

Curriculum Vitae

LINGJUN LI

University of Wisconsin-Madison
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EDUCATION

- Ph.D.** University of Illinois at Urbana-Champaign, 1995-2000
May 2000 Chemistry major (analytical and biomolecular)
- B.E.** Beijing University of Technology, Beijing, China, 1987-1992
July 1992 Chemistry major (environmental analytical chemistry)

EXPERTISE AND RESEARCH INTERESTS

Bioanalytical chemistry, neurochemistry, biological mass spectrometry, neuropeptides, proteomics, peptidomics, metabolomics, lipidomics, and glycomics

Research in my laboratory is focused on developing and implementing an array of novel mass spectrometry (MS) based methodologies to answer questions about the most complex and elusive set of signaling molecules, the neuropeptides, and gain new insights into the roles of peptide hormones and neurotransmitters play in the plasticity of neural circuits and behavior. Emphasis has been placed on constructing a multi-faceted and integrated platform that include high resolution *in-situ* peptide mapping, high sensitivity micro-separation techniques coupled with tandem MS *de novo* sequencing, isotopic labeling strategies, ion mobility MS, and new bioinformatics tools to allow large-scale discovery and functional analysis of novel neuropeptides. Furthermore, both mass spectrometric imaging technologies and *in vivo* microdialysis sampling tools have been implemented to follow neuropeptide distribution and secretion in unprecedented details. Towards the goal of functional discovery of bioactive neuropeptides, novel quantitative schemes and new isobaric tagging reagents based on dimethylated amino acids have been developed to produce differential display of neuropeptidomes under several physiological conditions, including food intake, environmental stress, and neural network development. Additionally, lectin-based affinity enrichment strategies have been developed in conjunction with isotopic labeling for comparative glycoproteomics and membrane proteomics for biomarker discovery in neurodegenerative diseases, diabetes, cardiovascular diseases, and pancreatic cancer.

PROFESSIONAL POSITIONS

Vilas Distinguished Achievement Professor of Pharmaceutical Sciences and Chemistry

07/01/2014-current, School of Pharmacy and Department of Chemistry, University of Wisconsin, Madison, WI

Charles Melbourne Johnson Distinguished Chair in Pharmaceutical Sciences

10/01/2018-09/30/2023, School of Pharmacy, University of Wisconsin, Madison, WI, USA

Janis Apinis Professor in Pharmaceutical Sciences

07/01/2016-09/30/2018, School of Pharmacy, University of Wisconsin, Madison, WI, USA

Professor of Pharmaceutical Sciences and Chemistry

07/01/2012-current, School of Pharmacy and Department of Chemistry, University of Wisconsin, Madison, WI

Faculty member of the Waisman Center, Chemistry-Biology Interface Training Program (CBI), Neuroscience Training Program, Biotechnology Training Program, Clinical Neuroengineering Training Program, Cardiovascular Research Training Program, Molecular and Cellular Pharmacology Training Program (MCP) and Molecular and Environmental Toxicology (METC) Training Program. Faculty member of the Summer Research Program in

Biology (SRP-Bio) for undergraduate research, and faculty mentor of the UW-Madison Undergraduate Research Scholar (URS) Program. Affiliated member of the UW Institute for Clinical and Translational Research (ICTR)

Associate Professor of Pharmaceutical Sciences and Chemistry

07/01/2008-06/30/2012, School of Pharmacy and Department of Chemistry, University of Wisconsin, Madison, WI

Assistant Professor of Pharmaceutical Sciences and Chemistry

12/1/2002-06/30/2008, School of Pharmacy and Department of Chemistry, University of Wisconsin, Madison, WI

Postdoctoral Research Fellow

5/2000-11/2002, Pacific Northwest National Laboratory (Advisor: Dr. Richard Smith), Brandeis University

(Advisor: Prof. Eve Marder), and University of Illinois at Urbana-Champaign (Advisor: Prof. Jonathan Sweedler)

Graduate Research Assistant

9/1995-5/2000, University of Illinois at Urbana-Champaign, Urbana, IL (Advisor: Prof. Jonathan Sweedler)

Research Scientist

1992-1994, Research Center for Eco-Environmental Sciences, Chinese Academy of Science, Beijing, China

SELECTED HONORS AND AWARDS

- Named one of the Top 100 Most Influential Analytical Scientists, Power List 2021 and 2019 in the journal Analytical Scientist (2021, 2019)
- Named one of the Top 50 Women in Analytical Sciences and included as the Power List 2016 in Analytical Scientist (2016)
- 2014 American Society for Mass Spectrometry (ASMS) Biemann Medal
- National Science Foundation Special Creativity Award (2024-2026)
- 2023 Probst Lectureship at Department of Chemistry, Southern Illinois University Edwardsville (SIUE)
- Vilas Distinguished Achievement Professorship (2014-2019)
- Charles Melbourne Johnson Distinguished Chair in Pharmaceutical Sciences (2018-2023)
- Janis Apinis Professorship in Pharmaceutical Sciences (2016-2018)
- H. I. Romnes Faculty Fellowship (2011-2016)
- Pittsburgh Conference Achievement Award (2011)
- Alfred P. Sloan Research Fellowship (2006-2010)
- Vilas Associate Award (2009-2011)
- National Science Foundation CAREER Award (2005-2010)
- Shaw Scientist Finalist, University of Wisconsin (2006)
- School of Pharmacy Faculty Travel Award (2006)
- American Society for Mass Spectrometry (ASMS) Research Award (2004)
- Women in Neuroscience (WIN)/Eli Lilly Travel Award (2001)
- Associated Western Universities Postdoctoral Fellowship, PNNL (2000)
- Outstanding Poster Presentation Award at the 12th Annual Cell & Molecular Biology and Molecular Biophysics Research Symposium (1999)
- University of Illinois and Department of Chemistry Graduate Fellowship (1997-1999)
- Garmon Algernon Award for Outstanding Student Seminar in Analytical Chemistry (1997)
- University of Illinois Graduate College Conference Travel Award (1997)
- National Collegiate Honor Societies: Phi Kappa Phi and Phi Lambda Upsilon
- Research Seminar Award (1993, Research Center for Eco-Environmental Sciences)
- Beijing Education Committee Scholarship (1991)
- Chinese National Science Foundation Undergraduate Scholarship (1991)
- Beijing University of Technology Scholarship (1989-1992)

RESEARCH

Peer-Reviewed Publications based on work at the University of Wisconsin-Madison (H-index 64, Citations 15227, Google Scholar,

https://scholar.google.com/citations?hl=en&user=H4Ec5VYAAAAJ&view_op=list_works&sortby=pubdate

402. H. Zhang, D.G. Delafield, and **L. Li*** (2023). Mass spectrometry imaging: the rise of spatially resolved single-cell omics. **Nature Methods**. 20, 327-330. doi: 10.1038/s41592-023-01774-6.
401. R. Hellinger, A. Sigurdsson, W. Wu, E.V. Romanova, **L. Li***, J.V. Sweedler*, R.D. Sussmuth*, and C.W. Gruber* (2023). Peptidomics. **Nature Reviews Methods Primers**. 3, Article number: 25, <https://www.nature.com/articles/s43586-023-00205-2> Invited Contribution.
400. Z. Li, D.M. Tremmel, F. Ma, Q. Yu, M. Ma, D.G. Delafield, Y. Shi, B. Wang, S.A. Mitchell, A.K. Feeney, V.S. Jain, S.D. Sackett, J.S. Odorico, and **L. Li*** (2021). Proteome-wide and matrisome-specific alterations during human pancreas development and maturation. **Nature Communications**. Feb 15; 12(1): 1020. Doi: <https://www.nature.com/articles/s41467-021-21261-w>.
399. G. Li, K. DeLaney, K., and **L. Li*** (2019). Molecular basis for chirality-regulated Abeta self-assembly and receptor recognition revealed by ion mobility-mass spectrometry. **Nature Communications**. Nov 6;10(1):5038. doi: 10.1038/s41467-019-12346-8.
398. G. Li, F. Ma, Q. Cao, Z. Zheng, K. DeLaney, R. Liu, and **L. Li*** (2019). Nanosecond photochemically promoted click chemistry for enhanced neuropeptide visualization and rapid protein labeling. **Nature Communications**. Oct 16;10(1):4697. doi: 10.1038/s41467-019-12548-0. **Recommended by Faculty 1000, and featured as Editor's Highlights**
397. G. Li, C.K. Jeon, M. Ma, Y. Jia, Z. Zheng, D.G. Delafield, G. Lu, E.V. Romanova, J.V. Sweedler, B.T. Ruotolo*, and **L. Li*** (2023). Site-specific chirality-conferred structural compaction differentially mediates the cytotoxicity of Abeta42. **Chemical Sciences**. 14, 5936-5944.
396. H. Lu, B. Wang, Y. Liu, D. Wang, L. Fields, H. Zhang, M. Li, X. Shi, H. Zetterberg, and **L. Li*** (2023) DiLeu Isobaric Labeling Coupled with Limited Proteolysis Mass Spectrometry for High-Throughput Profiling of Protein Structural Changes in Alzheimer's Disease. **Analytical Chemistry**. 95(26), 9746-9753. doi: 10.1021/acs.analchem.2c05731. **Featured as a supplemental cover.**
395. H. Zhang, Y. Liu, L. Field, X. Shi, P. Huang, H. Lu, A.J. Schneider, X. Tang, L. Puglielli, N.V. Welham, and **L. Li*** (2023). Single-cell lipidomics enabled by dual-polarity ionization and ion mobility-mass spectrometry imaging. **Nature Communications**. Accepted for publication. doi: 10.1038/s41467-023-40512-6
394. T.-J. Gu, P.-K. Liu, Y.-W. Wang, M.T. Flowers, S. Xu, Y. Liu, D.B. Davis, and **L. Li*** (2023). Diazobutanone-assisted isobaric labeling of phospholipids and sulfated glycolipids enables multiplexed quantitative lipidomics using LC-MS/MS. **Nature Chemistry**. Under revision.
393. W. Wu, M. Ma, A.E. Ibarra, G. Lu, V.P. Bakshi, and **L. Li*** (2023). Global neuropeptidome profiling in response to predator stress in rat: implications for post-traumatic stress disorder. **Journal of the American Society for Mass Spectrometry**. In press. Doi: 10.1021/jasms.3c00027. **Featured as a front cover art of August issue.**
392. H. Lu, H. Zhang, and **L. Li*** (2023). Chemical tagging mass spectrometry: an approach for single-cell omics. **Analytical and Bioanalytical Chemistry**. Invited critical review for *Special Issue on "Ultrasensitive Omics"*. Accepted.
391. Q. Wang, X. Yan, B. Fu, Y. Xu, **L. Li***, C. Chang*, and C. Jia* (2023). mNeuCode empowers targeted proteome analysis of arginine demethylation. **Analytical Chemistry**. 95, 3684-3693.
390. M. Ma, F. Liu, H.N. Miles, E.-J. Kim, L. Fields, W. Xu*, and **L. Li*** (2023). Proteome-wide profiling of asymmetric di-methylated arginine in human breast tumors. **Journal of the American Society for Mass Spectrometry**. Accepted. **Invited contribution to the Special Focus Issue on "Next Generation Mass**

Spectrometry Omics Technologies", honoring Prof. Erin Baker for her winning the 2022 ASMS Biemann Medal.

389. S. Lista*, R. Gonzalez-Dominguez, S. Lopez-Ortiz, A. Gonzalez-Dominguez, H. Menendez, J. Martin-Hernandez, A. Lucia, E. Emanuele, D. Centonze, B.P. Imbimbo, V. Triaca, L. Lionetto, M. Simmaco, M. Cuperlovic-Culf, J. Mill, **L. Li**, M. Mapstone, A. Santos-Lozano, R. Nistico (2023). Integrative metabolomics science in Alzheimer's disease: Relevance and future perspectives. **Ageing Research Reviews**. 89, 101987. <https://doi.org/10.1016/j.arr.2023.101987>
388. V. Patel*, J. Mill, O. Okonkwo, S. Salamet, **L. Li**, and T. Raife (2023). Global energy metabolism deficit in Alzheimer's disease brain. **Journal of Prevention of Alzheimer Disease**. Accepted.
387. J.G. Pavek, B.L. Frey, D.C. Frost, T.-J. Gu, **L. Li**, and L.M. Smith* (2023). Cysteine counting via isotopic chemical labeling for intact mass proteoform identifications in tissue. **Analytical Chemistry**. Under revision.
386. H. Xie, M. S. Bacabac, M. Ma, E.-J. Kim, Y. Wang, W. Wu, **L. Li**, W. Xu*, and W. Tang* (2023). Development of potent coactivator-associated arginine methyltransferase 1 (CARM1) degraders. **Journal of Medicinal Chemistry**. Under revision.
385. M. Li, M. Ma, and **L. Li*** (2023). Development of novel isobaric tags enables accurate and sensitive multiplexed proteomics using complementary ions. **Analytical and Bioanalytical Chemistry**. Invited contribution for *Special Issue on "Ultrasensitive Omics"*. Selected for publication as Paper in Forefront. In press, <https://doi.org/10.1007/s00216-023-04877-3>
384. D. Zhang, J. Gao, Z. Zhu, Q. Mao, Z. Xu, P.K. Singh, C.C. Rimayi, C. Moreno-Yruela, S. Xu, G. Li, Y.-C. Sin, Y. Chen, C.A. Olsen, N.W. Snyder, L. Dai*, **L. Li***, Y. Zhao* (2023). Detection and differentiation of three isomeric lysine post-translational modifications: K_{L-1a}, K_{D-1a}, and K_{ce}. **Nature Metabolism**. Under review.
383. Z. Zheng, M. Ma, Y. Jia, Y. Cui, R. Zhao, S. Li, C. Wenthur, **L. Li***, and G. Li* (2023). Expedited evaluation of conformational stability-heterogeneity associations for crude polyclonal antibodies in response to conjugate vaccines. **Analytical Chemistry**. In press.
382. D. Wang, J. Huang, H. Zhang, T.-J. Gu, and **L. Li*** (2023). Cotton Ti-IMAC: Developing phosphorylated cotton as a novel platform for phosphopeptide enrichment. **ACS Applied Materials & Interfaces**. Minor revision.
381. D.G. Delafield, H.N. Miles, W.A. Ricke, and **L. Li*** (2023). Inclusion of Porous Graphitic Carbon Chromatography Yields Greater Protein Identification, Compartment and Process Coverage, and Enables More Reflective Protein-Level Label-Free Quantitation. **Journal of Proteome Research**. Under revision.
380. D.G. Delafield, H.N. Miles, T.T. Liu, W.A. Ricke, and **L. Li*** (2023). Proteomic fingerprinting of prostate cancer progression through library-free DIA-MS reveals systematic and conserved pathway dysregulation. **Molecular and Cellular Proteomics**. Submitted.
379. D.G. Delafield, X. Zhong, C. Sauer, Q. Yu, H. Zetterberg, and **L. Li*** (2023). Sample agnostic spectral libraries enable quantitation of >9,300 cerebrospinal fluid proteins across neurodegenerative disease patient cohorts. **Nature Communications**. To be submitted.
378. G. Lu, F. Ma, P. Wei, M. Ma, V.N.H. Tran, B.A. Baldo*, and **L. Li*** (2023). Quantitative mass spectrometry profiles acute cocaine intoxication-induced peptidome changes in rat brains. **Journal of Proteome Research**. To be submitted.

377. Z. Zhu, S. Xu, Z. Wang, D.G. Delafield, M.J. Rigby, G. Lu, T.-J. Gu, P.-K. Liu, M. Ma, L. Puglielli, and L. Li* (2023). *Chiral Pair Isobaric Labeling Strategy for Multiplexed Absolute Quantitation (CHRISTMAS) Enabled Quantitative Probing of Enantiomeric Amino Acid Alterations in Alzheimer's Disease Progression*. **ACS Central Science**. To be submitted.
376. M. Ma, M. Li, Y. Zhu, Y. Zhao, F. Wu, Z. Wang, Y. Feng, H.-Y. Chiang, M.S. Patankar, C. Chang*, and L. Li* (2023). 6-plex *md*SUGAR Isobaric-Labeling Guide Fingerprints Embedding (MAGNI) for Glycomics Analysis. **Chemical Science**. To be submitted.
375. M. Ma, Q. Yu, D.G. Delafield, Y. Cui, Z. Li, M. Li, W. Wu, X. Shi, P.R. Westmark, A. Gutierrez, G. Ma, A. Gao, M. Xu, W. Xu, C.J. Westmark*, and L. Li* (2023). On-tissue spatial proteomics integrating MALDI-MS imaging with shotgun proteomics reveals soy consumption induced protein changes in a fragile X syndrome mouse model. **ACS Chemical Neuroscience**. Submitted.
374. S. Xu, Z. Zhu, D.G. Delafield, M.J. Rigby, G. Lu, L. Puglielli and L. Li* (2023). Spatially and temporally probing distinctive glycerophospholipid alterations in Alzheimer's disease mouse brain via high-resolution ion mobility-enabled *sn*-position resolved lipidomics. **Nature Methods**. To be submitted.
373. D. Wang, J. Huang, H. Zhang, M. Ma, M. Xu, Y. Cui, X. Shi, and L. Li* (2023). ATP-Coated Dual-Functionalized Titanium(IV) IMAC Material for Simultaneous Enrichment and Separation of Glycopeptides and Phosphopeptides. **Journal of Proteome Research**. 22(6), 2044-2054.
372. H.N. Miles, D. Tomlin, W.A. Ricke, and L. Li* (2023). Integrating intracellular and extracellular proteomic profiling for in-depth investigations of cellular communication in a model of prostate cancer. **Proteomics**. May 24;:e2200287. doi: 10.1002/pmic.202200287. NIHMSID:NIHMS1904604.
371. M. Li, Y. Feng, M. Ma, A. Kapur, M. Patankar, and L. Li* (2023). High-Throughput Quantitative Glycomics Enabled by 12-plex Isobaric Multiplex Labeling Reagents for Carbonyl-Containing Compound (SUGAR) Tags. **Journal of Proteome Research**. 22(5), 1557-1563. doi: 10.1021/acs.jproteome.2c00773. PMID: PMC10164053.
370. Y. Liu, H. Zhang, W.F. Dove, Z. Wang, Z. Zhu, P.J. Pickhardt, M. Reichelderfer, and L. Li* (2023). Quantification of Serum Metabolites in Early Colorectal Adenomas Using Isobaric Labeling Mass Spectrometry. **Journal of Proteome Research**. 22(5), 1483-1491. doi: 10.1021/acs.jproteome.3c00006. PMID: PMC10276621.
369. A. Phetsanthad, A.V. Carr, L. Fields, and L. Li* (2023). Definitive Screening Designs to Optimize Library-Free DIA-MS Identification and Quantification of Neuropeptides. **Journal of Proteome Research**. 22(5), 1510-1519. doi: 10.1021/acs.jproteome.3c00088. PMID: PMC10190159.
368. A. Phetsanthad, N.Q. Vu, Q. Yu, A.R. Buchberger, Z. Chen, C. Keller, and L. Li* (2023). Recent advances in mass spectrometry analysis of neuropeptides. **Mass Spectrometry Reviews**. 42(2), 706-750. doi: 10.1002/mas.21734. PMID: PMC9067165.
367. B. Wang, X. Zhong, L. Fields, H. Lu, Z. Zhu, and L. Li* (2023). Structural Proteomic Profiling of Cerebrospinal Fluids to Reveal Novel Conformational Biomarkers for Alzheimer's Disease. **Journal of the American Society for Mass Spectrometry**. 34(3), 459-471. doi: 10.1021/jasms.2c00332. PMID: PMC10276618.
366. S. Thomas, W.A. Ricke, and L. Li* (2023). Toxicoproteomics of Mono(2-ethylhexyl) phthalate and Perfluorooctanesulfonic Acid in Models of Prostatic Diseases. **Chemical Research in Toxicology**. 36(2), 251-259. doi: 10.1021/acs.chemrestox.2c00328. PMID: PMC10041651.
365. N.Q. Vu, H.-C. Yen, L. Fields, W. Cao, and L. Li* (2023). HyPep: An Open-Source Software for Identification and Discovery of Neuropeptides Using Sequence Homology Search. **Journal of Proteome**

