), Academic Press, Waltham. pp. 291-317.
63. Ngo, L., Wu, J., Yang, C., Zheng, Y. G. (2015) Effective Quenchers Are Required to Eliminate the Interference of Substrate—Cofactor Binding In the HAT Scintillation Proximity Assay. *Assay Drug Dev Techn*. 13, 210-220.
64. Park, J. H., Szemesa, M., Vieira, G., Meleghe, Z., Malika, S., Heesom, K. J., Von Wallwitz-Freitas, L., Greenhough, A., Brown, K. W., Zheng, Y. G., Catchpole, D., Deery, M. J., Malik K. (2015) Protein arginine methyltransferase 5 is a key regulator of the MYCN oncoprotein in neuroblastoma cells. *Mol Oncol*. 9, 617-627.
65. Hu, H., Owens, E., Su, H., Yan, L., Zhao, X., Henary, M., Zheng, Y. G. (2015) Exploration of cyanine compounds as selective inhibitors of protein arginine methyltransferases: synthesis and biological evaluation. *J Med Chem*. 58, 1228-1243.

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67. Yan, L., Yan, C., Su, H., Qian, K., Wofford, S., Lee, W., Zhao, X., Ho, M., Ivanov, I. and Zheng, Y. G. (2014) Diamidine Compounds for Selective Inhibition of Protein Arginine Methyltransferases. *J Med Chem*, 57, 2611-2622.
68. Yang, C., Ngo, L., Zheng, Y. G. (2014) Rational Design of Substrate-Based Multivalent Inhibitors of Histone Acetyltransferases. *ChemMedChem.* 9, 537-541.
69. Zhang, R., Li, X., Liang, Z., Zhu, K., Lu, J., Kong, X., Ouyang, S., Li, L., Zheng, Y. G., Luo, C. (2013) Theoretical insights into catalytic mechanism of protein arginine methyltransferase 1. *PLoS One.* 8, e72424.
70. Xu, J., Liu, J., Wang, A. H., Oses-Prieto, J., Makhijani, K., Pei, M., Kastuno, Y., Leilei, Y., Zheng, Y. G., Burlingame, A., Brückner, K., Derynck, R. (2013) Arginine methylation initiates BMP-induced Smad signaling. *Mol Cell.* 51, 5-19.
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73. Gao, T. Yang, C., Zheng, Y. G. (2013) Comparative studies of thiol-sensitive fluorogenic probes for HAT inhibitor screening. *Anal Chem Biochem.* 405, 1361-1371.
74. Wang, J., Chen, L., Sinha, S. H., Liang, Z., Cai, H., Muniyanf, S., Chou, Y., Yang, C., Li, K., Lin, M., Jiang, H., Zheng, Y. G., Luo, C. (2012) Pharmacophore-Based Virtual Screening and Biological Evaluation of Small Molecule Inhibitors for Histone Arginine Methyltransferases. *J Med Chem.* 55, 7978-7987.
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Instruction and Continuing Education Summary of Facts

Courses of Instruction at University of Georgia:

PMCY 4300/6300 –Medicinal Chemistry (3 credit hours)

This course provides a comprehensive and integrated review of modern medicinal chemistry with emphasis on drug and drug targets, pharmacokinetics, drug assays, lead discovery and optimization, computer-aided drug design, structure-activity relationship, combinatorial synthesis, and selected drug topics in medicinal chemistry. I served as the coordinator of the course. Components that I have taught include: protein structure and function, enzymes: structure and function, enzymes as drug targets, receptors: structure and function, receptors as drug targets, nucleic acids: structure and function, nucleic acids as drug targets, miscellaneous drug targets, pharmacokinetics and related topics, drug discovery: finding a lead, structure-activity relationships of functional groups, pharmacophores, optimizing drug-target interactions, optimizing access to target, quantitative structure-activity relationships, combinatorial and parallel synthesis, getting the drug to market, antibacterial agents, and anticancer therapeutics.

PHRM 8010 – Structural Biology and Medicinal Chemistry (4 credit hours)

This course is designed to familiarize students with lead discovery, chemical synthesis, and validation methodology central to medicinal chemistry and to provide a graduate level introduction in the fundamentals of Structural Biology techniques including NMR, X-ray crystallography and elements of modeling. This course serves as a basis from which students can develop specific, in-depth skills required in their research in these areas. Both the theoretical and practical aspects of the listed topics will be covered. Components that I taught include: principles of medicinal chemistry synthesis, sources of preclinical small molecule leads, total synthesis, combinatorial synthesis, and parallel synthesis.

