Curriculum Vitae

Dr. Wenshe Liu

Tel:

Assistant Professor of Chemistry Member of Professional Program in Biotechnology Member of Interdisciplinary Faculty of Toxicology

Department of Chemistry Texas A&M University

MS 3255

E-mail: wliu@chem.tamu.edu

College Station, TX 77843

Education: Scripps Research Institute, La Jolla, CA

2005-2007

Postdoc in Chemical Biology

University of California, Davis, CA Beijing University, Beijing, China

001-979-845-1746

2000-2005 1996-2000 Ph.D. in Biological Chemistry

1996-2000 B.S. in Chemistry

Awards and Honors: 2012-2017 NSF CAREER Award

2004 UCDavis Summer Research Award

2003 UCDavis Travel Award

2000-2004 UC Systemwide Biotechnology Research Training Fellow

1999-2000 Outstanding Student Leader Award 1998-1999 Canon Undergraduate Award 1997-1998 Huikai Undergraduate Award

1996-2000 Geru Zen Fellow

<u>Professional Affiliations:</u> 2003-current American Chemical Society

2007-current Chinese-American Chemistry Professor Association

Research

Research Experience: Texas A&M University 08/2007 – current

Position: Assistant Professor of Chemistry

Research focus:

1) Develop chemical and biological tools for the synthesis of proteins with posttranslational modifications and apply these tools to studying epigenetic roles of posttranslational modifications in cell differentiation and cancer development;

2) Use bacteria and bacteria phage to construct peptide-small molecule conjugate libraries for anti-cancer drug identifications;

3) Devise simple strategies for fluorescent protein labeling and apply them to understanding protein folding diseases and developing biosensors.

Scripps Research Institute

07/2005 - 07/2007

Position: Postdoctoral Researcher Advisor: Dr. Peter G. Schultz

Research focus:

1) Genetic code expansion of mammalian cells for site-specific installation of unnatural amino acids in their proteins;

 Structurally characterize evolved tyrosyl-tRNA synthetases that were used for genetic incorporation of unnatural amino acids in bacteria and yeast.

University of California-Davis 09/2000 - 06/2005

Position: Graduate Researcher Advisor: Dr. Michael D. Toney

Research focus:

Structurally and mechanistically characterize pyridoxyl-5'-phosphate

dependent enzymes.

Peer Reviewed Publications:

As an independent principal investigator

- 1. Wang Y.-S., Fang X., Chen H.-Y., Wu B., Wang Z.U., Hilty C.B., & Liu W.R.*, "Genetically Encoding Twelve *meta*-Substituted Phenylalanine Derivatives with Diverse Bioorthogonal Functionalities Using a Single Pyrrolysyl-tRNA Synthetase Mutant", *ACS Chem. Biol.*, submitted.
- 2. Odoi K.A., Huang Y., Rezenom Y.H. & Liu W.R.*, "Orthogonality of the Pyrrolysyl-tRNA Synthetase-tRNA^{Pyl} pairs in *Escherichia coli*", *PLOS One*, submitted
- 3. O'Donoghue P, Prat L., Heinemann I., Ling J., Odoi K.A., Liu W.R.* & Soll D.*, "Near-cognate Suppression of Amber, Opal, and Quadruplet Codons Compete with Aminoacyl-tRNA^{Pyl} for Genetic Code Expansion", *FEBS Lett.*, **2012**, in press (*co-corresponding authors).
- Wan W, Wang Y.-S., & Liu W.R.*, "Genetically Encoding Bioorthogonal Functional Groups for Site-selective Protein Labeling", Organic Chem. Curr. Res., 2012, 1:e111, DOI: 10.4172/2161-0401.1000e111
- 5. Wang Z.U., Wang Y.-S., Pai P.-J., Russell W.K., Russell D.H. & Liu. W.R.*, "A Facile Method to Synthesize Histones with Posttranslational Modification Mimics", *Biochemistry*, **2012**, 51:5232-5234.
- 6. Wu B., Wang Z., Huang Y. & Liu W.R.*, "Catalyst-Free and Site-Specific One-Pot Dual Labeling of a Protein Directed by Two Genetically Incorporated Noncanonical Amino Acids", *ChemBioChem*, **2012**, 13: 1405-1408.
- 7. Wang Y.-S., Fang X., Wallace A.L., Wu B. & Liu W.R.*, "A Rationally Designed Pyrrolysyl-tRNA Synthetase Mutant Has a Broad Substrate Specificity", *J. Am. Chem. Soc.*, **2012**, 134: 2950-2953.
- 8. Weinert B.T., Wagner S.A., Horn H., Henriksen P., Liu. W.R., Olsen J.V., Jensen L.J. & Choudhary C.*, "Proteome-wide Mapping of the Drosophila Acetylome Demonstrates a High Degree of Conservation of Lysine Acetylation", *Sci. Signal*, **2011**, 4: ra48.
- 9. Wang Y.-S., Russell W.K., Wang Z., Wan W., Dodd L.E., Pai P.-J., Russell D.H., & Liu W.R.*, "The *De Novo* Engineering of Pyrrolysyl-tRNA Synthetase for Genetic Incorporation of L-phenylalanine and Its Derivatives", *Mol. BioSyst.*, **2011**, 7: 714-717.
- 10. Liu W.R.*, Wang Y.-S. & Wan W., "Synthesis of Proteins with Defined Posttranslational Modifications Using the Genetic Noncanonical Amino Acid Incorporation Approach", *Mol. BioSyst.*, **2011**, 7: 38-47.
- 11. Wang Y.-H., Wu B., Wang Z., Huang Y., Wan W., Russell W.K., Pai P.-J., Russell D.H. & Liu W.R.*, "Genetic Incorporation of A Photocaged N ← methyl-L-lysine into Proteins" *Mol. Biosyst.*, **2010**, 6: 1557-1560. This was an invited submission and featured on *Molecular BioSystems 2010 Emerging Investigators Issue*.