- Research.** 22(2), 420-431. doi: 10.1021/acs.jproteome.2c00597. PMC10160011.
364. A. Phetsanthad A, C. Roycroft, and **L. Li*** (2023). Enrichment and fragmentation approaches for enhanced detection and characterization of endogenous glycosylated neuropeptides. **Proteomics**. 23(3-4):e2100375. doi: 10.1002/pmic.202100375. PMC9884999.
363. X. Xu, L. Han, Z. Zheng, R. Zhao, **L. Li**, X. Shao, G. Li* (2023). Composite Multidimensional Ion Mobility-Mass Spectrometry for Improved Differentiation of Stereochemical Modifications. **Analytical Chemistry**. 95(4), 2221-2228. doi: 10.1021/acs.analchem.2c03522. PMC10276620.
362. D.G. Delafield, H.N. Miles, W.A. Ricke, and **L. Li*** (2023). Higher Temperature Porous Graphitic Carbon Separations Differentially Impact Distinct Glycopeptide Classes. **Journal of the American Society for Mass Spectrometry** 34(1), 64-74. doi: 10.1021/jasms.2c00249. PMC9812930.
361. Y. Shi, Z. Li, B. Wang, X. Shi, H. Ye, D.G. Delafield, L. Lv, Z. Ye, Z. Chen, F. Ma, and **L. Li*** (2022). Enabling Global Analysis of Protein Citrullination via Biotin Thiol Tag-Assisted Mass Spectrometry. **Analytical Chemistry**. 94(51),17895-17903. doi: 10.1021/acs.analchem.2c03844. Epub 2022 Dec 13. PubMed PMID: 36512406; PubMed Central PMCID: PMC10276619.
360. B. Wang, L. Fields, and **L. Li*** (2022). Recent advances in characterization of citrullination and its implication in human disease research: From method development to network integration. **Proteomics**. Dec 22;:e2200286. doi: 10.1002/pmic.202200286. PMC10285031.
359. Z. Chen, D. Wang, Q. Yu, J. Johnson, R. Shipman, X. Zhong, J. Huang, Q. Yu, H. Zetterberg, S. Asthana, C. Carlsson, O. Okonkwo, and **L. Li*** (2022). In-Depth Site-Specific O-Glycosylation Analysis of Glycoproteins and Endogenous Peptides in Cerebrospinal Fluid (CSF) from Healthy Individuals, Mild Cognitive Impairment (MCI), and Alzheimer's Disease (AD) Patients. **ACS Chemical Biology**. 17(11), 3059-3068. doi: 10.1021/acscchembio.1c00932. PMC9240109.
358. M. Li, X. Zhong, Y. Feng, and **L. Li*** (2022). Novel Isobaric Tagging Reagent Enabled Multiplex Quantitative Glycoproteomics via Electron-Transfer/Higher-Energy Collisional Dissociation (EThcD) Mass Spectrometry. **Journal of the American Society for Mass Spectrometry**. 33(10),1874-1882. doi: 10.1021/jasms.2c00177. PMC10160164.
357. M.K. Sivanich, T.-J. Gu, D.N. Tabang, and **L. Li*** (2022). Recent advances in isobaric labeling and applications in quantitative proteomics. **Proteomics**. 22(19-20):e2100256. doi: 10.1002/pmic.202100256. PMCID: PMC9787039.
356. Y. Feng, Y. Lv, T.-J. Gu, B. Chen, and **L. Li*** (2022). Quantitative Analysis and Structural Elucidation of Fatty Acids by Isobaric Multiplex Labeling Reagents for Carbonyl-Containing Compound (SUGAR) Tags and m-CPBA Epoxidation. **Analytical Chemistry**. 94(38),13036-13042. doi: 10.1021/acs.analchem.2c01917. PMC9912774.
355. D. Wang, M. Ma, J. Huang, T.-J. Gu, Y. Cui, M. Li, Z. Wang, H. Zetterberg, and **L. Li*** (2022). Boost-DiLeu: Enhanced Isobaric N,N-Dimethyl Leucine Tagging Strategy for a Comprehensive Quantitative Glycoproteomic Analysis. **Analytical Chemistry**. 94(34),11773-11782. doi: 10.1021/acs.analchem.2c01773. PMC9966376. **Featured as a Supplemental Journal Cover.**
354. D.G. Delafield, H.N. Miles, Y. Liu, W.A. Ricke, and **L. Li*** (2022). Complementary proteome and glycoproteome access revealed through comparative analysis of reversed phase and porous graphitic carbon chromatography. **Analytical Bioanalytical Chemistry**. 414(18),5461-5472. doi: 10.1007/s00216-022-03934-7. PMC9246830.
353. H. Zhang, X. Shi, Y. Liu, B. Wang, M. Xu, N.V. Welham, and **L. Li*** (2022). On-tissue amidation of

- sialic acid with aniline for sensitive imaging of sialylated N-glycans from FFPE tissue sections via MALDI mass spectrometry. **Analytical Bioanalytical Chemistry**. 414(18),5263-5274. doi: 10.1007/s00216-022-03894-y. Epub 2022 Jan 24. PubMed PMID: 35072748; PubMed Central PMCID: PMC9381140.
352. A. Phetsanthad, G. Li, C.K. Jeon, B.T. Ruotolo, and L. Li* (2022). Comparing Selected-Ion Collision Induced Unfolding with All Ion Unfolding Methods for Comprehensive Protein Conformational Characterization. **Journal of the American Society for Mass Spectrometry**. 33(6),944-951. doi: 10.1021/jasms.2c00004. PMC9167759.
351. A. Phetsanthad, N.Q. Vu, and L. Li* (2022). Multi-Faceted Mass Spectrometric Investigation of Neuropeptides in *Callinectes sapidus*. **Journal of Visualized Experiments**. May 31;(183). doi: 10.3791/63322. PMC9306302.
350. M. Li, J. Huang, M. Ma, X. Shi, and L. Li* (2022). Selective Enrichment of Sialylglycopeptides Enabled by Click Chemistry and Dynamic Covalent Exchange. **Analytical Chemistry**. 94(18),6681-6688. doi: 10.1021/acs.analchem.1c05158. PMCID: PMC9090990.
349. D.N. Tabang, D. Wang, and L. Li* (2022). A Spin-Tip Enrichment Strategy for Simultaneous Analysis of N-Glycopeptides and Phosphopeptides from Human Pancreatic Tissues. **Journal of Visualized Experiments**. May 4;(183). doi: 10.3791/63735. PMC9186302.
348. Y. Liu, H. Zhang, X. Zhong, Z. Li, H. Zetterberg, and L. Li* (2022). Isotopic N,N-dimethyl leucine tags for absolute quantification of clusterin and apolipoprotein E in Alzheimer's disease. **Journal of Proteomics**. 257:104507. doi: 10.1016/j.jprot.2022.104507. PMC8916911.
347. Y. Liu, G. Li, T.-J. Gu, and L. Li* (2022). Nanosecond Photochemical Reaction for Enhanced Identification, Quantification, and Visualization of Primary Amine-Containing Metabolites by MALDI-Mass Spectrometry. **Analytical Chemistry**. 94(9), 3774-3781. doi: 10.1021/acs.analchem.1c03840. PMC9300574.
346. K. DeLaney, A. Phetsanthad, and L. Li* (2022). Advances in high-resolution MALDI mass spectrometry for neurobiology. **Mass Spectrometry Reviews**. 41(2):194-214. doi: 10.1002/mas.21661. PMC8106695.
345. N.T. Chan, J. Huang, G. Ma, H. Zeng, K. Donahue, Y. Wang, L. Li, and W. Xu* (2022). The transcriptional elongation factor CTR9 demarcates PRC2-mediated H3K27me3 domains by altering PRC2 subtype equilibrium. **Nucleic Acids Research**. 50(4):1969-1992. doi: 10.1093/nar/gkac047. PMC8887485.
344. J. Mill and L. Li* (2022). Recent Advances in Understanding of Alzheimer's Disease Progression through Mass Spectrometry-Based Metabolomics. **Phenomics**. 2(1), 1-17. doi: 10.1007/s43657-021-00036-9. PMC9159642. **Invited contribution**.
343. Z. Li, B. Wang, Q. Yu, Y. Shi, and L. Li* (2022). 12-Plex DiLeu Isobaric Labeling Enabled High-Throughput Investigation of Citrullination Alterations in the DNA Damage Response. **Analytical Chemistry**. 94(7),3074-3081. doi: 10.1021/acs.analchem.1c04073. PMC9055876.
342. J. Mill, V. Patel, O. Okonkwo, L. Li*, and T. Raife* (2022). Erythrocyte sphingolipid species as biomarkers of Alzheimer's disease. **Journal of Pharmaceutical Analysis**. 12(1):178-185. doi: 10.1016/j.jpha.2021.07.005. PMC9073235.
341. K. DeLaney, M. Hu, W. Wu, M.P. Nusbaum, and L. Li* (2022). Mass spectrometry profiling and quantitation of changes in circulating hormones secreted over time in *Cancer borealis* hemolymph due to feeding behavior. **Analytical Bioanalytical Chemistry**. 414(1), 533-543. doi: 10.1007/s00216-021-03479-1. PMC8714863.

340. J. Wang, A.J. Drelich, C.M. Hopkins, S. Mecozzi, **L. Li**, G. Kwon, and S. Hong* (2022). Gold nanoparticles in virus detection: Recent advances and potential considerations for SARS-CoV-2 testing development. **Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology**. *14*(1):e1754. doi: 10.1002/wnan.1754. PMC8646453.
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7. **L. Li** and K. Jiang (1995) Determination of dioxin-like PCBs congeners of Chinese PCBs chemicals. **Chinese Journal of Environmental Sciences** 16, 55-58.
6. **L. Li** and K. Jiang (1995) Determination of toxic equivalents of PCDD/Fs in two Chinese commercial PCBs by ¹³C isotope dilution method. **Acta Environ. Sci.** 15, 433-439.
5. **L. Li**, Y. Chen, Y. Zhou, J. Wu, and K. Jiang (1995) Use of acid-base silica/alumina column and gas chromatography-mass spectrometry (GC/MS) methods for determination of residual PCBs in the solid wastes of an incinerator. **Chin. J. Environ. Chem.** 14, 322-328.
4. K. Jiang, Y. Chen, and **L. Li** (1995) PCDD/Fs in sodium pentachlorophenate (Na-PCP) and human blood, milk, and sediment samples from Chinese schistosomiasis areas. **J. Environ. Sci.** 7, 52-59.
3. J. Jin, **L. Li**, K. Jiang (1995) Toxicity of dioxin-like compounds. **Shanghai Environ. Sci.** 14, 29-32.
2. **L. Li**, Y. Chen, C. Chiu, G. Poole, W. Miles, and K. Jiang (1994) PCDD/Fs in sediment samples from Chinese schistosomiasis areas and potential human health effects. **Organohalogen Compound** 20 (Dioxin '94), 155-158.
1. **L. Li**, J. Wu, Y. Chen, and K. Jiang (1993) Determination of polychlorinated biphenyls in transformer oils. **Chin. J. Environ. Sci.** 14, 69-72.

Manuscripts in preparation:

1. H. Ye, J. Wang, J. Dowell, B. Baldo, and **L. Li** (2013). Quantitative changes of neuropeptides induced by food intake in rats. Manuscript in preparation.
2. D. Ma, C. Yang, X. Shi and **L. Li** (2013). Comparative secretome analysis of vascular smooth muscle cells in response to Smad3-dependent TGF- β signaling. Manuscript in preparation.
3. Y. Zhang, J. Wang, L. Hui, and **L. Li**. Quantitative peptidomic analysis of crustacean neuroendocrine organs in response to salinity stress. Manuscript in preparation.
4. Y. Zhang, R. Chen, and **L. Li**. Development and application of relative quantitation via in cell combination (QUICC) methodology for neuropeptide analysis. Manuscript in preparation.

5. R. Chen, Y. Zhang, M. Ma, and L. Li. Mass spectrometric study of neuropeptide expression and secretion changes in *Cancer borealis* induced by acute temperature stress. Manuscript in preparation.
6. C. Jia, Z. He, W. Qi, and L. Li. Application of carrier-free enzyme immobilization to proteomics: on-plate proteolysis using cross-linked trypsin aggregates. Manuscript in preparation.
7. M. Ma, F. Xiang, A.E. Christie, and L. Li. Identification of neuropeptides in the giant freshwater prawn *Macrobrachium rosenbergii* using MALDI-based high resolution mass profiling and tandem mass spectrometric sequencing. Manuscript in preparation.
8. L. Hui, K. K. Kutz-Naber, and L. Li. Mass spectrometric investigation of neuropeptide degradation. Manuscript in preparation.
9. J.A. Dowell, A.E. Kelley, and L. Li. Feeding-induced changes in striatal opioid release: a neuropeptidomic approach. Manuscript in preparation.
10. Y. Zhang, G. Muthuvel, and L. Li. Expression and distribution of neuropeptides in the nervous system of the crab *Carcinus maenas* and their roles in environmental stress. Manuscript in preparation.
11. R. Cunningham, J. Dowell, J. Wang, D. Wellner, M. Milhelm, and L. Li. Identification of astrocytic JNK targets by phosphoproteomic using mass spectrometry. Manuscript in preparation.
12. W. Cao, L. Hui, Y. Zhang, and L. Li. Discovery of neuropeptidome in *Callinectes sapidus*: prediction, detection and expression study. Manuscript in preparation.
13. W. Cao, Y. Ma, M. Ma, and L. Li. PRESnovo: Prescreening prior to *de novo* sequencing to improve accuracy and sensitivity for endogenous peptide identification. Submitted.
14. J. Zhang, Q. Fu, and L. Li (2013). Mass spectrometric investigation of acetylation specific neutral loss in collision induced dissociation of *O*-acetylated peptides. Manuscript in preparation.
15. D. Frost, T. Greer, F. Xiang, Z. Liang, and L. Li (2013). Novel isobaric 8-plex N,N-dimethyl leucines tandem mass tags for high throughput quantitative proteomics and peptidomics. Manuscript in preparation.
16. C. B. Lietz, R. M. Sturm, C. Johnson, G. Kreitinger, L. Smith, J. Pedersen, and L. Li (2013). Quantification of mammalian prions using chymotrypsin derived peptides. Manuscript in preparation.
17. N. Vázquez-Acevedo, J. Pérez-Laspiur, L. Mélenlez, F. Xiang, L. Li, F. Duan, E. A. Rodríguez, N. M. Rivera, E. A. Ruíz-Rodríguez and M. A. Sosa. Differential expression of proteins in the brain of the freshwater prawn *Macrobrachium rosenbergii* in the context of dominance hierarchies. Manuscript in preparation.
18. Y. Zhang, L. Hui, J. Wang, R. Sturm, and L. Li (2013) A multifaceted mass spectrometry method for the study of peptidergic regulation of feeding in *Callinectes sapidus*. Manuscript in preparation.
19. R. Cunningham, D. Grunwald, D. Wellner, M. Conway, W. Heideman, and L. Li (2013). Investigation of the differences in the phosphoproteome between starved vs. glucose fed *Saccharomyces cerevisiae*. Manuscript in preparation.
20. W. Cao and L. Li. Accelerating endogenous peptide identification by a hybrid strategy combining *de novo* sequencing and homology database search. Manuscript in preparation.
21. A. Herbst, R. Cunningham, D. Ma, J. Aiken, and L. Li (2013). Transcriptomic and proteomic analysis of a rat adapted scrapie model. Manuscript in preparation.
22. W. Cao, M. Ma, Y. Zhang, Y. Ma, and L. Li (2013). GreenNPDB: A database of the green crab neuropeptidome discovered by multi-faceted mass spectrometry and *in silico* mining public databases. Manuscript in preparation.
23. X. Jiang and L. Li (2013). Mass spectral characterization and three-dimensional imaging of neuropeptides, lipids and neurotransmitters in lobster *Homarus americanus*. Manuscript in preparation.
24. R. Chen, H. Ye, T. Szabo, E. Marder, and L. Li. In situ identification and mapping of neuropeptides in the crustacean stomatogastric nervous system. Manuscript in preparation.

25. C. Schmerberg, N. Woodards, and **L. Li** (2013). Recent advances in mass spectrometry of neuropeptides. Invited review for **Mass Spectrometry Review**. Manuscript in preparation.
26. C. Schmerberg and **L. Li** (2013). Neuropeptide quantitation with data-independent MS/MS. **Rapid Communication in Mass Spectrometry**. Manuscript in preparation.
27. C. Schmerberg, Z. Liang and **L. Li** (2013). MS/MS characterization of the neuropeptidome of the crayfish *Orconectes rusticus*. **Journal of Proteome Research**. Manuscript in preparation.
28. C. Schmerberg and **L. Li** (2013). Application of microdialysis and data-independent MS/MS quantitation for determination of feeding-related neuropeptides. **ACS Chemical Neuroscience**. Manuscript in preparation.
29. C. Schmerberg, K.T. Hayes, L.B. Putterman, and **L. Li** (2013). Quantification of neuropeptides altered in acute and repeated alcohol exposure. Manuscript in preparation.

Patents:

Li, L., Xiang, F., Greer, T., Frost, D., Liang, Z. “Novel Isobaric Tandem Mass Tags for Quantitative Proteomics and Peptidomics”. US Patent Application No. US 13/619,164, Priority date: Sept. 15, 2011; Filing date: Sept. 14, 2012; **Publication date: Jul. 12, 2016**. Publication number: US9388132 B2; also published as US20130078728.

Li, L., Frost, D.C., and Buchberger, A.R., Mass defect-based multiplex dimethyl pyrimidinyl ornithine (DiPyrO) tags for high-throughput quantitative proteomics and peptidomics. 571395:61-15P US Provisional application was filed on October US Patent 14, 2015. **Publication number: 20180299464. Publication date: October 18, 2018**

Li, L. and Frost, D.C., DiLeu tags for quantitative analysis by mass spectrometry – know-how summary. WARF Ref No. P160226US01 was filed on February 18 2016.

Li, L., Feng, Y., Chen, B., Yu, Q., Zhong, X., and Li, M., Isobaric multiplex reagents for carbonyl containing compound high-throughput quantitative analysis. WARF Ref No. P180060US01, 595699: 105-17P US Provisional application to be filed in January 2018. Application number: 16252464. Publication date: 2019/7/25. **Publication number: US2023/0096494A1. Publication date: March 30, 2023.**

Li, L., Shi, Y., and Li, Z., Development of a novel mass spectrometry-based method for simultaneous qualitative and quantitative protein citrullination analysis of complex biological samples. WARF Ref No. P190302US01, 337501: 109-19P US Provisional application filed on December 13, 2019.

Li, L., Li, M., and Ma, M., Multiplexed DiLeu-Biotin-Azide (DBA) Tag Enabled Isobaric Tandem Orthogonal Proteolysis Activity-based Protein Profiling (isoBOP-ABPP) Platform for High-Throughput Quantitative Pan-PTM Analysis. WARF Ref No. P22020286US01, 339276: 36-22P US Provisional application filed on June 15, 2022. Non-provisional application filed on Jun 14, 2023. Application number 18/334,781.

Li, L., Gu, T.-J., Liu, P.-K. Diazobutanone linker – assisted high-throughput quantitative analysis for phosphate and sulfate containing lipids. WARF IDR filed on Jun 30, 2023.

Invited Seminars and Conference Talks since Position at UW-Madison (updated till November 2018, >300):

(232) Invited Speaker, 2019 International Symposium on Mass Spectrometry Imaging and Natural Medicines, China Pharmaceutical University, Nanjing, China, April 22-23, 2019.

(231) Invited Speaker, Analytical Chemistry and Biological Big Data Forum 2019, Southeast University, April 23, 2019

(230) Invited Seminar Speaker, Genetics Institute, University of Florida, March 27, 2019.

(229) Invited Seminar Speaker, Center for Translational Biomedical Research, University of North Carolina at Greensboro, March 21, 2019.

(228) Invited Seminar Speaker, Department of Chemistry and Biochemistry, University of North Carolina at Greensboro, March 22, 2019.