PHRM 8030 – Principles of Drug Discovery and Development (4 credit hours)

Course objectives are to master the principles and strategies of pharmaceutical sciences, including the development of new drugs and dosage forms, the study of mechanisms of drug action and drug metabolism, and the assessment of drug effects and therapeutic responses. Components that I taught include: receptor-ligand interaction, enzyme as therapeutic targets, steady state enzyme kinetics, enzyme mechanism and inhibition, and epigenetics and drug discovery.

PHRM 8050 – Pharmaceutical and Biomedical Analysis (2 credit hours)

This is the second part of a two-course series on Pharmaceutical and Biomedical Analysis. It is designed to familiarize students with the methods employed analysis of drugs and other compounds in various biological and pharmaceutical matrices. It serves as a basis from which students can develop specific, in-depth skills required in their research. Both the theoretical and practical aspects of the various techniques will be covered. Components that I taught include drug screen, characterization and synthesis.

PHRM 8200 – Pharmaceutical and Biomedical Sciences Seminar (2 credit hours)

This seminar course is designed for graduate students to learn research topics, analyze scientific problems, present research data in organized manners, and have the best practice of scientific presentations. My responsibility is to give guidance for scientific presentations, manage and implement seminar presentations, arrange questions and answer sessions, organize group discussions, track student attendance, and judge and grade student performances.

SERVICE

Service at department level

2024	Junior Faculty Mentor Committee
2024-2025	Member, PBS Faculty Search Committee
2023-2024	Member, PBS Faculty Search Committee
2022-2023	Member, Faculty Development Committee
2022-2023	Chair, Faculty Search Committee
2021-2022	Member, Faculty Development Committee
2021-2022	Member, PBS Faculty Search Committee
01/2017-06/2020	Graduate Program Coordinator, Department of Pharmaceutical and Biomedical Sciences
01/2019-5/2020	Junior Faculty Mentor Committee
08/2018-5/2019	Management Committee, Department of Pharmaceutical and Biomedical Sciences
07/2013-12/2016	Graduate Program Committee, Department of Pharmaceutical and Biomedical Sciences
2016	Chair, Faculty Search Committee
2015	Member, PBS Faculty Search Committee
2014	Member, PBS Faculty Search Committee
2013	Member, PBS Faculty Search Committee

Service at college level

2025-present	College Undergraduate and Graduate Education and Curriculum Committee
2018-present	College of Pharmacy Promotion & Tenure Committee
2022	Scientific Reviewer of College of Pharmacy Seed Grants
2020-2022	PharmD Admissions Committee

2018-2020	College Undergraduate and Graduate Education and Curriculum Committee
2018-2020	College Diversity & Multiculturalism Committee
1/10/2018	Admissions interview of PharmD applicants
2016-2017	Member, Computer and Instructional Technology Committee, College of Pharmacy
2016	College of Pharmacy Self-Study Committee
2015-2016	Admissions Committee, College of Pharmacy
08/2013-08/2016	Graduate Education and Curriculum Committee

Service at university level

2024	Chair, Faculty Research Awards Review Committee, Office of Research University of Georgia
6/2020-present	Coordinator of Chemical Biology Interdisciplinary Group (IG) of the ILS program.
2021-2024	Member, Faculty Affairs Committee, University Council
2022, 2023	Member, Faculty Research Awards Review Committee, Office of Research University of Georgia
12/2019-6/2021	Organizer of the Pre-Seed Research Team on “Epi-Drugs”
5/1/2019	Reviewer for <i>Junior Faculty Seed Grants</i> at UGA
04/10/2019	Reviewer for <i>Graduate School Dissertation Completion Award competition</i> at UGA
2/2015-5/2018	Member, Faculty Affairs Committee, University of Georgia
02/2015-5/2018	University Council Member, University of Georgia
04/07/2017	Reviewer for Graduate School Dissertation Completion Award competition at UGA
04/11/2017	Reviewer for Faculty Research Grants in Science and Engineering (FRG-SE) at UGA
04/17/2017	Judge for Annual Graduate Students and Postdocs in Science Research Day at UGA
05/2014-present	Adjunct Professor, Department of Chemistry, University of Georgia
12/2013-present	Member, UGA Biomedical & Health Sciences Institute (BHSI)
08/2013-present	Member, UGA Center for Drug Discovery (CDD)
08/2013-present	Member, UGA Integrated Life Sciences Program (ILS)