- 12. Wan W., Huang Y., Wang Z., Russell W.K., Pai P.-J., Russell D.H. & Liu W.R.*, "A Facile System for Genetic Incorporation of Two Different Noncanonical Amino Acids into One Protein in *Escherichia coli*", *Angew. Chem. Int. Ed.*, **2010**, 49: 3211-3214. Chosen as a "**Hot Paper**" by the Editors for its importance in a rapidly evolving field of high current interest and announced in the journal's press release.
- 13. Huang Y., Russell W.K., Wan W., Pai P.-J., Russell D.H. & Liu W.*, "A convenient Method for Genetic Incorporation of Multiple Noncanonical Amino Acids into One Protein in *Escherichia coli*". *Mol. BioSyst.* **2010**, 6: 683-686.
- 14. Huang Y., Wan W., Russell W.K., Pai P.-J., Wang Z., Russell D.H. & Liu W.*, "Genetic Incorporation of An Aliphatic Keto-containing Amino Acid into Proteins for Their Site-specific Modification". *Bioorg. Med. Chem. Lett.* **2010**, 3: 878-880

Before becoming an independent investigator

- 15. Brustad E., Bushey M.L., Lee J.W., Groff D., Liu W. & Schultz P.G.* "A Genetically Encoded Boronate Containing Amino Acid" *Angew. Chem. Int. Ed. Engl.*, **2008**, 47: 8220-8223
- 16. Graziano, J.J., Liu, W., Perera R., Geierstanger, B.H., Lesley, S.A., & Schultz, P.G. "Selecting Folded Proteins from a Library of Secondary Structural Elements", *J. Am. Chem. Soc.*, **2008**, 130: 176-185
- 17. Tippmann, E.M.⁺, Liu, W.⁺, Summerer, D., Geierstanger, B., Mack, A.V., & Schultz, P.G.*, "A Genetic Encoded Diazirine Photocrosslinker in *Escherichia coli*", *ChemBioChem*, **2007**, 8: 2210-2214 (*equally contributing authors)
- 18. Liu C.C., Braustad E., Liu W.* & Schultz P.G.*, "Crystal Structure of a Biosynthetic Sulfo-hirudin Complexed with Thrombin", *J. Am. Chem. Soc.*, **2007**, 129: 10648-10649 (*corresponding authors in this paper)
- 19. Liu, W., Brock, A., Chen, S., Chen, S. & Schultz P.G.*, "The Genetic Incorporation of Unnatural Amino Acids into Proteins in Mammalian Cells", *Nat. Methods.* **2007**, 4: 239-44
- 20. Xie, J., Liu, W., & Schultz, P.G.* "A Genetic Encoded Bidentate, Metal Ion Binding Amino Acid", *Angew. Chem. Int. Ed.*, **2007**, 46: 9239-9242,
- 21. Liu, W., Alfonta, L., Mack, A.V. & Schultz, P.G.* "Structural Basis for the Recognition of p-Benzoyl-L-phenylalanyl by Evolved Aminoacyl-tRNA Synthetases", *Angew. Chem. Int. Ed.*, **2007**, 46: 6073-6075,
- 22. Liu, W., Peterson, P.E., Langston, J.A., Jin, X., Zhou, X., Fisher, A.J. & Toney, M.D.* "Kinetic and Crystallographic Analysis of Active Site Mutants of *Escherichia coli* γ-Aminobutyrate Aminotransferase", *Biochemistry* **2005**, 44: 2982-92,
- 23. Fogle, E.J., Liu, W., Keller, J. & Toney, M.D.* "Role of Q52 in the Decarboxylation and Transamination of Dialkylglycine Decarboxylase", *Biochemistry* **2005**, 44: 16392-404,
- 24. Liu W., Peterson P.E., Carter R.J., Zhou X., Langston J.A., Fisher A.J. & Toney M.D. Crystal Structures of Unbound and Aminooxyacetate-bound *Escherichia coli* γ-Aminobutyrate Aminotransferase. *Biochemistry* **2004**, 43: 10896-905
- 25. Liu W. & Toney M.D. "Kinetic and thermodynamic analysis of the interaction of cations with dialkylglycine decarboxylase", *Biochemistry* **2004**, 43: 4998-5010
- 26. Liu W., Rogers C.J., Fisher A.J. & Toney M.D. "Aminophosphonate inhibitors of dialkylglycine decarboxylase: Structural basis for slow binding inhibition", *Biochemistry* **2002**, 41: 12320-28