(227) Invited Speaker, Symposium entitle “Biological Mass Spectrometry: Innovative Advances in Understanding

- and Diagnosing Disease,” Pittcon 2020, March 1-5, Chicago, IL.
- (226) Invited Keynote Lecture, Session D: Chromatography, the 18th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA). October 23-26, 2019, Beijing, China.
- (225) Invited Keynote Speaker, The 4th Mass Spectrometry Forum: The Application of Mass Spectrometry-based Technologies in Life Sciences and Biomedical Research. October 22, 2019, Beijing Normal university, Beijing, China.
- (224) Invited Keynote Lecture at the International Symposium for Celebrating the 70th Birthday of Dalian Institute of Chemical Physics (DICP), Chinese Academy of Sciences, October 20-23, 2019, Dalian, China.
- (223) Invited Keynote Speaker, The 18th Human Proteome Organization World Congress – HUPO 2019, September 15-18, 2019, Adelaide, Australia.
- (222) Invited Speaker, ACS Symposium on Interdisciplinary Chemistry for New Frontiers in Biology and Medicine. ACS Spring 2019 National Meeting, March 31-April 4, 2019, Orlando, Florida, USA.
- (221) Invited Speaker, ACS Analytical Division Symposium on Advances in Ion Mobility Spectrometry. ACS Spring 2019 National Meeting, March 31-April 4, 2019, Orlando, Florida, USA.
- (220) Invited Speaker, 12th North American FT MS Conference, Key West, Florida, April 28-May 2, 2019.
- (219) Invited Speaker, ACS Symposium on Advances in Analytical Technologies Supporting Environmental Fate, Metabolism, and Residue Analysis. ACS Fall 2019 National Meeting, August 25-29, 2019, San Diego, CA.
- (218) Invited Speaker, 2019 Midwest Fragile X Research Exchange, Madison, WI, February 4-5, 2019
- (217) Invited Speaker, The 4th Chinese Mass Spectrometry Conference by the Chinese Chemical Society, Guangzhou, China, November 23-26, 2018.
- (216) Invited Speaker, Thermo Fisher Scientific /METRIC Symposium, North Carolina State University, Research Triangle Area, November 7, 2018
- (215) Invited Speaker, 34th ASMS Asilomar Conference on Quantitative Analysis of Posttranslational Modifications by Mass Spectrometry, November 2-6, 2018
- (214) Invited Seminar Speaker, Department of Chemistry, Santa Clara University, November 1, 2018
- (213) Invited Speaker, Seminar Series on Frontiers in Metabolism Research, Fudan University, Shanghai, China, October 18-20, 2018
- (212) Invited Speaker, Deciphering the Glycosylation Code in Alzheimer’s Disease Meeting Hosted by National Institute on Aging, Bethesda, MD, September 19-20, 2018
- (211) Invited Speaker, 256th American Chemical Society (ACS) Fall National Meeting & Exposition, Special Symposium on Nanoscience, Nanotechnology & Beyond, Boston, MA, USA, August 19-23, 2018
- (210) Invited Speaker, Gordon Research Conference on Molecular Structure Elucidation, Newry, ME, USA, August 12-17, 2018
- (209) Invited Speaker, Medical College of Wisconsin Mass Spectrometry Discussion Group, Milwaukee, WI, August 2, 2018
- (208) Invited Speaker, The 1st Annual North American Mass Spectrometry Summer School, Madison, WI, August 6-9, 2018
- (207) Invited Speaker, The 7th World Chinese Mass Spectrometry Conference and the 15th Taiwan Society for Mass Spectrometry Annual Conference, Taipei, Taiwan, July 17-20, 2018
- (206) Invited Seminar Speaker, The School of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 25, 2018
- (205) Invited Seminar Speaker, The Oil Crops Research Institute, Chinese Academy of Agricultural Sciences, Wuhan, China, June 22, 2018
- (204) Invited Keynote Speaker, The 6th China Bioanalysis Forum Annual Conference, Wuhan, China, June 22-24, 2018
- (203) Invited Seminar Speaker, Institute of Materia Medica, Chinese Academy of Medical Sciences & Peking Union Medical College, June 20, 2018
- (202) Invited Seminar Speaker, School of Pharmacy, Xi’an Jiaotong University, Xi’an, China, April 26, 2018
- (201) Keynote Speaker, Ambient Ionization Mass Spectrometry (AIMS) Conference 2018, The 5th China AIMS Conference, Xi’an, China, April 27-29, 2018
- (200) Invited Speaker, Department of Chemistry Seminar, Wichita State University, Wichita, KS, March 28, 2018.
- (199) Invited Speaker, Symposium on Recent Development and Future Directions in Clinical Tissue Analysis: Towards In Vivo and Real-Time Diagnostics, PittCon 2018, Orlando, FL, February 25-March 1, 2018.

- (198) Invited Seminar Speaker, Department of Chemistry Seminar Series, Iowa State University, Ames, IA, February 16, 2018.
- (197) Invited Speaker, Triangle Area Mass Spectrometry (TAMS) Discussion Group, North Carolina, February 13, 2018.
- (196) Invited Plenary Speaker, The 3rd Chinese Mass Spectrometry Conference by the Chinese Chemical Society, Xiamen, China, December 9, 2017.
- (195) Invited Seminar Speaker, Seminar Series at the Institute of Biophysics, Chinese Academy of Sciences, Beijing, China, October 12, 2017.
- (194) Invited Keynote Speaker, The 17th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA), Session D: Chromatography/Women Scholar Session, Beijing, China, October 9, 2017.
- (193) Invited Seminar Speaker, qBio2017 Seminar Series, Wisconsin Institute for Discovery, University of Wisconsin-Madison, September 13, 2017.
- (192) Invited Seminar Speaker, Hong Kong Baptist University Seminar Series. June 27, 2017.
- (191) Invited Seminar Speaker, Distinguished Lecture Series, Department of Applied Biology and Chemical Technology, The Hong Kong Polytechnic University. June 26, 2017.
- (190) Invited Plenary Speaker, Hong Kong Society for Mass Spectrometry (HKSMS) Symposium 2017, Hunghom, Hong Kong, China, June 24, 2017.
- (189) Invited Keynote Speaker, IUPAC International Congress on Analytical Sciences 2017 (ICAS 2017), Haikou City, China, May 5-8, 2017.
- (188) Invited Seminar Speaker, Frontier Seminar Series, School of Chemistry and Biochemistry, Georgia Institute of Technology, April 13, 2017.
- (187) Invited Speaker, The 3rd International Conference of D-Amino Acid Research, IDAR2017, Varese, Italy, July 10-13, 2017. Declined due to visa issue.
- (186) Invited Speaker, The Royal Society Symposium on “Evolution and Functional Biology of Neuropeptide Signaling: from Genomes to Behavior”. Kavli Royal Society Centre, Buckinghamshire, UK, March 13-14, 2017.
- (185) Invited Speaker, The Dalian Institute of Chemical Physics Symposium Honoring Professor Hanfa Zou, Dalian, China, April 25-27, 2017.
- (184) Invited Seminar Speaker, Neuroscience Seminar Series, University of Illinois in Chicago, March 30, 2017.
- (183) Invited Speaker, Symposium on Measuring the Brain: From the Synapse to Thought, PittCon 2017, Chicago, IL, March 6-9, 2017.
- (182) Invited Speaker, The Ralph N Adams Award Symposium Honoring Professor Robert T. Kennedy, PittCon 2017, Chicago, IL, March 6-9, 2017.
- (181) Invited Speaker, ASMS Sanibel Conference on Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
- (180) Invited Speaker, Seminar Series at the China Pharmaceutical University, Nanjing, China, December 20, 2016.
- (179) Invited Speaker, 2016 Chinese Bioanalysis Conference by the Chinese Chemical Society, Nanjing, China, December 16-19, 2016
- (178) Invited Speaker, Seminar for School of Life Sciences, Tsinghua University, Beijing China, November 17, 2016.
- (177) Invited Speaker, The 4th Ambient Ionization Mass Spectrometry Conference China (AIMS 2016). Guangzhou, China, November 11-12, 2016.
- (176) Invited Seminar Speaker, Frontiers in Chemistry Seminar Series, School of Chemistry and Biochemistry, Georgia Institute of Technology. November 28, 2016.
- (175) Invited Speaker, NSF Workshop on Measuring the Brain. Arlington, VA. October 12-13, 2016
- (174) Invited Keynote Speaker, Lake Louise Annual International Workshop in Tandem MS, Lake Louise, Canada, November 30-December 3, 2016.
- (173) Invited Speaker, 2nd International Conference on “Innovations in Mass Spectrometry: Instrumentation and Methods”. Moscow, Russia, November 7-11, 2016.
- (172) Invited Seminar Speaker, College of Chemistry and Molecular Engineering, Peking University, Beijing, China, April 22, 2016.
- (171) Invited Seminar Speaker, Seminar for the Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, Peking Union Medical College, Beijing, China, April 28, 2016.
- (170) Invited Seminar Speaker, Neuroscience Seminar Series, University of Wisconsin at Milwaukee, May 6, 2016.
- (169) Invited Keynote Speaker, RegPep 2016 Conference, Rouen-Normandy, France, July 11-15, 2016.

- (168) Invited Speaker, Symposium entitled “Advances in Biological Imaging”, ACS Fall National Meeting, Philadelphia, PA, August 21-25, 2016.
- (167) Invited Speaker, Delaware Valley Mass Spectrometry Discussion Group, Villanova University, May 9th, 2016.
- (166) Invited Keynote Speaker, 1st Phoenix Mini-Symposium on Frontiers of Proteomics. Phoenix Center, Beijing, China, April 18, 2016
- (165) Invited Speaker, University of Wisconsin-Madison and University of Massachusetts-Boston O’Brien Research Center of Excellence Symposium, Madison, WI, April 5-6, 2016
- (164) Invited Seminar Speaker, Department of Biochemistry, School of Medicine, University of Pennsylvania, March 24, 2016.
- (163) Invited Speaker, Symposium on Overcoming the Obstacles to Making Measurements in the Brain, PittCon 2016, Atlanta, GA, March 6-10, 2016.
- (162) Invited Speaker, 2015-2016 O’Brien Center Seminar Series, School of Medicine and Public Health, University of Wisconsin-Madison, February 10, 2016.
- (161) Invited Speaker, 2015-2016 Cancer Biology Seminar Series, School of Medicine and Public Health, University of Wisconsin-Madison, February 3, 2016.
- (160) Invited Speaker, Oral session on Advances in Analytical Ion Mobility Separations, Pacificchem Meeting 2015, Honolulu, HI, Dec 15-20, 2015.
- (159) Invited Seminar Speaker, School of Medicine, Fudan University, Shanghai, China, October 30, 2015
- (158) Invited Keynote Speaker, the 16th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) and the 5th World Chinese Mass Spectrometry Conference, Beijing, China, October 27-30, 2015
- (157) Invited Speaker, International Symposium on *In Vivo* Analysis, Chinese Academy of Sciences Institute of Chemistry, Beijing, China, October 25-26, 2015.
- (156) Invited Speaker, 2015 Wisconsin Human Proteomics Symposium, BioPharmaceutical Technology Center, Madison, WI, August 7, 2015.
- (155) Invited Speaker, ANACHEM Award Symposium Honoring Jonathan V. Sweedler, SciX2015 Conference, Providence, Rhode Island, September 27-October 2, 2015.
- (154) Invited Speaker, Symposium on “Coupling Capillary Electrophoresis with Mass Spectrometry”, SciX2015 Conference, Providence, Rhode Island, September 27-October 2, 2015.
- (153) Invited Speaker, Symposium on “Advances in Analytical Mass Spectrometry”, ACS Fall National Meeting, Boston, MA, August 16-20, 2015.
- (152) Session Chair and Invited Speaker for the Chemical Proteomics in Living Systems and Other Imaging Techniques, US HUPO 2015 “Next Generation Proteomics”, Tempe, AZ, March 15-18, 2015
- (151) Invited Plenary Speaker at the 2015 Annual Symposium of the Greater Boston Mass Spectrometry Discussion Group (GBMSDG) and Massachusetts Separation Society (MASSEP), Boston, MA, May 13, 2015.
- (150) Invited Speaker at Symposium on Advances in Analytical Technology for Understanding the Central Nervous System, Pittsburgh Conference on Analytical Chemistry and Allied Spectroscopy 2015 (March 11, 2015, New Orleans, LA)
- (149) Invited Speaker, the 12th Uppsala Conference on Electron Capture and Transfer Dissociation (UPPCON 2015), March 22-25, 2015, Lake Arrowhead, CA, USA.
- (148) Invited Keynote Speaker, Peptide Research Network of Excellence Conference, Le Havre University, France, January 15th-16th, 2015. Declined invitation due to visa issue.
- (147) Invited Keynote Speaker, the 3rd Ambient Ionization Mass Spectrometry Conference (AIMS 2015), April 24-25, 2015, Chengdu, China.
- (146) Invited Speaker, 2015 Wisconsin Human Proteomics Symposium on Post-Translational Modifications in Disease, August 6-7, 2015, Madison, WI, USA.
- (145) Invited Seminar, NIH Proteomics Interest Group 2014-2015 Seminar Series, February 6, 2015.
- (144) Invited Seminar, Molecular and Environmental Toxicology Program, University of Wisconsin-Madison, September 4, 2014.
- (143) Invited Seminar, Department of Chemistry, George Washington University, October 31, 2014.
- (142) Invited Seminar, Department of Chemistry and Biochemistry, University of Texas at Arlington, October 24, 2014.
- (141) Invited Plenary Lecture, The 3rd China Workshop and Symposium on Computational Proteomics, CNCP-2014, November 12-13, 2014, Beijing, China.

- (140) Plenary Award Lecture, Biemann Medal 2014, The 62nd Annual Conference for The American Society for Mass Spectrometry, Baltimore, MD, June 17, 2014
- (139) Invited Departmental Seminar, Department of Biological Chemistry, The Johns Hopkins University School of Medicine, Baltimore, MD, June 19, 2014
- (138) Invited Symposium, 15th International Conference on Monitoring Molecules in Neuroscience, August 3-7, 2014
- (137) Invited Colloquium, ChangChun Institute of Applied Chemistry, Chinese Academy of Sciences, July 22, 2014, Changchun, China.
- (136) Invited presentation at the 5th Asian Oceania Mass Spectrometry Conference (AOMSC) and the 33rd Chinese Society for Mass Spectrometry Annual Conference, Peking University, Beijing, China, July 16-19, 2014
- (135) Invited Analytical Seminar, Department of Chemistry, Indiana University, November 4, 2014
- (134) Invited Seminar, School of Life Sciences, Tsinghua University, April 9, 2014
- (133) Invited Speaker at a Symposium on Mass Spectrometry and Its Biomedical Applications, the 2014 SERMACS (The 66th Southeastern Regional Meeting of the American Chemical Society), Nashville, TN, October 16-19, 2014.
- (132) Invited Speaker at 2014 Bioanalytical Sensors Gordon Research Conference (Newport, RI, USA, June 2014)
- (131) Invited Speaker at Symposium on Imaging Mass Spectrometry of Biological Tissues and Cell Cultures, Pittsburgh Conference on Analytical Chemistry and Allied Spectroscopy 2014 (March 2014, Chicago, IL)
- (130) Invited Speaker at Symposium on Novel Approaches in Quantitative Analysis of Biomarkers in Drug Discovery and Development, Pittsburgh Conference on Analytical Chemistry and Allied Spectroscopy 2014 (March 2014, Chicago, IL)
- (129) Invited Plenary Lecture, The 2nd Ambient Ionization Mass Spectrometry Conference China, April 1-4, Zhangjiajie, China
- (128) Invited Speaker, Department of Chemistry and Biochemistry, University of Arizona, December 18, 2013
- (127) Guest Speaker, Institute of Basic Medical Sciences, Chinese Academy of Medical Sciences, School of Basic Medicine, Peking Union Medical College, Beijing, China, October 24, 2013
- (126) Invited Speaker, International Symposium on In Vivo Analysis, Beijing, China, Oct 22, 2013
- (125) Invited Speaker, Analytical Seminar Series, University of Washington, April 21, 2014.
- (124) Invited Seminar Speaker, SUNY-Buffalo Medical School, February 25, 2014.
- (123) Invited Speaker at a Symposium entitled "Mass Spectrometry for Clinical Diagnosis", National Sun Yat-Sen University, Kaohsiung, Taiwan, November 1-2, 2013. Declined invitation due to scheduling conflict.
- (122) Invited Speaker at Academia Sinica, Taipei, Taiwan, Oct. 29-30, 2013. Declined invitation due to schedule conflict.
- (121) Invited Colloquium Speaker, School of Life Sciences, Tianjin University, Tianjin, China, Oct. 21, 2013.
- (120) Invited Seminar Speaker, The China State Key Laboratory at the Research Center for Eco-Environmental Sciences, Chinese Academy of Science, Beijing, China, October 31, 2013.
- (119) Invited Speaker at the 40th Annual Meeting SciX 2013 for FACSS (The Federation of Analytical Chemistry and Spectroscopy Societies) (Milwaukee, WI, USA, September 29-October 4, 2013)
- (118) Invited Seminar, Department of Chemistry and Biochemistry, University of Notre Dame, August, 2013.
- (117) Invited Speaker, International Forum on Novel Techniques for Quantitative Proteome Analysis (2013), Dalian Institute of Chemical Physics, Chinese Academy of Science, Dalian, China, Oct. 27-29, 2013.
- (116) Invited Keynote Speaker, Sub-session of Analytical Techniques in Life Sciences at the 15th International Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) October 23th -26th, Beijing, China.
- (115) Invited Keynote Speaker, Proteomics Workshop at the 15th International Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) October 23th -26th, Beijing, China.
- (114) Invited Speaker, the 3rd Wisconsin Human Proteomics Symposium, Madison, Wisconsin, August 1, 2013.
- (113) Invited Seminar, Department of Chemistry, University of Massachusetts Amherst, Spring 2014.
- (112) Invited Seminar, Chemical Biology Training Program, University of Illinois at Urbana-Champaign, April 4, 2013.
- (111) Invited talk, Chicago Mass Spectrometry Discussion Group Monthly Meeting, March 12, 2013

- (110) Invited Departmental Colloquium, Department of Chemistry and Biochemistry, University of Arizona, January 24, 2013.
- (109) Invited Keynote Speaker, 2nd Annual Symposium on Proteomics and Human Diseases, Chinese Academy of Sciences Proteomics Center and Peking Union Medical College, November 28, 2012, Beijing, P. R. China
- (108) Invited Keynote Speaker, The 9th International Symposium on Persistent Toxic Substances (9th ISPTS), Miami, FL, Oct 23-27, 2012. Declined invitation due to scheduling conflict.
- (107) Invited Seminar, Department of Biology Seminar Series, Illinois State University, May 2, 2013.
- (106) Invited Seminar, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, July 6, 2012
- (105) Invited Seminar, College of Pharmacy, Tianjin University, Tianjin, China, July 9, 2012
- (104) Invited Departmental Colloquium, Department of Chemistry and Biochemistry, University of Arkansas, April 15, 2013.
- (103) Invited Seminar, Student Seminar Series at the University of Minnesota, Department of Chemistry, 2012-2013 seminar series, April 9, 2013.
- (102) Invited Speaker, the 28th International Symposium on MicroScale Bioseparations (MSB), Shanghai, China, October 21-26, 2012.
- (101) Invited Speaker, I-International Conference on Imaging Mass Spectrometry, Ourense, Spain, September 3-5, 2012. Turned down due to scheduling conflict.
- (100) Invited Speaker, 4th World Chinese Mass Spectrometry Conference, Tainan, June 28-July 1, 2012.
- (99) Invited Seminar, State University of New York at Buffalo, Department of Chemistry, April 6, 2012
- (98) Invited Speaker for the Symposium “Ion Cyclotron Resonance Mass Spectrometry: Recent Developments”, 2012 Pittsburgh Conference, Orlando, FL, March 2012
- (97) Invited Speaker and Chair for the Symposium “Hyphenated Techniques for Peptidomics: Bridging the Gap between Proteomics and Metabolomics by Mass Spectrometry,” 2012 Pittsburgh Conference, Orlando, FL, March 2012
- (96) Invited Speaker at the SACP (Society for Analytical Chemists of Pittsburgh) Meeting, Duquesne University, Pittsburgh, PA; February 6, 2012.
- (95) Invited Speaker for the Chemistry Colloquium, Department of Chemistry, Pennsylvania State University, April 12, 2012
- (94) Invited Speaker for the Symposium on Chemical Communication, Temasek Life Sciences Laboratory (TLL), Singapore, Jan 29- Jan 31, 2012
- (93) Invited Speaker for the Seminar Series at Department of Surgery, School of Medicine and Public Health, University of Wisconsin-Madison, Jan 6, 2012
- (92) Invited Speaker for the 6th Symposium of the Peptide Therapeutics Foundation (PTF). Salk Institute, San Diego, CA, October 20-21, 2011
- (91) Invited Seminar, University of California-San Diego, School of Pharmacy, October 24, 2011
- (90) Invited Keynote Speaker, 14th International Beijing Conference and Exhibition on Instrumental Analysis (BCEIA 2011), Beijing, China, October 13-16, 2011 (declined due to teaching conflict)
- (89) Invited Speaker, 2011 Wisconsin Human Proteomics Symposium, Madison, Wisconsin, Aug 5, 2011
- (88) Invited Seminar, Department of Chemistry, Xiamen University, Xiamen, China, July 2011
- (87) Invited Seminar, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, July 15, 2011
- (86) Invited Seminar, National Institute of Biological Sciences, Beijing, China, July 6, 2011
- (85) Invited Speaker as an awardee at the 2011 Pittsburgh Conference Achievement Award Symposium, Atlanta, GA (March 14, 2011)
- (84) Invited Seminar, Department of Chemistry and Chemical Biology, Northeastern University, February 2011
- (83) Invited Speaker at the Waisman Center Cellular and Molecular Neuroscience (CMN) Core Sponsored Lecture Series 2010-2011, UW-Madison (December 2010)
- (82) Invited Plenary Lecture at the 2010 Chinese Organic Mass Spectrometry Conference, Nanning, China (November 4-9, 2010)
- (81) Invited Analytical Chemistry Seminar, Wayne State University (October 2010)
- (80) US-China Analytical Chemists Workshop, Purdue University, October 6-7, 2010
- (79) Invited Speaker, The 3rd Chinese National Symposium on Analytical Chemistry for Life Sciences, Peking University, College of Chemistry and Molecular Engineering, Beijing, China (August 19-22, 2010)

- (78) Invited Seminar, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China, August 12, 2010
- (77) Invited Seminar, China Novartis Institutes for BioMedical Research Co., Ltd., Shanghai, China, August 10, 2010
- (76) Invited Seminar, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, August 3, 2010.
- (75) Invited External Lecturer, Marine Biology Laboratory Neurobiology 2010 Summer Course (turned down invitation due to schedule conflict)
- (74) Invited Speaker, 3rd World Congress Mass Spectrometry Conference, Changchun, China (July 30-August 03, 2010)
- (73) Invited Seminar, Department of Chemistry, Tsinghua University, Beijing, China (January 12, 2010)
- (72) Invited Seminar, Pharmaceutical Product Development, Inc. Madison, WI (February 2010)
- (71) Invited Speaker, Satellite Meeting “Molecular Biomarkers: TSE Signatures” at PrP Canada 2010 conference (March, 2010, turned down invitation due to schedule conflict)
- (70) Invited Speaker, Applied Biosystems Mass Spectrometric Imaging Workshop, Toronto, Canada (December 2009)
- (69) Invited Speaker and Session Chair at the 24th Microscale Bioseparations (MSB) Conference 2009, Dalian, China (October 2009)
- (68) UW-Madison, Molecular Environmental Toxicology Program, Fall Colloquium (2009)
- (67) UW-Madison Human Proteomics Program, August 27, 2009
- (66) Merck Research Laboratories, Department of Pharmacokinetics and Drug Metabolism (DMPK), West Point, PA (January, 2010)
- (65) University of Puerto Rico, School of Medicine (February 10, 2010)
- (64) Invited Speaker at Symposium on New Frontiers in Mass Spectrometric Analysis of Proteins, Pittsburgh Conference on Analytical Chemistry and Allied Spectroscopy 2010 (March 2010, Orlando, FL)
- (63) Invited Speaker at an ACS sponsored oral session on Bioanalytical Approaches to Study Cellular Communication, Pittsburgh Conference on Analytical Chemistry and Allied Spectroscopy 2010 (March 2010, Orlando, FL)
- (62) Invited Speaker and Session Chair for Lab Automation 2010, Separation and Detection Track, Symposium on Tissue Imaging Mass Spectrometry and Miniaturization Mass Spectrometry (January 2010)
- (61) University of Illinois at Urbana-Champaign, College of Veterinary Medicine, Translational Biomedical Research Seminar Series (March 2009)
- (60) University of Kansas, Department of Pharmaceutical Chemistry Seminar Series (February 2009)
- (59) Invited Speaker and Session Chair for Microscale Bioseparations (MSB) Conference 2009, Boston (February 2009)
- (58) Boston University, Department of Biochemistry and Boston School of Medicine (October 2008)
- (57) University of Notre Dame, Department of Chemistry Analytical Seminar (October 2008)
- (56) Gordon Research Conference on Proprotein Processing, Trafficking and Secretion (July 2008)
- (55) The Second International Congress of Chinese Mass Spectrometrists (Taiwan, June 2008)
- (54) Gordon Research Conference on Isotopes in the Biological and Chemical Sciences (February 2008)
- (53) University of California – Davis, Department of Chemistry (January 2008)
- (52) University of Wisconsin-Madison, School of Pharmacy (January 2008)
- (51) Purdue University, Department of Chemistry (December 2007)
- (50) University of North Carolina – Chapel Hill, Department of Chemistry (November 2007)
- (49) North Carolina State University, Department of Chemistry (November 2007)
- (48) Vanderbilt University, Department of Chemistry Colloquium (November 2007)
- (47) University of Chicago, Department of Organismal Biology & Anatomy (October 2007)
- (46) University of Arkansas, Department of Chemistry Colloquium (October 2007)
- (45) University of Washington, Department of Chemistry (October 2007)
- (44) University of Illinois at Urbana-Champaign, Department of Chemistry (August 2007)
- (43) Brandeis University, Department of Chemistry (August 2007)
- (42) 234th American Chemical Society (ACS) National Meeting (August 2007)
- (41) Session Chair for the Symposium on Cellular and Network Functions in the Spinal Cord 2007 (Madison, WI, June 2007)
- (40) The 2nd Annual Human Proteomics Symposium, UW-Madison, June 2007

- (39) Varian Inc. User Meeting at ASMS 2007 Annual Conference, June 2007
- (38) University of California-Irvine, Department of Physiology and Biophysics (May 2007)
- (37) University of Wisconsin-Madison, Waisman Center Seminar Series (May 2007)
- (36) University of California-Riverside, Department of Chemistry (May 2007)
- (35) University of Minnesota, Analytical Chemistry Seminar (May 2007)
- (34) The 6th North American FTICR MS Conference 2007 (April 2007)
- (33) The NSF workshop on brain science initiative as a mutual opportunity for the physical sciences (March 2007)
- (32) University of Iowa, Department of Chemistry Colloquium (March 2007)
- (31) Pittsburgh Analytical Chemistry Award Symposium, Pittsburgh Conference 2007 (March 2007)
- (30) University of Wisconsin at Madison, Genomics Seminar Series (December 2006)
- (29) University of Wisconsin at Madison, Department of Physiology Seminar Series (December 2006)
- (28) University of Illinois at Chicago, Departmental Seminar, Department of Chemistry (November 2006)
- (27) Society for Neuroscience (SFN) Mini-symposium on Functional Neuronal Identity and Intrinsic Excitability: Molecular and Sub-Cellular Mechanisms of Neuronal Output, SFN Annual Meeting (October 2006)
- (26) University of Michigan at Ann Arbor, Department of Chemistry, Analytical Seminar Series (September 2006)
- (25) IonSpec Corporation Advisory Committee Meeting (May 2005)
- (24) Neuroscience Satellite Meeting on Dynamic Neural Networks: The Stomatogastric Ganglion, 2004, San Diego, CA (October 2004)
- (23) Symposium on Analytical Methods to Characterize the Nervous System, The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) Meeting, Oregon, Portland, October 4 (2004)
- (22) Endocrinology-Reproductive Physiology Program Seminar Series, UW-Madison (2004)
- (21) Medical College of Wisconsin, Department of Pharmacology and Toxicology Seminar Series (October 2004)
- (20) Cancer Pharmacology Seminar Series, UW Cancer Center, Madison, Wisconsin (2004)
- (19) The Fourth Tuesday Group, University of Wisconsin-Madison (2004)
- (18) Neuroscience Seminar for Undergraduates, UW-Madison (2003)
- (17) Neuroscience Seminar Series, Neuroscience Training Program, Madison, Wisconsin (2003)
- (16) Analytical Sciences Seminar Series, UW-Chemistry, Madison, Wisconsin (2003)
- (15) Proteomics Workshop, DNA Conference, Madison, Wisconsin (2003)
- (14) Bowdoin College, Department of Biology (2002)

Invited Seminars and Conference Talks Prior to Position at UW-Madison:

- (13) The Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) Meeting (2002)
- (12) University of Wisconsin-Madison, School of Pharmacy (2002)
- (11) University of Maryland at College Park, Department of Chemistry and Biochemistry (2002)
- (10) University of Utah, Department of Chemistry (2002)
- (9) West Virginia University, Department of Chemistry (2002)
- (8) University of Washington, Department of Chemistry (2002)
- (7) University of Kentucky, College of Pharmacy (2002)
- (6) University of Iowa, Department of Chemistry (2001)
- (5) Georgia Institute of Technology, School of Chemistry and Biochemistry (2001)
- (4) 222nd American Chemical Society (ACS) National Meeting (2001)
- (3) Centers for Disease Control and Prevention (1999)
- (2) Analytical Seminar, Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory (1998)
- (1) Annual Meeting of the Biomedical Engineering Society (1998)

Contributed and Invited Conference Research Presentations since Position at UW-Madison:

Underlined name is student or postdoc presenter.

2020

366. Y. Shi, J. Johnson, B. Wang, B. Chen, G.L. Fisher, G. Urabe, X. Shi, L.C. Kent, L.-W. Guo, and **L. Li**, "Spatiotemporal Dynamics of Bioactive Lipids in Arteries Undergoing Restenosis Observed by Multi-Modal Mass Spectrometry Imaging," 15th European Molecular Imaging Meeting, August 25-28, 2020, HELEXPO Thessaloniki, Greece.

365. J. Knickelbine, Y. Cui, F. Liu, **L. Li**, and G. Robertson, “Mechanism of Heteromeric hERG Channel Biosynthesis through mRNA Association,” RNA Society Annual Meeting 2020, May 26-31, Virtual Meeting.
364. M. Li and **L. Li**, “High Throughput Fine Mapping of Glycosylation Enabled by DiLeuEN and ETD-MS,” Poster presentation 2020 ASMS Virtual Conference, June 1-12, 2020.
363. C. Sauer, M.A. Job, and **L. Li**, “Multiplex Quantitation of Biomolecules Involved in Copper Toxicity via Custom N,N-Dimethylated Leucine (DiLeu) 12-plex Isobaric Tags,” Poster presentation 2020 ASMS Virtual Conference, June 1-12, 2020.
362. Q. Yu, Z. Chen, X. Zhong, and **L. Li**, “Developing a New Pipeline for Mapping and Quantification of O-glycosylation using Isobaric N,N-dimethyl Leucine (DiLeu) Reagents,” Poster presentation 2020 ASMS Virtual Conference, June 1-12, 2020.
361. R. Liu, P. Wei, C. Keller, D. Frost, S. Han, T.-W. Cross, F. Rey, and **L. Li**, “Label-free and DiLeu Isobaric Tag Quantitative Methods for Profiling Mouse Hypothalamic Neuropeptidomic and Proteomic Changes under Different Gut Microbiota Environments,” Poster presentation 2020 ASMS Virtual Conference, June 1-12, 2020.
360. **L. Li**, “Chemical Tags Enabled Quantitative (Glyco)proteomic Analysis of Cerebrospinal Fluids in Alzheimer’s Disease,” Invited Symposium entitled “Biological Mass Spectrometry: Innovative Advances in Understanding and Diagnosing Disease”. Pittcon 2020, March 1-5, Chicago, IL
359. Z. Li, D.M. Tremmel, F. Ma, S.D. Sackett, J.S. Odorico, and **L. Li**, “12-plex DiLeu Isobaric Tags Enable Quantitative Proteomic Analysis of Pancreatic Tissues at Various Developmental Stages,” Oral presentation, Pittcon 2020, March 1-5, Chicago, IL
358. C. Sauer and **L. Li**, “Multiplexed Quantification of Crustacean Neuropeptides via Custom Isobaric Tags (DiLeu),” Oral presentation, Pittcon 2020, March 1-5, Chicago, IL
357. Q. Yu, Y. Feng, and **L. Li**, “SUGAR Tag Enabled Multiplexed Quantitative Glycomics Analysis of N-glycans including Sialic Acid Linkage Isomers,” Oral presentation, Pittcon 2020, March 1-5, Chicago, IL
356. K. DeLaney and **L. Li**, “Profiling, Imaging, and Functional Assessment of Neuropeptides in the Crustacean Cardiac Neuromuscular System,” Oral presentation, Pittcon 2020, March 1-5, Chicago, IL
355. P. Wei, E. Jankowska-Gan, D. Lema, M. Brown, L.D. Haynes, W.J. Burlingham, and **L. Li**, “Self-target Antigen Characterization to Improve Heart and Lung Post-Transplant Survival Rate,” Oral presentation, Pittcon 2020, March 1-5, Chicago, IL

2019

354. **L. Li**, B. Chen, Q. Cao, C. Ouyang, Y. Shi, G. Li, and C. Keller, “Painting Molecular Pictures of Biological Systems via Mass Spectrometric Imaging,” Invited Lecture, 2019 International Symposium on Mass Spectrometry Imaging and Natural Medicines, China Pharmaceutical University, Nanjing, China, April 22-23, 2019.
353. **L. Li**, D. Frost, X. Zhong, Y. Feng, L. Hao, and J. Johnson, “Leveraging Chemical Tags for High-Throughput Quantitative Omics,” Invited Lecture, Analytical Chemistry and Biological Big Data Forum 2019, Southeast University, Nanjing, China, April 23, 2019.
352. X. Zhong, Q. Yu, F. Ma, D. Frost, and **L. Li**, “Multiplexed Quantification Strategy for Candidate Biomarker Discovery and Verification in Alzheimer’s Disease,” Poster presentation, US HUPO 2019, Rockville, Maryland, March 3-6, 2019.
351. **L. Li**, D. Frost, X. Zhong, Y. Feng, M. Li, L. Hao, Z. Chen, “High Resolution FTMS Enabled Mass Defect-Based Chemical Tags for Multiplex Quantitative Omics,” Invited Plenary Lecture, 12th North American FT MS Conference, Key West, Florida, April 28-May 2, 2019.
350. K. DeLaney and **L. Li**, “DIA and DDA MS for Profiling the *Cancer borealis* Neuropeptidome and Peptidomic Changes Resulting from Food Intake,” Oral presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
349. Y. Shi, Z. Li, X. Shi, B. Wang, and **L. Li**, “Mass Spectrometry-based Large-scale and Precise Identification of Citrullinated Proteins from Complex Biological Samples,” Oral presentation, 67th ASMS Conference on Mass

Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.

348. C. Sauer and **L. Li**, “Multiplexed Dimethylated Leucine (DiLeu) Isobaric Tags to Probe Neuropeptidomic Response to Copper Toxicity in the Blue Crab, *Callinectes sapidus*,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
347. T.-J. Gu, D. Frost, M. Li, Y. Feng, and **L. Li**, “Increased Multiplexing of DiLeu Isobaric Tags with Enhanced Linker Using Mass Defect Isotope Encoding,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
346. X. Zhong, Z. Chen, Q. Yu, H. Zetterberg, C. M. Carlsson, O. Okonkwo, and **L. Li**, “Multiplexed Quantitative Glycoproteomic and Proteomic Analyses of Cerebrospinal Fluid in Alzheimer’s Disease,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
345. P. Wei, C. Keller, J. Brathurd, R. Liu, E. Vivas, E. Gemperline, F. Rey, C. Currie, and **L. Li**, “Integrated, Multi-Omics Strategy to Study the Gut Microbiota Response to *Salmonella enterica* Typhimurium Infection in Humanized Mice,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
344. J. Huang, L. Dias, M. Wuethrich, and **L. Li**, “Mass Spectrometric Elucidation of global Glycosylation Profile on a Fungal Vaccine Adjuvant BL-ENG2,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
343. J. Johnson and **L. Li**, “The Spheroid Microarray: Pushing *In Vitro* Drug Penetration Towards High-throughput Technologies,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
342. Q. Cao, G. Li, A.R. Buchberger, and **L. Li**, “5-plex iDiLeu Enabled Neurotransmitter Absolute Quantitation in the Crustacean Nervous System,” Poster presentation, 67th ASMS Conference on Mass Spectrometry and Allied Topics, June 2-6, 2019, Atlanta, Georgia, USA.
341. **L. Li**, J. Huang, Y. Cui, J. Dong, M. Glover, Q. Yu, D. Tabang, and M. Ye, “Developing Improved Strategies for Selective Enrichment and Large-scale Profiling of Peptides with Multiple PTMs,” Invited Keynote Lecture, Session D: Chromatography, the 18th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA), October 23-26, 2019, Beijing, China.
340. **L. Li**, Z. Chen, X. Zhong, Y. Feng, L. Hao, G. Li, C. Carlsson, and O. Okonkwo, “Development and Application of Mass Spectrometry (MS)-based Omics Strategies for Biomarker Discovery and Validation in Alzheimer’s Disease (AD),” Invited Keynote Speaker, The 4th Mass Spectrometry Forum: The Application of Mass Spectrometry-based Technologies in Life Sciences and Biomedical Research. October 22, 2019, Beijing Normal university, Beijing, China
339. **L. Li**, J. Huang, Y. Cui, J. Dong, D. Tabang, and M. Ye, “Developing Improved Strategies for Selective Enrichment and Large-Scale Profiling of Peptides with Multiple PTMs,” Invited Keynote Lecture at the International Symposium for Celebrating the 70th Birthday of Dalian Institute of Chemical Physics (DICP), Chinese Academy of Sciences, October 20-23, 2019, Dalian, China.
338. **L. Li**, “Comparative Glycoproteomic Analyses of Cerebrospinal Fluids Reveal Novel Molecular Players in Alzheimer’s Disease,” HPP5: High Connectivity: Neuroproteomics at the Interface of Bench and Bedside. Invited Keynote Speaker, The 18th Human Proteome Organization World Congress – HUPO 2019, September 15-18, 2019, Adelaide, Australia.
337. Y. Cui and **L. Li**, “Salt Optimization in ERLIC for Simultaneous and Highly Selective Enrichment of Peptides with Multiple PTMs,” ISPPP 2019 (International Symposium on Proteins, Peptides and Polynucleotides), July 10-12, Baltimore, Maryland, USA.
336. G. Li and **L. Li**, “Sialylation Effects in Alzheimer’s Disease: A Case Study on the Glycoprotein Transferrin,” Oral presentation, ACS Fall 2019 National Meeting, August 25-29, 2019, San Diego, CA.
335. **L. Li**, A. Buchberger, C. Sauer, K. DeLaney, N. Vu, and Y. Liu, “A Temporal and Spatial Study of Neuropeptidomic Changes in Response to Hypoxia via a Multi-faceted Mass Spectrometry Platform,” Invited Oral

Presentation at the ACS Symposium on Advances in Analytical Technologies Supporting Environmental Fate, Metabolism, and Residue Analysis. ACS Fall 2019 National Meeting, August 25-29, 2019, San Diego, CA.

334. **L. Li** and G. Li, “Advancing Neuropeptide Research via Novel Application of Ion Mobility Mass Spectrometry (IM-MS),” Invited Oral Presentation, ACS Analytical Division Symposium on Advances in Ion Mobility Spectrometry. ACS Spring 2019 National Meeting, March 31-April 4, 2019, Orlando, Florida, USA.

333. **L. Li**, “Sweetening the Process of Biomarker Discovery in Alzheimer’s Disease: Development of Improved Chemical Strategies for Probing Glycosylation Patterns in AD,” Invited Oral Presentation, ACS Symposium on Interdisciplinary Chemistry for New Frontiers in Biology and Medicine. ACS Spring 2019 National Meeting, March 31-April 4, 2019, Orlando, Florida, USA.

332. **K. DeLaney** and **L. Li**, “DIA and DDA MS for Profiling the *Cancer borealis* Neuropeptidome and Peptidomic Changes Resulting from Food Intake,” Oral presentation, Pittcon 2019, March 17-21, Philadelphia, PA, USA.

331. **L. Li**, “Developing Mass Spectrometry-Based Omics Strategies and Chemical Tools to Advance Neuroscience Research,” Invited talk at the 2019 Midwest Fragile X Research Exchange. February 4-5, 2019, Madison, WI, USA.

2018

330. **L. Li**, “Mass Spectrometry-Based Omics Strategies for Cerebrospinal Fluid Biomarker Discovery and Validation in Alzheimer’s Disease,” Invited Oral Presentation at the Gordon Research Conference on Molecular Structure Elucidation – Enabling Development of Novel Therapeutics Through Innovative Analytical Technologies and Methods. August 12-17, 2018, Newry, ME, USA.

329. **L. Li**, “Developing a Multi-Faceted Mass Spectrometry Strategy for the Study of Pharmacokinetic Barriers and Stromal Cell Signaling in Pancreatic Cancer,” The 6th China Bioanalysis Forum Annual Conference, June 22-24, 2018, Wuhan, China.

328. **L. Li**, B. Chen, Q. Cao, C. OuYang, Y. Shi, G. Li, and C. Keller, “AP-MALDI-Quadrupole MS Platform for High Spatial and High Mass Spectral Resolution In Situ Analysis of Biomolecules,” The 5th China Ambient Ionization Mass Spectrometry Conference, April 27-29, 2018, Xi’an, China.