Patent Applications:

- 1. Liu W., "Incorporation of Two Different Noncanonical Amino Acids into A Single Protein", U.S. Application No. 61/467,728
- 2. Liu W. & Huang Y., "Methods, Cells, and Systems for Incorporating Noncanonical Amino Acids into Proteins", U.S. Application No. 2011-438743P
- 3. Liu W. & Schultz P.G., "Genetic Incorporation of Unnatural Amino Acids into Proteins in Mammalian Cells", U.S. Application No. 12/311,545

Invited Seminars:

- 1. Department of Biochemistry, Michigan State University, 02/21/2013 (scheduled)
- 2. Department of Chemistry, North Carolina State University, 01/16/2013 (scheduled)
- 3. Department of Chemistry, Duke University, 01/15/2013 (scheduled)
- 4. Department of Chemistry, Princeton University, 11/05/2012 (scheduled)
- 5. Department of Chemistry, University of Illinois at Urbana Champaign, 10/15/2012
- 6. Department of Chemistry, University of California-Irvine, 09/28/2012
- 7. Department of Chemistry, University of Utah, 09/06/2012
- 8. Department of Chemistry, University of California-Berkeley, 09/04/2012
- 9. Department of Chemistry, Baylor University, 08/24/2012
- 10. Department of Chemistry, Wuhan University, 07/25/2012
- 11. Department of Physics, Huazong University of Science and Technology, 07/24/2012
- 12. Department of Chemistry, Peking University, China, 06/16/2012
- 13. Department of Chemistry, University of Delaware, 05/02/2012
- 14. Department of Chemistry, University of South Carolina, 04/19/2012
- 15. Skaggs Institute of Chemical Biology, Scripps Research Institute, 04/17/2012
- 16. Department of Chemistry, University of New Mexico, 04/13/2012
- 17. Department of Chemistry, Cornell University, 04/09/2012
- 18. Department of Chemistry, Columbia University, 04/10/2012
- 19. Department of Chemistry, University of Chicago, 04/06/2012
- 20. School of Medicine, University of Miami, 03/20/2012
- 21. Department of Chemistry, Arizona State University, 03/09/2012
- 22. Department of Chemistry, Boston College, 02/14/2012
- 23. Department of Chemistry, Massachusetts Institute of Technology, 02/13/2012
- 24. Department of Chemistry, University of Nebraska-Lincoln, 02/03/2012
- 25. Department of Pharmacology, Johns Hopkins Medical School, 02/01/2012
- 26. Interdisciplinary Faculty of Toxicology, Texas A&M University, 01/23/2012
- 27. Department of Chemistry and Biochemistry, University of Texas-Austin, 01/20/2012
- 28. Department of Chemistry, Stanford University, 12/13/2011
- 29. Sutro Biopharma Inc., 12/12/2011

- 30. Department of Molecular and Cellular Oncology, University of Texas Anderson Cancer Center, 10/12/2011
- 31. Department of Biochemistry, University of Texas Health Science Center at San Antonio, 09/30/2011
- 32. Department of Molecular Biophysics and Biochemistry, Yale University, 09/07/2011
- 33. School of Pharmacy, Wuhan University, 07/28/2011
- 34. Department of Chemistry, Shandong University, 07/8/2011
- 35. Department of Chemistry, University of California-Davis, 1/11/2011
- 36. Institute of Organic Chemistry, Chinese Academy of Science, 06/01/2010
- 37. Department of Biochemical Engineering, East China University of Science and Technology, 05/28/2010
- 38. Department of Natural Sciences, Albany State University-Georgia, 10/21/2008
- 39. Department of Chemistry, Beijing University, 01/11/2008

Talks and Posters at Conferences and Meetings:

As an independent principle investigator

(¶ from students)

- 1. Liu W.R., A Rationally Designed Pyrrolysyl-tRNA Synthetase Has a Broad Substrate Spectrum, Gordon Research Conference, Proctor Academy, NH, June 10-15, 2012
- 2. Tharp J.M., Wang Y.-S. & Liu W.R., Increasing Insulin Yield by Fusion with Superfolder Green Fluorescent Protein, Abstracts of Papers, 243rd ACS National Meeting & Exposition, San Diego, CA, United States, March 25-29, 2012, CHED-433¶
- 3. Odoi K.A. & Liu W.R., Alternative Codon Study for Genetic Code Expansion in *Escherichia coli*, Abstracts of Papers, 243rd ACS National Meeting & Exposition, San Diego, CA, United States, March 25-29, 2012, BIOL-135¶
- 4. Wang Y.-S. & Liu W.R., Tools to Study Posttranslational Lysine Modifications of Histone, Chemistry and Biology of Peptides, Gordon Research Conference, Ventura, CA, 02/19-24/2012
- 5. Wang Y.-S. & Liu W.R., Tools to Study Posttranslational Lysine Modifications of Histone, Chromatin: Structure and Function, Aruba, 12/05-08/2011
- 6. 67th Southwest Regional Meeting of the American Chemical Society, Austin, TX, 11/09-11/2011
- 7. Wang Y.-S. & Liu W.R., Genetic Encoding of Methyl- and Acetyl-lysine Analogs into Proteins, Abstracts of Papers, 242nd ACS National Meeting & Exposition, Denver, CO, United States, August 28-September 1, 2011 (2011), BIOL-116¶
- 8. Jacobs K.J., Wang Y.-S. & Liu W. "Probing the active site of alanine racemase by incorporation of non-canonical amino acids". Abstracts of Papers, 241st ACS National Meeting & Exposition, Anaheim, CA, United States, March 27-31, 2011 (2011), CHED-352¶
- 9. Huang Y., Wan W. & Liu W. "Facile system for genetic incorporation of two different noncanonical amino acids into one protein in Escherichia coli". Abstracts of Papers, 241st ACS National Meeting & Exposition, Anaheim, CA, United States, March 27-31, 2011 (2011), BIOL-51.¶
- 10. Huang Y. & Liu W.R., Site-specific Installation of Two Lysine Derivatives in Histone H3, Enzyme Mechanism Conference, St. Petersburg, FL, 01/02-06/2011

- 11. Wang Y.-S., Wu B. & Liu W. "Genetically encoded photocaged N[□]methyl-L-lysine". Abstracts of Papers, 240th ACS National Meeting, Boston, MA, United States, August 22-26, 2010 (2010), BIOL-156.¶
- 12. Dodd L.E., Wang Y.-S. & Liu W. "Site specific post-translational modifications of protein by expanding the genetic code: Protein methylation and structure enrichment". Abstracts of Papers, 239th ACS National Meeting, San Francisco, CA, United States, March 21-25, 2010 (2010), CHED-458.¶
- 13. Wan W., Huang Y. & Liu W.R., Genetic Incorporation of Two Different Noncanonical Amino Acids into One Protein, Challenges in Organic Chemistry and Chemical Biology (ISACS1), San Francisco, 07/06-09/2010
- Wan W., Huang Y. & Liu W.R., Genetic Incorporation of Two Different Noncanonical Amino Acids into One Protein, Bioorganic Chemistry, Gordon Research Conference, Proctor Academy, 06/13-18/2010
- 15. Liu W.R., Engineering Pyrrolysyl-tRNA Synthetase for Genetic Code Expansion, The 3rd Texas Enzyme Conference, Austin, TX, 01/80-09/2010
- 16. Liu W.R., The Genetic Code Expansion, The 4th Sino-US Symposium on Organic Chemistry, Beijing, China, 06/12-13/2008 (oral)