327. **L. Li**, D. Frost, X. Zhong, J. Johnson, L. Hao, Z. Chen, “Expanding the Chemical Toolbox for High-Throughput Quantitative Proteomics”. Invited Oral Presentation at the 7th World Chinese Mass Spectrometry Conference and 15th TSMS Annual Conference, July 18-20, 2018, Taipei, Taiwan.

326. **L. Li**, Z. Li, and C. OuYang, “Multifaceted Mass Spectrometric Investigation of Neuropeptidomic Changes in Decapod Crustaceans after Exposure to Silver Nanoparticles”. Invited Oral Presentation at the 256th ACS National Meeting, August 19-23, 2018, Boston, MA.

325. **Z. Tian**, Y. Feng, M. Li, and **L. Li**, “Separation, Characterization and Quantification of Fatty Acid Isomers with Epoxidation and Isobaric Multiplex Reagents for Carbonyl Containing Compound (SUGAR) Labeling”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

324. **J. Johnson**, W.J. Kao, M. Skala, K. Eliceiri, and **L. Li**, “Metabolite Conservation in Mass Spectrometry Imaging: Comparing Flash Frozen and Formalin Fixed Paraffin Embedded (FFPE) Pancreatic Cancer Spheroids”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

323. **Z. Li**, Y. Liu, and **L. Li**, “Mass spectrometric investigation of neuropeptide changes in blue crab *Callinectes sapidus* in exposure to silver nanoparticles”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

322. **Y. Shi**, Z. Li, B. Wang, X. Shi, L.-W. Guo, and **L. Li**, “MALDI MS Imaging of N-glycans and peptides from human FFPE aneurysmal and atherosclerotic tissue sections”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

321. C. Sauer, A. Buchberger, and **L. Li**, “Improving Coverage and Quantification of the Crustacean Neuropeptidome via Custom 4-plex Dimethylated Leucine (DiLeu) Isobaric Tags”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
320. A. Buchberger, N. Vu, and **L. Li**, “Improved Sample Preparation for Comparative MALDI-MS Imaging of Neuropeptides in the Crustacean Brain under Hypoxia and Hypercapnia Stress”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
319. J. Huang, J. Dong, X. Shi, Z. Chen, Y. Cui, X. Liu, M. Ye, and **L. Li**, “Enrichment and separation of phosphopeptides and mannose-6-phosphate glycopeptides by Ti(IV)-IMAC in a typical HILIC-mode elution”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
318. Q. Cao, Q. Yu, Y. Liu, Z. Chen, and **L. Li**, “Discovery of N-linked and O-linked Glycosylation in Neuropeptides in the Crustacean Nervous System”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
317. Q. Yu, X. Zhong, B. Chen, Y. Feng, C. Ikonomidou, and **L. Li**, “Discovery and Characterization of Leukemia Chemotherapy-Related Neurotoxicity Biomarkers in Cerebrospinal Fluid Using Two Orthogonal Proteomics Strategies”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
316. F. Ma, K. DeLaney, M. Glover, F. Liu, W. Xu, and **L. Li**, “Comprehensive evaluation of sample preparation protocols and multistep enrichment for extraction of N- and O- glycopeptides from breast cancer cells”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
315. C. Keller, J. Maeda, D. Jayaraman, M.R. Sussman, J. Harris, J.-M. Ane, and **L. Li**, “Comparison of Atmospheric Pressure and Vacuum MALDI Orbitrap Platforms for the Examination of Salt Stress in *Medicago truncatula* Root Nodules”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
314. M. Xu, J. Johnson, Y. Shi, X. Shi, A. Keikhosravi, K. Eliceiri, M. Skala, W.J. Kao, and **L. Li**, “Combining Enzymes to Increase Glycan Profiling in Human Pancreatic Cancer Tissues Using Mass Spectrometry Imaging”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
313. A. Buchberger, K. DeLaney, C. Sauer, K. Helfenbein, Y. Liu, N. Vu, and **L. Li**, “Characterization of Crustacean Neuropeptide Dynamics under Hypoxia Stress Using Mass Spectrometry”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
312. K. DeLaney and **L. Li**, “Capillary electrophoresis (CE) separation coupled to matrix-assisted laser desorption/ionization mass spectrometry imaging (MALDI MSI) for the enhanced detection of neuropeptides”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
311. X. Zhong, Q. Yu, F. Ma, D. Frost, L. Lu, Z. Chen, H. Zetterberg, C. Carlsson, O. Okonkwo, and **L. Li**, “A multiplexed absolute quantification strategy for candidate biomarker verification in preclinical Alzheimer’s disease”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
310. Y. Liu and **L. Li**, “Quantitative top-down analysis of crustacean hyperglycemic hormones (CHHs) and CHH precursor-related peptides in response to low pH stress”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
309. J. Zhu, Z. Chen, J. Zhang, M. An, J. Wu, M. Bern, I. Sen, B. Weatherly, S. J. Skilton, **L. Li**, and D. Lubman “Quantitative LC-ETHcD-MS/MS Determination of Intact N-glycopeptides in Serum Haptoglobin between Hepatocellular Carcinoma and Liver Cirrhosis”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.
308. Y. Cui, I. Dieterich, T. Rhoads, Z. Chen, R. Anderson, L. Puglielli, and **L. Li**, “Isobaric Labeling-based Quantitative Studies of Protein Expression and N-Glycosylation of AT-1 sTg Mouse Model Reveal Molecular

Basis of Aging”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

307. G. Li, and **L. Li**, “Ion Mobility MS (IM-MS) Investigation of Naturally-Occurring Chirality-driven Oligomerization and Recognition of Amyloid Beta Peptide”. Oral Presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

306. Y. Feng, B. Chen, D. Frost, Q. Yu, X. Zhong, M. Li, C. Ikonmidou, and **L. Li**, “Isobaric Multiplex Reagents for Carbonyl Containing Compound (SUGAR) High-Throughput Quantitative MS Analysis”. Poster presentation at the 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

305. P. Wei, Q. Yu, H. Sun, F. Ma, V. Bakshi, W. Sun, Z. Zheng, C. Zeng, and **L. Li**, “Development of a Novel Mass Spectrometry Approach for Comprehensive Neuropeptide Characterization and Its Application to Analysis of Human Pituitary Tumor”. 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

304. D. Frost, Y. Feng, and **L. Li**, “21-plex DiLeu Isobaric Tags for High-Throughput Quantitative Proteomics”. 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

303. M. Li, Y. Feng, and **L. Li**, “Amino Acid-based Mass Defect Chemical Tags for Glycomics Analysis”. 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

302. Z. Chen, Q. Yu, J. Johnson, R. Shipman, X. Zhong, J. Huang, S. Asthana, C. Carlsson, O. Okonkwo, and **L. Li**, “In-depth Site-Specific Analysis of Glycoproteome in Human Cerebrospinal Fluid (CSF) and Glycosylation Alterations in Alzheimer’s Disease (AD)”. 66th Conference on Mass Spectrometry and Allied Topics, June 2-7, 2018, San Diego, CA.

301. **L. Li**, “*In Vivo* Neurochemical Analysis in Crustacean and Mammalian Model Systems by Multi-faceted Mass Spectrometry-based Approaches” Invited Oral Presentation, Symposium on Recent Developments and Future Directions in Clinical Tissue Analysis: Towards *In Vivo* and Real-Time Diagnostics, PittCon 2018, Orlando, FL, February 25-March 1, 2018.

2017

300. K. DeLaney and **L. Li**, “Profiling Secreted Neuropeptides in the Stomatogastric Nervous System Using Mass Spectrometry,” Oral presentation at the 2017 STG Meeting, a satellite meeting to the SFN Annual Conference, Washington DC, November 10, 2017.

299. C. Keller, J. Bratburd, E. Vivas, F. Rey, C. Currie, and **L. Li**, “Mass Spectrometric Investigation of the Human Gut Microbiota’s Response to Infection as a Source for Novel Antibiotics,” Short talk and poster presentation at the 33rd Asilomar Conference on Mass Spectrometry, Impact of Metabolomics in Translational and Clinical Research, Asilomar Conference Center, Pacific Grove, CA, September 29-October 3, 2017.

298. Z. Chen, Q. Yu, L. Hao, F. Liu, J. Johnson, Z. Tian, W. Xu, and **L. Li**, “Site-Specific Characterization and Quantitation of N-glycoproteins in Breast Cancer Cells using DiLeu Isobaric Tags Enabled by Electron-Transfer/Higher-Energy Collision Dissociation (EThcD),” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.

297. F. Ma, P. Wei, J. Wang, V. Bakshi, B. Baldo, and **L. Li**, “Profiling Peptidomic Changes in Major Brain Regions in Response to Cocaine Intoxication and Withdrawal,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.

296. C. Sauer, A. Buchberger, K. DeLaney, and **L. Li**, “Multiplex Quantitation of Crustacean Neuropeptides after Hypoxia Exposure Using Custom 4-plex Dimethylated Leucine (DiLeu) Isobaric Tags,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.

295. Q. Cao, Q. Yu, B. Chen, C. OuYang, F. Ma, and **L. Li**, “Multifaceted Mass Spectrometric Analyses of Feeding-related Metabolomic and Peptidomic Changes in the Rock Crab, *Cancer irroratus*,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.

294. J. Johnson, A. Keikhosravi, C. Pearce, M. Huppert, K. Eliceiri, M. Skala, W.J. Kao, and **L. Li**, “Multi-Modal

- Imaging: Fusing Mass Spectrometry Imaging and Second Harmonic Generation to Understand Molecular Signatures and Collagen Alignment in Pancreatic Cancer,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
293. L. Hao, P. Wei, F. Liu, J. Johnson, A. Buchberger, W.J. Kao, W. Xu, and **L. Li**, “Metandem: A Novel Online Software Platform for Mass Spectrometry-based Isobaric Labeling Metabolomics,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
292. C. Keller, J. Bratburd, C. Currie, and **L. Li**, “Mass Spectrometric Investigation of the Human Gut Microbiota’s Response to Infection as a Source for Novel Antibiotics,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
291. Y. Shi, Z. Chen, Q. Yu, B. Wang, M. Glover, X. Shi, L.-W. Guo, C.K. Kent, and **L. Li**, “Large-scale Characterization and Quantitation of Citrullinated Proteins Involved in Restenosis by HCD Product Ion Triggered EThcD Mass Spectrometry,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
290. Z. Tian, Z. Chen, M. Glover, Q. Cao, and **L. Li**, “Large-scale Collision Cross section (CCS) Profiling of Endogenous Neuropeptides by Ion Mobility Mass Spectrometry,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
289. Y. Liu, A. Buchberger, K. DeLaney, and **L. Li**, “Functional Discovery of Neuropeptides in Blue Crab, *Callinectes sapidus*, in Response to Ocean Acidification,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
288. Q. Yu, B. Chen, Y. Feng, C. Ikonomidou, and **L. Li**, “Discovery and Characterization of Leukemia Chemotherapy-Related Neurotoxicity Biomarkers in Cerebrospinal Fluid via Mass Spectrometry-based Shotgun Proteomics,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
287. M.S. Glover, Q. Yu, Z. Chen, and **L. Li**, “Development of Combined Phosphoproteomic and Glycoproteomic Workflows Using EThcD Fragmentation,” Oral presentation, 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
286. S. Thomas, L. Hao, D. Frost, P. Marker, W. Ricke, and **L. Li**, “A Proteomic Fingerprint of Hormone-Induced Lower Urinary Tract Dysfunction in Mice,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
285. B. Chen, C. OuYang, Z. Tian, M. Xu, and **L. Li**, “A High Resolution Atmospheric Pressure MALDI-Quadrupole-Orbitrap Platform Enables *In Situ* Analysis of Biomolecules by Multi-Mode Ionization and Acquisition,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
284. P. Wei, L. Hao, F. Ma, Q. Yu, A. Buchberger, S. Lee, W. Bushman, and **L. Li**, “Urinary Metabolomics and Proteomics Analysis of an *E. Coli*-Induced Prostatic Inflammation Mouse Model via Isobaric DiLeu Tagging and Label-free Methods,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
283. X. Zhong, L. Hao, J. Johnson, D. Frost, A. Buchberger, J. Kao, and **L. Li**, “Quantitative Multi-omics Characterization of Gemcitabine-Induced Apoptosis and Resistance in Human Pancreatic Cancer Cells,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
282. X. Pang, Z. Tian, D. Page, and **L. Li**, “Peptide Collision Cross Section Predictor: Rapid Correlation of Ion Mobility Mass Spectrometry Signal with Analyte Structures via Machine Learning,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
281. Y. Cui, Q. Yu, and **L. Li**, “Optimization of Multi-Notch MS3 Technique for Accurate Quantification with Dimethyl Amino Acid-based Isobaric Tags,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
280. Y. Feng, B. Chen, Q. Yu, X. Zhong, and **L. Li**, “Novel 4-plex Isobaric Aldehyde Reactive N,N-Dimethyl Leucine Derivative Tags for Quantitative Glycomics Analysis,” 65th Conference on Mass Spectrometry and

Allied Topics, June 3-8, 2017, Indianapolis, IN.

279. Q. Yu, A. Canales, M. Glover, R. Das, X. Shi, Y. Liu, M.P. Keller, A.D. Attie, and **L. Li**, “Discovery and Identification of O-Glycosylated Signaling Peptides from Mouse and Human Pancreatic Islets Enabled by EThcD Mass Spectrometry”, 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
278. K. DeLaney and **L. Li**, “Multifaceted Quantitation and Imaging of Changes in Crustacean Neuropeptidome Resulting from Food Intake,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
277. A. Buchberger, and **L. Li**, “*In Situ* Labeling for the Absolute Quantitation of Crustacean Neuropeptides with Mass Spectrometric Imaging,” 65th Conference on Mass Spectrometry and Allied Topics, June 3-8, 2017, Indianapolis, IN.
276. **L. Li**, Z. Zhang, S. Jiang, and Z. Liang, “Coupling Micro-separation Techniques to Mass Spectrometry Imaging for Enhanced Analysis of Neuropeptides,” Invited Keynote Presentation, Session D: Chromatography, the 17th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA), Beijing, October 9, 2017.
275. **L. Li**, “Developing Novel Chemical Tags for Quantitative Multi-omics Studies,” Invited Plenary Talk, The 3rd Chinese Chemical Society Conference on Chinese Mass Spectrometry Analysis, Xiamen, China, December 9-11, 2017
274. **L. Li**, “Advancing Neuroscience Research via Development and Application of a Multi-faceted Mass Spectrometry-based Analytical Platform,” Invited Plenary Presentation at the Hong Kong Society for Mass Spectrometry (HKSMS) Symposium 2017, Hong Kong Polytechnic University, Hunghom, June 24, 2017.
273. **L. Li**, B. Chen, C. OuYang, Y. Shi, E. Gemperline, and Y. Liu, “Painting Molecular Pictures of Biological Systems via Mass Spectrometric Imaging,” Invited talk at the IUPAC International Congress on Analytical Sciences 2017 (ICAS 2017), Haikou City, China, May 5-8, 2017.
272. **L. Li**, Q. Yu, D. Frost, L. Hao, X. Zhong, T. Greer, “Advancing High-Throughput Proteomics and Metabolomics via Development of Multiplexed Isobaric Tags,” Invited talk at the 43rd DICP Symposium on Bioanalytical Methods, Techniques, and Applications, Dalian, China, April 25-27, 2017.
271. **L. Li**, C. OuYang, C. Schmerberg, Z. Liang, B. Chen, A. Buchberger, D. Frost, K. DeLaney, “Deciphering Neuropeptide Signaling via Mass Spectrometry-based Peptidomic Approaches: From Discovery to Function,” Invited Oral Presentation at the Royal Society Meeting on Evolution and Functional Biology of Neuropeptide Signaling: From Genomes to Behavior, Session 4 on New Perspectives, Techniques and Applications in Neuropeptide Research, Kavli Royal Society Centre, Buckinghamshire, UK, March 13-14, 2017.
270. **L. Li**, C. Jia, C. Lietz, Q. Yu, R. Sturm, and M. Glover, “Enabling Large-Scale Discovery, Characterization and Quantitation of Neuropeptides via Tandem MS Fragmentation Techniques,” Invited Oral Presentation, Symposium on Measurements in the Brain: From the Synapse to Thought, PittCon 2017, Chicago, IL, March 8, 2017.
269. **L. Li**, C. OuYang, F. Ma, Z. Liang, B. Chen, Q. Yu, J. Wang, and C. Jia, “Deciphering Neuropeptide Signaling via Mass Spectrometry-based Peptidomic Approaches: From Discovery to Function,” Invited Oral Presentation, The Ralph Adam Award Symposium Honoring Robert T. Kennedy, PittCon 2017, Chicago, IL, March 8, 2017.
268. F. Ma, P. Wei, J. Wang, V. Bakshi, B. Baldo, and **L. Li**, “Alteration of Brain Region-Resolved Peptidome in Response to Cocaine Intoxication and Withdrawal,” Short talk and poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
267. C. Keller, E. Gemperline, A. Eisold, J. Maeda, D. Jayaraman, M.S. Sussman, J.-M. Ane, and **L. Li**, “Optimization of LC-MS and MALDI-MSI Techniques for the Identification and Characterization of Peptides in *Medicago truncatula*,” Poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
266. K. DeLaney, and **L. Li**, “Mass Spectrometric Quantitation and Imaging of Neuropeptide Expression Levels in

- Crustacean Tissue and Circulating Fluid Resulting from Food Intake,” Short talk and poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
265. Q. Yu, A. Canales, M.S. Glover, R. Das, Y. Liu, M.P. Keller, A.D. Attie, and **L. Li**, “Discovery and Identification of O-Glycosylated Signaling Peptides from Mouse Pancreatic Islets,” Short talk and poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
264. Y. Liu, A. Buchberger, and **L. Li**, “Multifaceted Mass Spectrometric Investigation of Neuropeptide Changes in Blue Crab, *Callinectes sapidus*, in Response to Ocean Acidification,” Poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
263. A. Buchberger, K. DeLaney, Y. Liu, K. Helfenbein, and **L. Li**, “Qualitative and Quantitative Analysis of Crustacean Neuropeptides after Hypoxia Exposure,” Short talk and poster presentation, 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.
262. **L. Li**, K. DeLaney, F. Ma, A. Buchberger, Y. Liu, C. OuYang, Z. Liang, C. Schmerberg, Q. Yu, H. Ye, and J. Wang, “Multi-Faceted MS Approach for Functional Discovery of Neuropeptides,” Invited talk, Oral Session on Unique Challenges for Measurements of Endogenous Peptides: Sequence Analysis, Peptide Stability and Discovery. 29th ASMS Sanibel Conference On Peptidomics, Clearwater Beach, FL, January 19-22, 2017.