Before becoming an independent investigator

- 17. Liu W., Peterson P.E., Langston J.A., Jin X., Zhou X., Fisher A.J. & Toney M.D. "Attempted Conversion from Aminotransferase to a Decarboxylase: structural, kinetic, and mutagenic studies of Escherichia coli
 ☐-Aminobutryrate Aminotransferase". Abstracts, 39th Western Regional Meeting of the American Chemical Society, Sacramento, CA, United States, October 27-30 (2004), GEN-034.
- 18. Liu W. & Toney M. "Metal ion roles in control of dialkylglycine decarboxylase catalysis". Abstracts, 35th Central Regional Meeting of the American Chemical Society, Pittsburgh, PA, United States, October 19-22 (2003). 113.
- 19. Liu W. & Toney M. "Kinetic, thermodynamic, and crystallographic analysis of the interaction of cations with dialkylglycine decarboxylase". Abstracts of Papers, 227th ACS National Meeting, Anaheim, CA, United States, March 28-April 1, 2004 (2004), INOR-961.

Current Grants:

Welch Research Grant A-1715

\$150,000

06/01/2012-05/31/2014

"Sensors for small molecules and enzymes"

Principal investigator: Wenshe Liu, Ph.D.

NIH-1R01CA161158

\$1,483,085

07/01/2011-04/30/2016

"Phage display with two genetically incorporated noncanonical amino acids"

Principle investigator: Wenshe Liu, Ph.D.

NSF CAREER Award CHE-1148684

\$575,000

04/01/2012-03/31/2017

"CAREER: Site-specific dual-labeling of a protein through two genetically incorporated noncanonical amino acids"

Principle investigator: Wenshe Liu, Ph.D.

Research Grant from Suzhou Origen Biotech Inc. \$40,000

03/01/2012-02/28/2013

"Selective modification of insulin"

Principle Investigator: Wenshe Liu, Ph.D.

National Institute of Health

\$154,032

01/01/2013-12/31/2014

"Chemical/biochemical tools for studying novel protein acyl lysine modifications"

Principal investigator: Hening Lin, Ph.D. at Cornell University

Co PI: Wenshe Liu, Ph.D.

Finished Grants:

Welch Research Grant A-1715

\$150,000

06/01/2009-05/30/2012

"Synthesis and evaluation of methyltransferase-mediated alkylating agents"

Principle investigator: Wenshe Liu, Ph.D.

Teaching

Teaching Experience: Texas A&M University 08/2007 – current

Fall 2011

CHEM 228.503 - Organic Chemistry II (enrolment: 68)

CHEM 491.527 - Research (enrolment: 1)

CHEM 690.609 – Theory of Chemistry Research (enrolment: 5)

BIOT 685.604 – Directed Studies (enrolment: 1)

Summer 2011

CHEM 691 – Research (enrolment: 5)

Spring 2011

CHEM 630 – Bioorganic Chemistry (enrolment: 4)

CHEM 491.527 - Research (enrolment: 1)

CHEM 681.605 – Seminar (enrolment: 12)

CHEM 691.627 - Research (enrolment: 5)

Fall 2010

CHEM 627 – Principles of Biological Chemistry (enrolment: 19)

CHEM 691.627 - Research (enrolment: 5)

Summer 2010

CHEM 691.327 – Research (enrolment: 5)

Spring 2010

CHEM 689.603 – S. T. in Chemical Biology (enrolment: 6)

CHEM 691.627 - Research (enrolment: 5)

Fall 2009

CHEM 627 – Principles of Biological Chemistry (enrolment: 22)

CHEM 691.627 - Research (enrolment: 5)

Summer 2009

CHEM 691.327 - Research (enrolment: 4)

Spring 2009

CHEM 228 – Organic Chemistry II (enrolment: 39)

CHEM 691.627 – Research (enrolment: 4)

Fall 2008

CHEM 689.603 – S. T. in Chemical Biology (enrolment: 6)

CHEM 691.627 – Research (enrolment: 4)

CHEM 491.527 – Research (enrolment: 1)

Summer 2008

CHEM 691.327 - Research (enrolment: 2) CHEM 491.327 - Research (enrolment: 2)

Spring 2008

CHEM 691.627 - Research (enrolment: 2) CHEM 491.527 - Research (enrolment: 2)

Fall 2007

CHEM 689.603 – S. T. in Chemical Biology (enrolment: 6)