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261. **L. Li**, C. Jia, Q. Yu, C. Lietz, R. Sturm, and M. Glover, “Enabling Large-Scale Discovery, Characterization and Quantitation of Neuropeptides via Multiple Tandem Mass Spectrometry Fragmentation Techniques,” Invited Speaker, The 2016 Chinese Bioanalysis Conference by Chinese Chemical Society, Nanjing, China, December 16-19, 2016.
260. **L. Li**, C. Jia, C. Lietz, Q. Yu, R. Sturm, and M. Glover, “Enabling Large-Scale Discovery, Characterization and Quantitation of Neuropeptides via Tandem Mass Spectrometry,” Invited Speaker, The Endogenous Peptide Session at The 29th Annual Tandem Mass Spectrometry Workshop, Fairmont Chateau Lake Louise, Alberta, Canada, December 1, 2016.
259. **L. Li**, C. OuYang, B. Chen, E. Gemperline, Y. Shi, and B. Wang, “MALDI Mass Spectrometric Imaging (MSI) of Endogenous Signaling Molecules in Biological Systems,” Invited Plenary Speaker, AIMS 2016, The 4th China Ambient Ionization Mass Spectrometry Conference, Guangzhou, China, November 11-12, 2016.
258. **L. Li**, C. Jia, C. Lietz, Q. Yu, R. Sturm, X. Pang, and M. Glover, “Advancing Neuropeptidomic Research via Novel Application of Ion Mobility Mass Spectrometry (IM-MS),” Invited Keynote Speaker, The 2nd International Conference on “Innovations in Mass Spectrometry: Instrumentation and Methods”, Moscow, November 7-11, 2016.
257. **L. Li**, D. Frost, T. Greer, Q. Yu, A. Buchberger, F. Xiang and Z. Liang, “Development and Application of Novel Chemical Tags for Multiplexed Quantitative Proteomics and Peptidomics by Mass Spectrometry,” Invited Keynote Speaker, The 2nd International Conference on “Innovations in Mass Spectrometry: Instrumentation and Methods”, Moscow, November 7-11, 2016.
256. **L. Li**, C. OuYang, B. Chen, E. Gemperline, Y. Shi, and B. Wang, “MALDI Mass Spectrometric Imaging (MSI) of Endogenous Signaling Molecules in Biological Systems,” Invited talk, at the Symposium on Advances in Biological Imaging, Division of Physical Chemistry, ACS 252nd National Meeting, Philadelphia, PA, August 22, 2016.
255. **L. Li**, “Multi-faceted Approach for Functional Discovery of Neuropeptides,” Invited Keynote Speaker, Symposium on Neuropeptidomics: From mass spectrometry to discovery, RegPep 2016 Conference, Rouen-Normandy, France, July 11-15, 2016.
254. **L. Li**, “Probing the Spatial and Temporal Dynamics of Signaling Peptides in the Nervous Systems by a Multi-faceted MS Approach,” Invited Speaker, Symposium on Overcoming the Obstacles to Making Measurements in the Brain, PittCon 2016, Atlanta, GA, March 6-10, 2016.
253. L. Hao, J. Johnson, C. Lietz, W.J. Kao, and **L. Li**, “Mass Defect-based N,N-Dimethyl Leucine (DiLeu) Labels for Quantitative Proteomics and Amine Metabolomics of Pancreatic Cancer Cells, Poster presentation, 64th

- Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
252. P. Wei, L. Hao, J. Wang, X. Zhong, and **L. Li**, “Custom Isotopic N,N-Dimethyl Leucine (iDiLeu) Reagents Enable Absolute Quantification of Amine-Containing Metabolites and Its Application to Human Cerebrospinal Fluids. 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 251. Q. Yu, Y. Feng, and **L. Li**, “Dimethylated Alanine (DiAla)-assisted Large-scale Protein Phosphorylation Stoichiometry Characterization. 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 250. Y. Feng, Q. Yu, and **L. Li**, “Electron-Transfer/Higher-Energy Collision Dissociation (EThcD) Improves Spectral Quality while Retaining Quantitation Accuracy in Isobaric Tag-based Quantitative Proteomic Studies. Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 249. C. Keller, E. Gemperline, J. Maeda, D. Jayaraman, M.R. Sussman, J.-M. Ane, and **L. Li**, “MALDI-Mass Spectrometric Imaging of Endogenous Peptides and Proteins in *Medicago truncatula*,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 248. C. OuYang, B. Chen, and **L. Li**, “Method Development on a MALDI Orbitrap Platform to Achieve High Throughput *In Situ* DDA Analysis via Multiplex Mass Spectrometric Imaging,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 247. Y. Liu, A. Buchberger, and **L. Li**, “Multifaceted Mass Spectrometric Investigation of Neuropeptide Changes in Blue Crab, *Callinectes sapidus*, in Response to Ocean Acidification,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 246. X. Pang, C. Jia, M. Baird, Z. Chen, A. Shvartsburg, and **L. Li**, “Structural Characterization of Monomers and Oligomers of D-Amino Acid Containing Peptides Using Linear and Nonlinear Ion Mobility Separations,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 245. Z. Chen, X. Zhong, T. Cai, Y. Shi, X. Zhang, and **L. Li**, “Hydrophilic Interaction Liquid Chromatography-Mass Spectrometric Imaging Platform for N-Glycan Relative Quantitation Using Stable-Isotope Labeled Hydrazide Reagents,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 244. F. Ma, C. Lietz, S. Sackett, D. Tremmel, J. Odorico, and **L. Li**, “In Depth Quantification of Extracellular Matrix Proteins from Human Pancreas for Tissue Engineering,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 243. K. DeLaney, A. Buchberger, Y. Liu, and **L. Li**, “Mass Spectrometric Quantitation and Imaging of Changes in Crustacean Neuropeptide Expression Levels Resulting from Hypoxia Stress,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 242. Y. Shi, B. Wang, X. Shi, L.-W. Guo, K.C. Kent, and **L. Li**, “Mass Spectrometry-based Metabolomics for Biomarker Discovery after Angioplasty,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 241. J. Johnson, F. Ma, W.J. Kao, and **L. Li**, “Microinjection and High-Throughput Alignment of Cellular Spheroids for MALDI Mass Spectrometry Imaging Analysis,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 240. Q. Cao, C. OuYang, X. Zhong, and **L. Li**, “Profiling and Quantitative Analysis of Small Molecule Metabolites and Neurotransmitters in Crustacean Hemolymph/Neuronal Tissues Using Reversed-Phase and Mix-Mode LC-MS/MS,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 239. M. Glover, Q. Yu, B. Wang, X. Shi, L.-W. Guo, K.C. Kent, and **L. Li**, “Quantitative Cardiovascular Proteomics of Injured Arterial Tissue by DiLeu Isobaric Labeling: Toward Novel Therapeutic Targets for Restenosis,” Poster presentation, 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
 238. B. Chen, X. Zhong, S. Snowida, J. Rogers, and **L. Li**, “Relative Quantification of Glycans Using Multiplexed

Carbonyl-Reactive Tandem Mass Tags and MultiNotch MS³,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.

237. A. Buchberger, D. Frost, and **L. Li**, “Development of Dimethyl Pyrimidinyl Ornithines (DiPyrO) as Mass Defect-based Tags for Quantitative Proteomics,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.
236. X. Zhong, C. Lietz, X. Shi, K. C. Kent, and **L. Li**, “12-plex DiLeu Enabled Quantitative Phosphoproteomics Profiling of Vascular Smooth Muscle Cells,” 64th Conference on Mass Spectrometry and Allied Topics, June 5-9, 2016, San Antonio, TX.

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235. **L. Li**, C. Jia, C. Lietz, Q. Yu, and R. Sturm, “Advancing Neuropeptidomic Research via Novel Application of Ion Mobility Mass Spectrometry (IM-MS),” Invited talk, Oral session on Advances in Analytical Ion Mobility Separations, Pacificchem Meeting 2015, Honolulu, HI, Dec 15-20, 2015.
234. S. Thomas, L. Hao, T. Greer, C.M. Vezina, S. Bajpai, A. Ashok. C. Bieberich, W.A. Ricke, and **L. Li**, “The Urine Proteomes of Genetically-induced Lower Urinary Tract Dysfunction Mice,” Poster presentation, Society for Basic Urologic Research (SBUR) 2015 Fall Symposium, November 12-15, 2015, Fort Lauderdale, FL.
233. **L. Li**, C. OuYang, Z. Liang, and S. Jiang, “Probing the Spatial and Temporal Dynamics of Signaling Peptides and Neurotransmitters in the Nervous Systems by a Multi-faceted MS Approach,” Invited talk, International Symposium on *In Vivo* Analysis, Chinese Academy of Sciences Institute of Chemistry, Beijing, China, October 25-26, 2015.
232. **L. Li**, D. Frost, T. Greer, Q. Yu, A. Buchberger, F. Xiang, and Z. Liang, “Development and Application of Novel Chemical Labels for Highly Multiplexed Quantitative Proteomics and Peptidomics by Mass Spectrometry,” Invited Keynote Presentation, the 16th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA) and the 5th World Chinese Mass Spectrometry Conference, Beijing, China, October 29, 2015
231. **L. Li**, X. Zhong, S. Jiang, and Z. Zhang, “Coupling CE with MALDI Imaging MS and ESI MS for Enhanced Analysis of Signaling Molecules,” Invited talk, Symposium on “Coupling Capillary Electrophoresis with Mass Spectrometry”, SciX2015 Conference, Providence, Rhode Island, September 27-October 2, 2015.
230. **L. Li**, C. OuYang, Z. Liang, C. Schmerberg, J. Wang, and C. Jia, “Comparative Peptidomic Analysis Towards Functional Discovery of Neuropeptides,” Invited talk, ANACHEM Award Symposium Honoring Jonathan V. Sweedler, SciX2015 Conference, Providence, Rhode Island, September 27-October 2, 2015.
229. **L. Li**, “Development and Application of MS-based Strategies for Qualitative and Quantitative Analysis of Protein and Peptide PTMs,” Invited Speaker, 2015 Wisconsin Human Proteomics Symposium, BioPharmaceutical Technology Center, Madison, WI, August 7, 2015.
228. **L. Li**, C. Jia, C. Lietz, Q. Yu, and R. Sturm, “Enabling Large-Scale Discovery, Characterization and Quantitation of Neuropeptides via Tandem Mass Spectrometry,” Invited Speaker, Symposium on “Advances in Analytical Mass Spectrometry”, ACS Fall National Meeting, Boston, MA, August 16-20, 2015.
227. X. Zhong, Z. Chen, S. Snovida, Y. Liu, J.C. Rogers, and **L. Li**, “Quantitative Analysis of Glycans Labeled with Multiplex Carbonyl-Reactive Tandem Mass Tags Using Capillary Electrophoresis-Electrospray Ionization Mass Spectrometry,” Poster presentation, 2015 Wisconsin Human Proteomics Symposium, BioPharmaceutical Technology Center, Madison, WI, August 7, 2015.
226. X. Pang, C. Lietz, and **L. Li**, “Structural Analysis of Monomeric and Dimeric Neuropeptide Y (NPY) with IM-MS, HDX MS, and MD Simulations,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
225. Z. Chen, C. Lietz, and **L. Li**, “Evidence for Differential Structural Preference of the Leu7Pro Mutant Neuropeptide Y Signal Peptide Probed by Ion Mobility-Mass Spectrometry”, Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
224. C. OuYang, B. Chen, and **L. Li**, “Enhancing *In Situ* Biomolecule Identification by Novel Combination of

- Multiplexed Mass Spectrometric Imaging with DDA on a MALDI Orbitrap Platform,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
223. X. Zhong, Q. Yu, J. Wang, T. Greer, O. Okonkwo, and **L. Li**, “Novel iDiLei Labeling Coupled with High-resolution Mass Spectrometry for Absolute Quantification of Candidate Biomarkers in Preclinical Alzheimer’s Disease,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
222. F. Ma, J. Wang, and **L. Li**, “An Integrated and High Throughput Approach for *In Situ* Protein Digestion, Peptide Imaging and Sequence Verification,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
221. S. Jiang, Z. Liang, and **L. Li**, “Identification of Metabolites in Crustacean Hemolymph via *In Vivo* Microdialysis by Capillary Electrophoresis-Matrix-assisted Laser Desorption/Ionization Mass Spectrometric Imaging Platform,” Oral presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
220. A. Buchberger, and **L. Li**, “Multifaceted Mass Spectrometric Profiling of Neuropeptides in *Callinectes sapidus* during Hypoxia,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
219. C. OuYang, Q. Cao, and **L. Li**, “A Hybrid MSI Method Combining MALDI and NIMS for Small Molecule Discovery and Identification in Crustacean Brain Tissue,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
218. **L. Li**, “Developing Mass Spectrometry-based Molecular Imaging and Proteomics Strategies for the Studies of Neurological Diseases,” Invited talk, US HUPO 2015 Conference, March 15-18, Tempe, AZ.
217. J. Wang, H. Ye, R. Selleck, F. Ma, B. Baldo, and **L. Li**, “Mass Spectrometric Investigation of Neuropeptidomic Alteration in Food Intake,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
216. Z. Liang and **L. Li**, “Mass Spectral Measurement of Feeding-Related Neuropeptide Secretion in Crustacean via *In Vivo* Microdialysis,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
215. X. Zhong, C. Ouyang, L. Hao, and **L. Li**, “Metabolomic Profiling of Crustacean Neuroendocrine Tissues and Hemolymph by Capillary Electrophoresis-Electrospray Ionization-Mass Spectrometry,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
214. B. Chen, X. Zhong, C. Lietz, and **L. Li**, “High Resolution and Accurate Mass (HRAM) Characterization of Multiply Charged Proteins by Newly Developed Ionization Techniques on CE-LSI/MAIV-LTQ-Orbitrap Platform,” Oral presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
213. Q. Yu, T. Greer, and **L. Li**, “Hyperplex Amino Acid-based Isobaric Labels for Quantitative Proteomics,” Oral presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
212. E. Gemperline, H. Horn, C. Currie, and **L. Li**, “Surface MALDI-MS Imaging for the Discovery of Natural Products from Fungus-Growing Ants,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
211. L. Hao, T. Greer, X. Zhong, D. Page, S. Lee, C. Vezina, W. Ricke, P. Marker, D. Bjorling, W. Bushman, and **L. Li**, “Combining DiLeu Isobaric Labeling and Label-free Approaches for Metabolite Quantification and Biomarker Discovery of Lower Urinary Tract Symptoms (LUTS),” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
210. C.B. Lietz, D. Tilley, C. Kelley, R. Vallejo, B. Rasmin, D. Cedeno, and **L. Li**, “The Dynamic Phosphoproteome of Peripheral Nerve Injury and Chronic Pain,” Poster presentation, May 31-June 4, 63rd Conference on Mass Spectrometry and Allied Topics, St. Louis, MO.
209. **L. Li**, C. Ouyang, Z. Zhang, B. Chen, and S. Jiang, “Mass Spectrometry-based Comparative Peptidomic

Analysis towards Functional Discovery of Neuropeptides,” Invited talk at the Symposium on “Advances in Analytical Technology for Understanding the Central Nervous System” at 2015 PittCon, March 11, 2015, New Orleans, LA.

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208. **L. Li**, “Developing Mass Spectrometry-based Molecular Imaging and Proteomics Strategies for the Studies of Neurological Diseases,” The 3rd China Workshop and Symposium on Computational Proteomics, November 12-13, 2014, Beijing, China.
207. **T. Greer**, L. Hao, A. Nechyporenko, D. Frost, C. Vezina, W. Ricke, P. Marker, D. Bjorling, W. Bushman, and **L. Li**, “Identification of Candidate Biomarkers from Lower Urinary Tract Symptoms (LUTS) in Mouse Models and Human Patients,” LUTS Symposium 2014, Madison, WI.
206. **L. Li**, H. Ye, R. Chen, C. Ouyang, B. Chen, Z. Zhang, and S. Jiang, “In Situ Mass Spectrometric Imaging and Profiling of Peptides and Proteins for Their Spatial Distributions in Biological Tissues,” Ambient Ionization Mass Spectrometry Conference 2014, Zhang Jiajie, Hunan, China, April 2014.
205. **L. Li**, “Decoding Neurochemical Communication via Mass Spectrometry-based Peptidomic Approaches: From Discovery to Function”, Biemann Medal Award Plenary Lecture, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
204. **L. Li**, Z. Liang, C. Schmerberg, “Towards Functional Analysis of Neuropeptides via *In Vivo* Microdialysis Coupled with Mass Spectrometry,” Invited Oral Presentation, Symposium on *In vivo* neuropeptide measurements: developments and applications, 15th International Conference on Monitoring Molecules in Neuroscience, August 3-7, 2014, Los Angeles, CA
203. **L. Li**, “Decoding the Neurochemical Communication via Mass Spectrometry-Based Peptidomic Approaches: From Discovery to Function,” Invited Oral Presentation, 5th Asian Oceania Mass Spectrometry Conference (AOMSC) and the 33rd Chinese Society for Mass Spectrometry Annual Conference, July 16-19, 2014, Peking University, Beijing, China
202. **C. Jia**, Q. Yu, C. Lietz, and **L. Li**, “A Site-Specific Strategy for Localization of D-Amino Acids in Bioactive Peptides,” Oral presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
201. **B. Chen**, C. Lietz, A. Van, and **L. Li**, “High Resolution and High Mass Accuracy Multiply Charged MALDI Technique for *in situ* Protein Characterization - Sequencing, Identification and Visualization,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
200. **C. Yang**, K. Katsumura, E. Bresnick, and **L. Li**, “High performance mass spectrometry revealing phosphorylation-dependent regulation of GATA-2 function”, Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
199. **D. Frost**, T. Greer, and **L. Li**, “High-Resolution Enabled 12-plex DiLeu Isobaric Labels for Quantitative Proteomics,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
198. **T. Greer**, A. Nechyporenko, L. Hao, C. Vezina, W. Ricke, P. Marker, D. Bjorling, W. Bushman, and **L. Li**, “Identification and Comparison of Protein Candidate Biomarkers from Lower Urinary Tract Symptoms (LUTS) in Mouse Models and Human Patients,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
197. **L. Hao**, T. Greer, C. Vezina, W. Ricke, P. Marker, D. Bjorling, W. Bushman, and **L. Li**, “Identification of potential metabolite biomarkers of lower urinary tract symptoms (LUTS) in mouse and human urines,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
196. **C. Ouyang**, B. Chen, A. Kim, and L. Li, “In-Depth Characterization of the Neuropeptidome in Crustacean Stomatogastric Nervous System by Imaging Mass Spectrometry on an Orbitrap Platform,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD

195. S. Jiang, Z. Zhang, and **L. Li**, “Integration and application of separation strategies to multiplex imaging mass spectrometry for complex neuropeptide analysis,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
194. C. Lietz, Q. Yu, X. Pang, and **L. Li**, “Large-scale structural analysis of proteolytic peptides with C-terminal and N-terminal lysine residues,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
193. Q. Yu, K. Branchfield, C. Lietz, J. Wang, X. Sun and **L. Li**, “Mass Spectrometric Characterization of the Neuropeptidome in the Mouse Lung,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
192. Z. Liang, C. Schmerberg, and **L. Li**, “Mass spectral investigation of circadian rhythm-related neuropeptide secretion in crustacean via *in vivo* microdialysis,” Oral presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
191. E. Gemperline, J. Maeda, M. Venkateshwaran, J. Ané, and **L. Li**, “Multifaceted Investigation of Metabolites During Nitrogen Fixation in the *Medicago truncatula*-*Sinorhizobium meliloti* Symbiosis via High Resolution MALDI-MS Imaging and ESI-MS,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
190. J. Wang, O. Okonkwo, and **L. Li**, “Probing the role of APOE in global proteomic changes of cerebrospinal fluid in preclinical Alzheimer's disease,” Poster presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
189. X. Zhong, Y. Liu, S. Snovida, J. Rogers, and **L. Li**, “Relative quantification of glycans using multiplexed carbonyl-reactive tandem mass tags and CE-ESI-MS,” Oral presentation, June 17, 2014, 62nd Conference on Mass Spectrometry and Allied Topics, Baltimore, MD
188. **L. Li**, “Developing Improved MS “Sensor” Technology to Monitor Neuronal Signaling,” Invited talk at the Gordon Research Conference on Bioanalytical Sensors, Twenty First Century Technologies for Probing Biological Systems, June 22-27, 2014, Salve Regina University, Newport, RI
187. **L. Li**, C. Ouyang, B. Chen, H. Ye, E. Gemperline, Z. Zhang, and S. Jiang, “MALDI Mass Spectral Imaging and Profiling of Signaling Molecules in Biological Tissues,” Invited talk at the Symposium on “Imaging Mass Spectrometry of Biological Tissues and Cell Cultures” at 2014 PittCon, March 2-6, 2014, Chicago, IL.
186. **L. Li**, J. Wang, R. Cunningham, and D. Frost, “Developing Mass Spectrometry-based Quantitative Proteomics and Peptidomics Strategies for Biomarker Discovery in Neurodegenerative Diseases,” Invited talk at the Symposium on “Novel Approaches in Quantitative Analysis of Biomarkers in Drug Discovery and Development” at 2014 PittCon, March 2-6, 2014, Chicago, IL.
185. B. Chen, C. B. Lietz, C. Ouyang, and **L. Li**, “*In Situ* Protein Identification and Visualization Using Multiply Charged MALDI Mass Spectrometric Imaging,” Oral presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.
184. C. B. Lietz, L. Hao, T.J. Greer, D. Frost, Z. Liang, R. Cunningham, J. Rogers, and **L. Li**, “N,N-Dimethyl Leucine Tags for *De Novo* Peptide Sequencing: Neutron-encoding and Fragmentation Dynamics,” Oral presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.
183. D. Frost, T.J. Greer, and **L. Li**, “High-Resolution Enabled 10-plex DiLeu Isobaric Tagging Reagents for Mass Spectrometry-based Relative Quantitation,” Poster presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.
182. T. Greer, F. Xiang, N. Woodards, and **L. Li**, “Standard Curve Generation in MALDI and LC-MS Analyses by Isotopic N,N-Dimethylated Leucine (iDiLeu) Reagents for Absolute Quantitation of Peptides,” Oral presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.
181. C. Yang, D. Ma, X. Shi, C. K. Kent, and **L. Li**, “Comparative Proteomic Analysis of Secretome in Vascular Smooth Muscle Cells by Label-free Quantitation via Data-Independent Acquisition (DIA) Mass Spectrometry,” Oral presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.
180. X. Zhong, C. Ouyang, L. Hao, and **L. Li**, “Metabolomic and Peptidomic Profiling of Crustacean

Neuroendocrine Tissues by Capillary Electrophoresis-Electrospray Ionization-Mass Spectrometry,” Oral presentation, 2014 PittCon, March 2-6, 2014, Chicago, IL.