-			
Postdoctoral Researcher NAME	rs Mentored as a Primary A PROGRAM	<mark>Advisor</mark> DATE	Comments
Dr. Yang Wang Dr. Zhiyong Wang Dr. Xuejuan Xin Dr. Yan An Dr. Yadagiri Kurra Dr. Xinqiang Fang Dr. Yu Zeng Dr. Catrina Reed Dr. Yanyan Yang	Chemistry	09/2007-08/2008 09/2008-02/2011 07/2010-06/2011 09/2010-03/2011 07/2011-current 09/2011-06/2012 10/2011-current 09/2012-current 10/2012-current	Left for Novartis In a different group Left for China Left for China Left for Cornell
PhD Students Mentored	as a Primary Advisor		
NAME	PROGRAM	DATE	COMMENTS
Ying Huang Yane-Shih Wang Sharmilee Kannan Bo Wu Yan-Jiun Lee Alfred Tuley Xiaoyan Wang Willie Hsu Keturah Odoi	Chemistry Chemistry Biochemistry Chemistry Chemistry Chemistry Chemistry Chemistry Chemistry Chemistry Chemistry	10/2007-12/2011 10/2007-06/2012 04/2008-09/2008 10/2008-current 10/2008-current 11/2011-current 10/2011-cureent 01/2012-current 11/2009-current	Graduated Graduated Left program
Master Students Mentore	ed as a Primary Advisor		
NAME	PROGRAM	DATE	COMMENTS
Meghna Muralidhar	BIOT-non-thesis	06/2011-06/2012	Graduated
Membership in Other Ph	D Student Committees		
NAME	PROGRAM	Primary Advisor	COMMENTS
Bennie J. Bench J. Dafhne Aquirre Hillary Agbo Nicholas G. Fox Argentina Ornelas Alfredo Erazo-Oliveras Amanda David	Chemistry Chemistry Chemistry Chemistry Chemistry Biochemistry Chemistry	Coran Watanabe Kim Dunbar Coran Watanabe David Barondeau Frank Raushel Jean-Philippe Pellois Kim Dunbar	Graduated Graduated Graduated

Halil Okur	Chemistry	Paul Cremer
Rung-Yi Lai	Chemistry	Tadhg Begley
Anyanee Kamkaew	Chemistry	Kevin Burgess
Mavreen R. Tuvilla	Chemistry	David Russell

Membership in Other Master Student Committees

NAME	PROGRAM	Primary Advisor	COMMENTS
Sean C. Collin Gunjot S. Rana Meghna V. Krishna Lan Jiang Dilsher Dillon Sarah Lane	Chemistry BIOT-non-thesis BIOT-non-thesis BIOR-non-thesis BIOR-non-thesis Chemistry	Daniel Singleton Kim Dunbar	Graduated Graduated Graduated Graduated Graduated Graduated Graduated

Undergraduate Students Mentored as a Primary Advisor

NAME	PROGRAM	Dates
Clayton Mercer Hiren Bhakta John Oliver Lindsey Dodd Yin-Moe Kimberly Jocobs Jeff Tharp Willie Hsu Ashley Wallace	Chemistry Chemistry Chemistry REU Student REU Student REU Student REU Student Chemistry Chemistry	09/2007-06/2008 09/2007-06/2008 09/2008-06/2010 06/2009-08/2009 06/2010-08/2010 06/2011-08/2011 01/2011-12/2011 05/2011-09/2011
Josh Chen	Chemistry	05/2011-09/2011

Professional Service

Committee Membership:

2007-current	Member, Undergraduate Student Award Committee
2007-2011	Ad hoc member, Graduate Student Recruiting Committee
2011-current	Member, Graduate Student Recruiting Committee

2009-current Member, Professional Program in Biotechnology Recruiting Committee 2011-current Member, Professional Program in Biotechnology Executive Committee

2012 Member, Department of Chemistry Self Study Committee

Graduate Student Recruiting Visits:

10/2008 Albany State University, Georgia 10/2011 SERMACS 2011, Richmond, VA

Journal Article Review:

Angewandte Chemie, Journal of the American Chemical Society, FEBS Letters, Chemistry & Biology, Bioorganic & Medicinal Chemistry Letters, Applied Biochemistry & Biotechnology, ChemBioChem, Nutrition & Metabolism, Molecular Biosystems, Acta Biochimica et Biophysica Sinica, Biochemistry,

Genome Research, etc

Signed _____ on Oct 19th, 2012