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179. T. Greer, L. Hao, A. Nechyporenko, C. Vezina, W. Ricke, P. Marker, D. Bjorling, W. Bushman, and L. Li, “Identification of Protein and Metabolite Biomarkers from Prostatic Inflammation and Hormone Obstruction Induced Lower Urinary Tract Symptoms (LUTS) in Two Mouse Models,” Poster presentation, The 10th World Congress on Urologic Research / Society for Basic Urologic Research Fall Symposium, November 21-24, 2013. Nashville, TN.
- 178a. A. Herbst, R. Cunningham, D. McKenzie, L. Li, and J. Aiken, “Proteomic and Transcriptomic Analysis of Rats Clinically Affected with Scrapie,” Prion 2013
178. J. Wang, R. Cunningham, O. Okonkwo, and L. Li, “Label Free Quantitative Comparison of Cerebrospinal Fluid Glycoproteins in Subjects with Alzheimer’s Disease, Mild Cognitive Impairment and Healthy Individuals,” Society for Neuroscience Annual Meeting 2013, Nov. 9-13, 2013, San Diego, CA. (Poster presentation)
177. Z. Liang, C. Schmerberg, and L. Li, “Mass Spectral Characterization of Circadian Rhythm-related Neuropeptide Secretion During Light-Dark Cycle in Crustacean via *In Vivo* Microdialysis,” Society for Neuroscience Annual Meeting 2013, Nov. 9-13, 2013, San Diego, CA. (Poster presentation)
176. Jingxin Wang, H. Ye, and L. Li, “Defining the Neuropeptidome of the Spiny Lobster *Panulirus interruptus* Brain Using a Multi-Dimensional Mass Spectrometry-Based Platform,” Stomatogastric Ganglion (STG) Satellite Meeting 2013, Nov. 8, 2013, San Diego, CA. (Oral presentation)
175. Z. Liang, C. Schmerberg, and L. Li, “MS Analysis of Circadian Rhythm-related Neuropeptide Secretion During Light-Dark Cycle in Crustacean via *In Vivo* Microdialysis,” Stomatogastric Ganglion (STG) Satellite Meeting 2013, Nov. 8, 2013, San Diego, CA. (Oral presentation)
174. K.R. Katsumura, C. Yang, J. Zhang, L. Li, K. Johnson, and E.H. Bresnick, “Mechanistic Deficits of a Leukemogenic GATA-2 Mutant,” 2013 American Society of Hematology Meeting, December 7-10, New Orleans, LA.
173. L. Li, J. Wang, H. Ye, R. Cunningham, and D. Frost, “Developing Mass Spectrometry-Based Molecular Imaging and Proteomics Strategies for the Studies of Neurological Diseases,” Invited oral presentation, 2013 Wisconsin Human Proteomics Symposium, Targeted Proteomics and Systems Biology in Health and Disease, August 1, 2013, Madison, WI
172. C. B. Lietz, C. Jia, and L. Li, “Global Peptide Collision Cross-Section Profiling on a Traveling Wave Ion Mobility Spectrometer,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
171. J. Wang, L. Li, and Z.-P. Zhang, “Extraction and Quantitation of Biomarkers from Human Plasma in the Low Nanogram Range with a Rapid and Economical Method,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
170. T. Greer, D. Frost, F. Xiang, Z. Liang, and L. Li, “Development of Novel 8-Plex N,N-dimethylated Leucine (DiLeu) Isobaric Labels for Quantitative Proteomics and Peptidomics,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
169. E. Gemperline, H. Ye, M. Venkateshwaran, J.-M. Ane, and L. Li, “Matrix Application Method Optimization for MALDI-MS Imaging (MSI) of Metabolites during Nitrogen Fixation in the *Medicago truncatula* – *Sinorhizobium meliloti* Symbiosis,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
168. C. Ouyang, H. Ye, G. Chang, and L. Li, “The Investigation of Neuropeptides in Crustacean to Reveal the Neurotoxicity of Nanoparticles by MALDI-MS,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
167. L. Hao, H. Ye, X. Zhong, T. Greer, D. Frost, Z. Liang, and L. Li, “A Novel Strategy for Quantification of Primary Amine-Containing Metabolites Using N,N-Dimethyl Leucine Reagents via Capillary Electrophoresis-

- Electrospray Ionization-Mass Spectrometry,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
166. X. Zhong, H. Ye, J. Lu, S-C. Zhang, and **L. Li**, “Quantitative Analysis of Small Molecule Neurotransmitters Secreted by hEPCs Derived Serotonergic Neurons via Capillary Electrophoresis-Electrospray Ionization-Multiple Reaction Monitoring,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 165. B. Chen, H. Ye, M. Gautam, J. Wang, R. Thorne, and **L. Li**, “Mapping the Distribution of Intranasally Administered Oxytocin (OXT) in Rat Brain Using MALDI Imaging Mass Spectrometry,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 164. K. Hayes, C. Schmerberg, and **L. Li**, “Data Independent Acquisition and Quantitation of Isotopically Labeled Neuropeptides in Low Temperature Stressed *Cancer irroratus*,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 163. S. Jiang, Z. Zhang, and **L. Li**, “Preparation and Application of Monolithic Columns with Immobilized Antibodies for Affinity Chromatography Coupled to MS Detection of Neuropeptides,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 162. C. Jia, Z. Wu, C. Lietz, Z. Liang, Q. Cui and L. Li, “Gas-phase Fragment Ion Isomer Analysis Reveals the Mechanism of Peptide Sequence Scrambling,” Oral presentation at the 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 161. Z. Liang, C. Schmerberg, and **L. Li**, “Mass Spectral Characterization of the Neuropeptidome of the Crayfish *Orconectes rusticus*,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 160. Q. Yu, C. Jia, and **L. Li**, “Mass Spectrometric Characterization of the Neuropeptidome in the Dungeness Crab (*Cancer magister*),” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 159. C. Yang, D. Ma, X. Shi, K.C. Kent, and **L. Li**, “Characterization of the Secretome of Vascular Smooth Muscle Cells in Response to TGF- β /Smad 3 by Label-free MS^E Quantitation,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 158. Y. Liu, X. Zhong, S. Snovida, J.C. Rogers, and **L. Li**, “MALDI and ESI MS-based Quantitative Analysis of N-linked Glycans Using Carbonyl-Reactive Tandem Mass Tags,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 157. D. Frost, J. Wang, R. Cunningham, C. Carlsson, and **L. Li**, “Application of DiLeu Isobaric Tandem-Mass Tags to Quantitative Proteomic Analyses of Cerebrospinal Fluid from Alzheimer’s Disease Patients,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 156. C. Jia, Q. Yu, C. Lietz, and **L. Li**, “A Multi-scale Strategy for Quantitative Neuropeptidomic Analysis of Food Intake,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
 155. J. Wang, S. Yokoyama, R. Cunningham, X. Sun, and **L. Li**, “Comparative Analysis of the Proteomic Changes of Amniotic Fluid in Different Gestational Age for Lung Development,” The 61st ASMS Annual Conference, June 9-13, 2013, Minneapolis, MN.
- 2012**
154. **L. Li**, Z. Zhang, S. Jiang, “Coupling Microscale Separation Techniques with Imaging Mass Spectrometry for Enhanced Peptidomic Analysis,” Invited Oral Presentation, 2012 MSB Conference Shanghai, China, October 21-24, 2012.
 153. **L. Li**, H. Ye, Z. Zhang, E. Zimmerman, L. Hui, R. Chen, X. Jiang, “Probing the Chemical Space of Biological Systems with MALDI Imaging Mass Spectrometry” Invited Oral Presentation, The 4th World Chinese MS Conference, Taiwan, June 28-July 1, 2012.
 152. H. Ye, R. Mandal, C. Chen, C. Ikonomidou, and **L. Li**, “Mass Spectrometric Imaging of Brain Proteins following Neonatal Exposure to an NMDA Antagonist and Ethanol,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 151. C. M. Schmerberg, C. Jia, L. Hui, and **L. Li**, “MS^E for Simultaneous Sequence Verification and Label-free

- Quantitation of Crustacean Neuropeptides.” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
150. D. Ma, W. Cao, A. Kapur, C. Scarlett, M. Patankar, and **L. Li**, “Comparative Analysis of the Global Proteome of Naive and IL-2 Stimulated Human NK Cells,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 149. T. Greer, R. Sturm, N. Woodards, E. Zimmerman, and **L. Li**, “Mass Spectrometric Evaluation of Neuropeptidomic Profiles Upon Heat Stabilization Treatment of Neuroendocrine Tissues in Crustaceans,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 148. Z. Zhang, S. Jiang, and **L. Li**, “A Semi-Automated Monolithic LC-MS Imaging Device for Quantitative Analysis of Complex Neuropeptides,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 147. C. Jia, J. Wang, L. Hui, C.M. Schmerberg, H. Ye, and **L. Li**, “Mass Spectral Analysis of Crustacean Hyperglycemic Hormone Precursor Related Peptides,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 146. C. B. Lietz, R. Sturm, and **L. Li**, “Ion Mobility Spectrometry-Mass Spectrometric Characterization of Endogenous Crustacean Neuropeptides Using Time-Aligned Parallel Fragmentation and DiLeu Isobaric Tags,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 145. R. Sturm, G. Kreitinger, C. Booth, L. Smith, J. Pedersen, and **L. Li**, “Absolute Quantification of Prion Protein (90-231) Using Stable Isotope-labeled Chymotryptic Peptide Standards in a LC-MRM AQUA Workflow,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 144. D. Frost, M. Meller, and **L. Li**, “Application of New Detergents for Detergent Assisted Lectin Affinity Chromatography,” The 60th ASMS Annual Conference, May 19-24, 2012, Vancouver BC, Canada.
 143. Z. Zhang, H. Ye, J. Wang, and **L. Li**, “Enhanced CE-MALDI Imaging Platform for Quantitative Analysis of Complex Peptides,” Oral presentation at 2012 Pittsburgh Conference, Orlando, FL, March 11-15, 2012.
 142. **L. Li**, “Toward Functional Discovery of Neuropeptides by MS-based Comparative Peptidomic Strategies,” Invited talk at the Symposium on “Hyphenated Techniques for Peptidomics: Bridging the Gap Between Proteomics and Metabolomics by Mass Spectrometry” at 2012 Pittsburgh Conference, March 11-15, 2012.
 141. **L. Li**, “Neuropeptide Profiling, Quantitation and Imaging by High Resolution MALDI FTMS Technology,” Invited talk at the Symposium on “Ion Cyclotron Resonance Mass Spectrometry: Recent Developments” at 2012 PittCon, March 11-15, 2012.
 140. **L. Li**, “Comparative Peptidomics for Functional Discovery of Neuropeptides,” Invited Talk at The 6th Annual Peptide Therapeutics Symposium, The Salk Institute, La Jolla, CA, October 20-21, 2011.
 139. H. Ye, R. Mandal, **L. Li**, and C. Ikonomidou, “Mass spectrometric imaging of brain proteins following neonatal exposure to an NMDA antagonist and ethanol,” Society for Neuroscience Annual Meeting 2011, Nov. 12-16, 2011, Washington DC.
 138. C. Schmerberg and **L. Li**, “Mass spectral investigation of feeding-related neuropeptides in the decapod crustacean via *in vivo* microdialysis,” Society for Neuroscience Annual Meeting 2011, Nov. 12-16, 2011, Washington DC.
 137. **L. Li**, “Developing Mass Spectrometry-based Tools for Biomarker Discovery in Neurological Disorders,” 2011 Wisconsin Human Proteomics Symposium, August 5-6, 2011, Madison, WI. Invited talk.
 136. X. Jiang, H. Ye, and **L. Li**, “Mass spectral imaging of neurotransmitters and neuropeptides in the central nervous system of lobster *Homarus americanus* at multiple developmental stages,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
 135. Z. Zhang, J. Wang, and **L. Li**, “Monolithic based immobilized-pH gradient capillary isoelectric focusing and monolithic liquid chromatography for neuropeptide analysis,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.

134. L. Hui, Y. Zhang, J. Wang, A. Cook, H. Ye, M.P. Nusbaum, and **L. Li**, “Discovery and functional study of a novel tachykinin from *Callinectes sapidus* via a multi-faceted MS approach,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
133. F. Xiang, N. Woodards, and **L. Li**, “Dimethylated leucine isobaric tags for relative quantitation of crustacean neuropeptides at multiple feeding states,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
132. C. Jia, X. Jiang, F. Xiang, Z. Liang, L. Hui, and **L. Li**, “Quantitation study of biogenic amines and crustacean hyperglycemic hormone (CHH)-family peptides in crustacean nervous system by novel DiLeu labeling technique,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
131. D. Ma, A. Kapur, M. Felder, M. Patanka, and **L. Li**, “Characterization and comparative analysis of proteomic profiles of leukemic and primary human NK cells,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
130. R. Cunningham, M. Conway, D. Wellner, D. Grunwald, W. Heideman, and **L. Li**, “Development of optimized phosphopeptide enrichment methods for comparison of starved and glucose fed yeast *Saccharomyces cerevisiae*,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
129. T.J. Greer, F. Xiang, D. Frost, and **L. Li**, “Development and validation of 8-Plex N,N-Dimethyl Leucines as Novel Tandem Mass Tags for Quantitative Proteomics and Peptidomics,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
128. H. Ye, J. Wang, Z. Zhang, G. Girdaukas, and **L. Li**, “Advancing Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging (MALDI-MSI) for Capillary Electrophoresis (CE) Analysis of Peptides,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
127. R. Sturm, R. Krencik, S-C. Zhang, and **L. Li**, “Label free comparative secretome proteomics of an amyotrophic lateral sclerosis cellular model using human ESC-derived astrocytes,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
126. D. Frost, X. Wei, and **L. Li**, “Detergent Assisted Lectin Affinity Chromatography for Membrane Glycoproteomics,” 59th ASMS Annual Conference, June 5-9, 2011, Denver, CO.
125. **L. Li**, “Mass Spectrometry-based Tools for Probing Neuronal Communication,” Invited Award Presentation at the PittCon 2011 Achievement Award Symposium, March 14, 2011, Atlanta, GA.
124. C. Jia, H. Ye, J.-M. Ane, and **L. Li**, “A Multi-faceted MS Strategy for *De Novo* Sequencing of the Nodule-Specific Cysteine-Rich Peptides in *Medicago truncatula*,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
123. X. Jiang, F. Xiang, J. Wang, and **L. Li**, “Relative quantitation of neuropeptides at multiple developmental stages of the American lobster using novel N,N-dimethyl leucine isobaric tandem mass tags,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
122. W. Cao, L. Hui, Y. Zhang, and **L. Li**, “Discovery of Neuropeptides in the Blue Crab *Callinectes sapidus*: Prediction, Detection and Distribution,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
121. C. Schmerberg, A. Kozicki, and **L. Li**, “Antibody-Linked Nanoparticles for Affinity-Enhanced Microdialysis Study of Motivational Behaviors in the Decapod Crustacean,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
120. Z. Zhang, J. Wang, L. Hui, and **L. Li**, “Enhanced CIEF Systems Coupling with MALDI-FTMS for Neuropeptide Analysis,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
119. H. Ye, M. Spencer, and **L. Li**, “Qualitative and Quantitative Analysis of Neurotransmitters and Neuropeptides in the Decapod Crustacean Nervous System by Gold-assisted Laser Desorption/Ionization,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
118. R. Cunningham, P. Jany, A. Messing, and **L. Li**, “Mass Spectrometry-Based Analysis of GFAP Overexpressor Mice’s Cerebrospinal Fluid for Proteome Biomarker Discovery in Alexander Disease,” PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).

117. Y. Zhang, J. Wang, and **L. Li**, "Neuropeptidomic Investigation of Feeding Behavior via Multifaceted Mass Spectral Approaches," PittCon 2011, March 13-17, Atlanta, GA. (Oral presentation).
116. J. Zhang, K.A. Lanham, R.E. Peterson, W. Heideman, and **L. Li**, "Quantitative Proteomics Reveals Rapid Changes in Na⁺/K⁺ ATPase and NCX1 Levels in Adult Zebrafish Heart Following TCDD Exposure," Society of Toxicology Annual Meeting, March 6-10, 2011, Washington DC.

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115. Y. Zhang, L. Hui, and **L. Li**, "Quantitative peptidomics reveal neuropeptide regulation in feeding behavior," Society for Neuroscience Annual Meeting 2010, Nov. 13-17, 2010, San Diego, CA. (Poster presentation)
114. Y. Zhang and **L. Li**, "Comparative Peptidomic Analysis of Environmental Stress," Stomatogastric Ganglion (STG) Satellite Meeting 2010, Nov. 12, 2010, San Diego, CA. (Oral presentation)
113. C. Schmerberg and **L. Li**, "Developing *In Vivo* Microdialysis Sampling Tools for Neuropeptide Analysis During Behavior," Stomatogastric Ganglion (STG) Satellite Meeting 2010, Nov. 12, 2010, San Diego, CA. (Oral presentation)
112. **L. Li**, Y. Zhang, and H. Ye, "Investigation of Quantitative Aspects of MALDI Mass Spectral Imaging," Midwestern Universities Analytical Chemistry Conference 2010, Oct. 7-9, 2010, Purdue University, West Lafayette, IN. (Oral presentation)
111. F. Xiang and **L. Li**, "*N,N*-Dimethyl Amino Acids as Novel iTRAQ Alternative Reagents for Neuropeptide Quantitation," Midwestern Universities Analytical Chemistry Conference 2010, Oct. 7-9, 2010, Purdue University, West Lafayette, IN. (Poster presentation)
110. W. Cao, and **L. Li**, "The construction and application of normalized SVR retention time predictor for validation of neuropeptide identification by *de novo* sequencing," Second RECOMB Satellite Conference on Computational Proteomics, March 27-28, 2010, San Diego, CA.
109. Y. Zhang, and **L. Li**, "Expression and distribution of neuropeptides in the nervous system of the crab *Carcinus maenas* and their roles in environmental stress," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
108. R. Cunningham, D. Frost, A. Messing, and **L. Li**, "Development of an optimized ProteaseMAX assisted trypsin digestion of human CSF for SRM quantification of GFAP and identification of biomarkers," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
107. J. Wang, F. Xiang, Z. Zhang, and **L. Li**, "Rapid LC-MS/MS Analysis of Neuropeptides with Monolithic Column and Improved Nano-electrospray Emitter," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
106. C. Schmerberg, and **L. Li**, "Magnetic Beads to Enhance Microdialysis Recovery of Neuropeptides," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
105. Z. Zhang, J. Wang, and **L. Li**, "A Novel CIEF-MALDI-FTMS Based Platform for Neuropeptide Analysis," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
104. X. Jiang, R. Chen, J. Wang, and **L. Li**, "Mass spectral identification and quantification of neuropeptides in the stomatogastric ganglion of the lobster *Homarus americanus* during development," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
103. F. Xiang, H. Ye, R. Chen, Q. Fu, and **L. Li**, "N, N-Dimethyl Amino Acids as iTRAQ Alternative Reagents for Neuropeptide towards Quantitation at Multiple Feeding Time Points," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
102. H. Ye, R. Chen, M. Howes-Podoll, J.-M. Ané, and **L. Li**, "Exploration of the metabolome from *Medicago truncatula* roots and nodules by MALDI mass spectral imaging," 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
101. W. Cao, and **L. Li**, "Automated Peptide Sequence Assembly (APSA): A Novel Strategy for Peptide

Sequencing by Combining Partial Sequence with Motif,” 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.

100. C. Jia, L. Hui, R. Chen, Y. Zhang, and **L. Li**, “Mapping of Crustacean Hyperglycemic Hormone (CHH) Family Neuropeptides and Their Roles in Response to Environmental Stimuli,” 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
99. **L. Li**, X. Wei, A. Herbst, D. Ma, J. Aiken, “A Comparative Glycoproteomics Approach to the Discovery of Biomarkers in Prion Diseases,” 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.
98. R. Sturm, C. Booth, C. Smith, J. Pedersen, and **L. Li**, “Protease evaluation for production of methionine-deficient peptides for MRM quantitation of the infectious prion protein,” 58th ASMS Conference on Mass Spectrometry, May 23-27, 2010, Salt Lake City, UT.

2009

97. R. Chen, and **L. Li**, “Toward functional discovery of neuropeptides via multi-faceted mass spectrometric approaches,” Stomatogastric Ganglion (STG) Satellite Meeting 2009, Oct. 17, 2009, Chicago, IL.
96. R. Chen, X. Jiang, and **L. Li**, “Expression and distribution of neuropeptides in the nervous system of the lobster *Homarus americanus* and their roles in development,” Society for Neuroscience Annual Meeting 2009, Oct. 17-21, 2009, Chicago, IL.
95. R. Chen, L. Hui, and **L. Li**, “Comparative neuropeptidomic analysis of food intake and environmental stress via a multi-faceted mass spectrometric approach,” Neuropeptides Conference 2009, Oct. 14-16, 2009, Chicago, IL.
94. F. Xiang, and **L. Li**, “Generating Neuropeptide standard curve in a single LC-MS run by N, N-dimethyl amino acids tandem mass tags,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
93. Xin Wei, A Herbst, J. Aiken, and **L. Li**, “A quantitative proteomic approach for the discovery of Prion disease biomarkers,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
92. R. Sturm, R. Chen, H.-K. Woo, O. Yanes, G. Siuzdak, and **L. Li**, “Utilizing NIMS and MALDI imaging mass spectrometric techniques for lipidomic and peptidomic studies of crab and murine brain,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
91. Y. Zhang, R. Chen, and **L. Li**, “Development and application of quantitation via in cell combination (QUICC) methodology for MALDI FTMS analysis of neuropeptides in environmental stress,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
90. R. Chen, X. Jiang, and **L. Li**, “Expression and distribution of neuropeptides in the nervous system of the lobster *Homarus americanus* and their roles in development,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
89. L. Hui, R. Chen, and **L. Li**, “Exploring the functional consequences of neuropeptide diversity by MALDI mass spectrometry,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
88. R. Cunningham, X. Wei, P. Jany, A. Messing, and **L. Li**, “Mass spectrometry-based analysis of cerebrospinal fluid peptidome and proteome for biomarker discovery in Alexander disease,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
87. W. Cao, M. Ma, Q. Fu, and **L. Li**, “HyPep: A new strategy to accelerate peptide discovery with a combination of de novo sequencing and homology database search,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
86. J. Wang, F. Xiang, Y. Zhang, Z. Zhang, and **L. Li**, “Profiling stress-induced neuropeptidomic changes with capillary electrophoresis-mass spectrometry and stable isotopic labeling technique,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.
85. **L. Li**, J. Zhang, K. Lanham, R. Peterson, and W. Heideman, “Cardiac toxicity of 2,3,7,8-tetrachlorodibenzo-p-

dioxin (TCDD) in juvenile zebrafish heart: profiling proteomic changes by label free quantitation methods,” 57th ASMS Annual Conference, May 31-June 4, 2009, Philadelphia, PA.

84. **L. Li**, J. Wang, X. Jiang, and Y. Zhang, “Coupling capillary electrophoresis with MALDI mass spectrometry for enhanced neuropeptide detection,” Invited talk at the 23rd International Symposium on Microscale Bioseparations (MSB 2009), Boston, MA.
83. **J. Wang**, C. Jia, R. Chen, and **L. Li**, “Disulfide-bridged neuropeptide screening by off-line CE/MALDI-MS,” Poster presentation, PittCon 2009, Chicago, IL.
82. **L. Hui**, R. Chen, and **L. Li**, “Exploring the functional consequences of neuropeptide diversity by mass spectrometry,” Poster presentation, PittCon 2009, Chicago, IL.
81. **Y. Zhang**, R. Chen, and **L. Li**, “Development and application of relative quantitation via in cell combination (QUICC) methodology for neuropeptide analysis,” Poster presentation, PittCon 2009, Chicago, IL.
80. **R.M. Sturm**, R. Chen, and **L. Li**, “Mapping and Imaging of neuropeptides in *Cancer borealis* brain using matrix-assisted laser desorption/ionization (MALDI) and nanostructure-initiator mass spectrometry (NIMS),” Oral presentation, PittCon 2009, Chicago, IL.
79. **C. Schmerberg**, and **L. Li**, “Enhanced microdialysis for neuropeptide recovery,” Oral presentation, PittCon 2009, Chicago, IL.
78. **R. Chen**, L. Hui, and **L. Li**, “Toward Functional Discovery of Neuropeptides via Multifaceted Mass Spectrometry,” Oral presentation, PittCon 2009, Chicago, IL.
77. **X. Jiang**, R. Chen, J. Wang, and **L. Li**, “Mass Spectral Charting the Time Course of Neuropeptide Expression in the Nervous Systems of the Lobster *Homarus americanus*,” Oral presentation, PittCon 2009, Chicago, IL.
76. **J. Zhang**, and **L. Li**, “Application of ECD and CAD in the Characterization of O-Acetylation in Peptides,” Oral presentation, PittCon 2009, Chicago, IL.
75. **F. Xiang**, Q. Fu, and **L. Li**, “Amino Acid iTRAQ Reagents,” Oral presentation, PittCon 2009, Chicago, IL.

2008

74. **M. Ma**, T. Szabo, E. Marder, and **L. Li**, “Expanding the crustacean neuropeptidome using a multi-faceted mass spectrometric approach,” STG (Stomatogastric ganglion dynamic network) Meeting 2008, Washington DC.
73. **M. Ma**, F. Xiang, J. Wang, A.E. Christie, and **L. Li**, “Peptidomic analyses of the central nervous systems of the prawn *Macrobrachium rosenbergii* and the white shrimp *Litopenaeus vannamei*,” Society for Neuroscience Annual Meeting 2008, Washington DC.
72. **L. Li**, X. Wei, A. Herbst, S. McIlwain, J. Schmidt, R. Cunningham, D. Page, and J. Aiken, “Combining MALDI FTMS, comparative glycoproteomics, and bioinformatics for the discovery of biomarkers in prion disease,” Oral presentation at 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
71. **J. Dowell**, J. A. Johnson, and **L. Li**, NUBIN Symposium on Biomarker Discovery in Neurodegenerative Disease, June 12-13, 2008, Amsterdam.
70. **L. Li**, “Isotopic labeling for improved quantitative peptidomics and de novo sequencing,” Gordon Research Conference on Isotopes in Biological and Chemical Sciences, February 17-22, Ventura, CA.
69. **X. Wei**, F. Xiang, M. Ma, and **L. Li**, “Enrichment and characterization of C-terminally blocked neuropeptides in *Cancer borealis* brain tissue,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
68. **J. Zhang**, Q. Fu, and **L. Li**, “Investigation of acetylation specific neutral loss in collision induced dissociation of O-acetylated peptides,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
67. **J. Wang**, R. Chen, X. Jiang, and **L. Li**, “Combining tissue extraction and off-line capillary electrophoresis-MALDI FTMS for neuropeptide analysis using 2,5-dihydroxybenzoic acid,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.

66. F. Xiang, Q. Fu, and **L. Li**, “N,N-Dimethyl amino acids as iTRAQ reagent for improved peptidomics and proteomics,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
65. M. Ma, J. Schmidt, Y. Ge, and **L. Li**, “Mass spectrometric characterization of the crustacean hyperglycemic hormone (CHH) in the sinus gland of *Cancer borealis*,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
64. C. Jia, Z. He, and **L. Li**, “Application of carrier-free enzyme immobilization to proteomics: on-plate proteolysis using cross-linked trypsin aggregate,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.
63. R. Chen, S. Cape, J. Wang, Y. Zhang, and **L. Li**, “Comparative neuropeptidomic analysis of food intake via a multi-faceted MS approach,” 56th ASMS Annual Conference, June 1-5, 2008, Denver, CO.

2007

62. **L. Li**, “Differential display for signaling peptide discovery,” STG (Stomatogastric ganglion dynamic network) Meeting 2007, San Diego, CA.
61. **L. Li**, M. Ma, R. Chen, and A.E. Christie, “Peptidomic analyses of the central nervous systems of the American lobster *Homarus americanus* and the European green crab *Carcinus maenas*,” Society for Neuroscience Annual Meeting 2007, San Diego, CA.
60. **L. Li**, S.S. DeKeyser, M. Ma, H. Behrens, and J.J. Schmidt, “Advancing neuropeptide research by a multi-faceted mass spectrometry-based platform,” Oral presentation, American Chemical Society (ACS) Fall 2007 National Meeting, Boston, MA.
59. **L. Li**, X. Wei, J.J. Schmidt, A. Herbst, S. McIlwain, D. Page, and J. Aiken, “Combining MALDI FTMS, Comparative Glycoproteomics, and Bioinformatics for the Discovery of Biomarkers in Prion Disease,” Oral presentation, ACS Fall 2007 National Meeting, Boston, MA.
58. **L. Li**, S.S. DeKeyser, J.J. Schmidt, R. Chen, and M. Ma, “High resolution MALDI MS profiling and imaging of neuronal tissues for differential display of neuropeptidomes,” ASMS Annual Conference 2007, Indianapolis, IN.
57. J. Zhang, K.A. Lanham, R. E. Peterson, W. Heideman, and **L. Li**, “Characterization of zebrafish cardiac proteome by a novel 2D HPLC strategy coupled with Q-TOF tandem mass spectrometry,” ASMS Annual Conference 2007, Indianapolis, IN.
56. R. Chen, M. Ma, and **L. Li**, “Mass spectrometric profiling of neuropeptide expression and secretion changes in decapod crustaceans in response to environmental stress,” ASMS Annual Conference 2007, Indianapolis, IN.
55. J. Wang, R. Chen, S. S. DeKeyser, M. Ma, and **L. Li**, “Separation, modification, and identification of neuropeptides by off-line capillary electrophoresis MALDI FTMS,” ASMS Annual Conference 2007, Indianapolis, IN.
54. X. Wei, J. Schmidt, A. Herbst, J. Aiken, and **L. Li**, “Comparative glycoproteomics for the discovery of potential biomarkers for prion disease,” ASMS Annual Conference 2007, Indianapolis, IN.
53. J. J. Schmidt, A.E. Christie, S. McIlwain, M. Ma, D. Page, and **L. Li**, “Combining MALDI-FTMS and bioinformatics for peptidomic comparison among decapod crustacean species,” ASMS Annual Conference 2007, Indianapolis, IN.
52. M. Ma, R. Chen, A. E. Christie, and **L. Li**, “Mass spectral characterization of the CNS peptidomes of the lobster *Homarus americanus* and crab *Carcinus maenas*,” ASMS Annual Conference 2007, Indianapolis, IN.
51. L.S. Tang, Q. Fu, E. Marder, and **L. Li**, “Mass spectrometric characterization and physiological actions of a novel B type allatostatin in *Cancer borealis*,” 33rd East Coast Nerve Net Meeting 2007, Marine Biological Laboratory, Woods Hole, MA.
50. S. S. DeKeyser, J.J. Schmidt, K. K. Kutz-Naber, and **L. Li**, “Imaging Neuropeptides in Crustacean Nervous System by MALDI TOF/TOF,” ASMS Sanibel Conference 2007 on Imaging Mass Spectrometry, Sanibel Island, FL (indicates presenting author).

49. **L. Li**, S. S. DeKeyser, M. Ma, H. L. Behrens, K. K. Kutz-Naber, Q. Fu, and J. J. Schmidt, "Developing an integrated analytical platform for functional discovery of novel neuropeptides," Invited talk, PittCon 2007 Analytical Chemistry Award Symposium, Chicago, IL.
48. **R. Chen**, M. Ma, X. Wei, and **L. Li**, "Mass spectrometric profiling of neuropeptide expression and secretion in decapod crustaceans," Oral presentation, PittCon 2007, Chicago, IL
47. **S. S. DeKeyser**, K.K. Kutz-Naber, and **L. Li**, "MALDI-FTICR for the differential display analysis of neuropeptides involved in feeding," Oral presentation, PittCon 2007, Chicago, IL
46. **J. Zhang**, K.M. Arnold, R.E. Peterson, W. Heideman, and **L. Li**, "A proteomic approach to the study of zebrafish cardiovascular development using a novel 2D HPLC strategy coupled with Q-TOF tandem mass spectrometry," Oral presentation, PittCon 2007, Chicago, IL
45. **X. Wei**, J.J. Schmidt, A. Herbst, J. Aiken, and **L. Li**, "MS-based comparative profiling of glycoproteins for the discovery of potential biomarkers for prion disease," Poster presentation, PittCon 2007, Chicago, IL
44. **J.J. Schmidt**, S. McIlwain, M. Ma, D. Page, A.E. Christie, and **L. Li**, "Comparative peptidomics using MALDI-FTMS coupled with bioinformatics," Poster presentation, PittCon 2007, Chicago, IL

2006

43. **L. Li**, "A peptidomic approach to neuromodulation of a small neural network," invited talk, Society for Neuroscience Annual Meeting 2006, Atlanta, GA.
42. **L. Li**, S.S. DeKeyser, K.K. Kutz-Naber, M. Ma, and J.J. Schmidt, "Mass spectrometric studies of neuropeptides involved in feeding," Society for Neuroscience Annual Meeting 2006, Atlanta, GA.
41. **J. Dowell**, W. Vander Hayden, A. Kelley, and **L. Li**, "Analysis of neuropeptide expression in fed and unfed rats by mass spectrometry," Society for Neuroscience Annual Meeting 2006, Atlanta, GA.
40. **Q. Fu**, C. Zhang, J.S. Thorson, and **L. Li**, "Identification of calicheamicins using LC ESI QTOF MS/MS," 2006 AAPS (The American Association of Pharmaceutical Scientists) Annual Meeting and Exposition, San Antonio, TX.
39. **J. Yew**, Y. Wang, N. Barteneva, **L. Li**, and E.A. Kravitz, "Circuit-specific identification and characterization of neuropeptides in *Drosophila*," oral presentation, 32nd East Coast Nerve Net Annual Meeting 2006, Woods Hole, MA.
38. **L. Li**, S. DeKeyser, K. Kutz, J. Schmidt, and M. Ma, "Neuropeptide analysis by MALDI FTICR mass spectrometry," oral presentation, PittCon 2006, Orlando, FL.
37. **Q. Fu** and **L. Li**, "*De novo* sequencing of neuropeptides by isotope-based formaldehyde labeling and investigation of fragmentation pattern of neuropeptides with N-terminal dimethylation," oral presentation, PittCon 2006, Orlando, FL.
36. **S. DeKeyser**, K. Kutz-Naber, and **L. Li**, "Qualitative and quantitative *in situ* analysis of neuropeptides involved in feeding," 54th ASMS Annual Conference, Seattle, WA, 2006.
35. **H. Behrens** and **L. Li**, "Coupling microdialysis to nanoLC-MS for *in vivo* monitoring of neuropeptides," 54th ASMS Annual Conference 2006, Seattle, WA.
34. **M. Ma**, K. Kutz-Naber, and **L. Li**, "Immunoaffinity-based mass spectrometric characterization of the RFamide neuropeptide family in the pericardial organ of *Cancer borealis*," 54th ASMS Annual Conference 2006, Seattle, WA.
33. **J. J. Schmidt**, A. Herbst, S. McIlwain, D. Page, J. Aiken, and **L. Li**, "Combining MALDI-FTMS and biostatistics to identify biomarkers of prion diseases," 54th ASMS Annual Conference 2006, Seattle, WA.
32. **Q. Fu**, C. Zhang, J. S. Thorson, and **L. Li**, "ESI QTOF MS/MS of protonated calicheamicin derivatives," 54th ASMS Annual Conference 2006, Seattle, WA.
31. **K. Kutz-Naber**, S. Heinzelman, and **L. Li**, "On-target reduction and alkylation of disulfide-bond containing peptides," 54th ASMS Annual Conference 2006, Seattle, WA.

30. J.A. Dowell and **L. Li**, "Rat neuropeptidomics by LC/MS/MS and MALDI-FTMS: enhanced extraction techniques coupled with 2D RP-RP HPLC separation," 54th ASMS Conference 2006, Seattle, WA.

2005

29. J. J. Schmidt, A. Herbst, S. McIlwain, D. Page, J. Aiken, and **L. Li**, "Using MALDI-FTMS and biostatistics for the identification of animals infected with prion diseases," Society for Neuroscience Annual Meeting 2005.
28. A.E. Christie, K.K. Kutz, D. I. Messinger, E.E. Savage, and **L. Li**, "Midgut endocrine cells are rich source of neuroactive peptides in the crab *Cancer productus*," Society for Neuroscience Annual Meeting 2005.
27. P.S. Dickinson, D.I. Messinger, J.J. Schmidt, Y.A. Hsu, W. Rabacal, T.N. Ho, M. Pott, B. Peguero, E.A. Stemmler, **L. Li**, and A.E. Christie, "SIFamides in stomatogastric nervous system and neuroendocrine organs of decapod crustaceans," Society for Neuroscience Annual Meeting 2005.
26. D.I. Messinger, D.R. Verley, Q. Fu, K.K. Kutz, Y.A. Hsu, **L. Li**, J.T. Birmingham, and A.E. Christie, "Structural and functional characterization of the anterior cardiac neuron 1/2-anterior cardiac plexus (ACN1/2-ACP) neuroendocrine system of the crab *Cancer productus*," Society for Neuroscience Annual Meeting 2005.
25. J. J. Schmidt, A. E. Christie, and **L. Li**, "Exploring interspecies neuropeptidomics in the thoracic ganglia of decapod crustaceans using MALDI FTMS and bioinformatics," Stomatogastric Ganglion Satellite Meeting 2005.
24. J. Y. Yew, Y. Wang, **L. Li**, and E. A. Kravitz, "Identification of neuropeptides and co-localization of peptides and biogenic amines in the *Drosophila* CNS using tandem affinity cell capture mass spectrometry," Cold Spring Harbor Laboratory (CSHL) Neurobiology of *Drosophila* Symposium 2005.
23. J.Y. Yew, K.K. Kutz, S. Dikler, L. Messinger, **L. Li**, and A.O. Stretton, "Neuropeptide discovery in the nematode *Ascaris suum* using mass spectrometry," Society for Experimental Biology Annual Meeting 2005.
22. J.J. Schmidt, A. Herbst, S. McIlwain, D. Page, **L. Li**, and J. Aiken, "Using MALDI-FTMS and biostatistics for the identification of biomarkers from animals infected with Prion diseases," 2nd International Chronic Wasting Disease (CWD) Symposium, July 12-14, 2005.
21. S. McIlwain, A. Herbst, J. Schmidt, D. Page, **L. Li**, and J. Aiken, "Diagnosing prion disease through proteomic profiles," 13th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB 2005).
20. **L. Li**, Q. Fu, K. K. Kutz, S. S. DeKeyser, J. J. Schmidt, and Y. Wang, "Development of integrated MS strategies for probing peptidergic signaling in a small neural network," 53rd ASMS Conference, Platform presentation, 2005.
19. Q. Fu and **L. Li**, "*De novo* sequencing of novel neuropeptides by a combination of N-terminal derivatization and nanoLC-MS/MS," 53rd ASMS Conference, 2005.
18. K. K. Kutz, A. Vilkov, L. Pasa-Tolic, N. Tolic, R.D. Smith, A. E. Christie, and **L. Li**, "Characterization of neuropeptidome of *Cancer productus* hemolymph in two physiological states by FTMS," 53rd ASMS Conference, 2005.
17. S. S. DeKeyser and **L. Li**, "Quantitative MALDI-FTMS analysis of a simple neural circuit throughout development," 53rd ASMS Conference, 2005.
16. Y. Wang, J. Yew, E. Kravitz, and **L. Li**, "Identification of *Drosophila melanogaster* neuropeptides with capillary liquid chromatography-tandem mass spectrometry," 53rd ASMS Conference, 2005.
15. N. Cruz, K. Kutz, **L. Li**, and E. Marder, "Effect of novel neuropeptide in the stomatogastric ganglion and cardiac ganglion of the crab *Cancer borealis*," East Coast Nerve Net 2005.

2004

14. **L. Li**, Q. Fu, K.K. Kutz, J.J. Schmidt, Y. Wang, K. Graubard, A.E. Christie, "Mass spectrometric characterization of neuropeptide hormones in the neurosecretory structures of *Cancer productus*," Society for Neuroscience Annual Meeting 2004, San Diego, CA.
13. J.J.Schmidt, K.K.Kutz, Y.Wang, Y.A.Hsu, C.T.Ngo, D.I.Messinger, A.E.Christie and **L.Li**, "Comparative

neuropeptidomics of the thoracic/abdominal ganglia of crustaceans from the greater Puget Sound region of Washington State,” Society for Neuroscience Annual Meeting 2004.

12. C.T. Ngo, D.I. Messinger, Y.A. Hsu, A. Countryman, J.J. Schmidt, **L. Li** and A.E. Christie, “Transmitter complement in modulatory commissural neuron 1 (MCN1) homologs,” Society for Neuroscience Annual Meeting 2004, San Diego, CA.
11. **L. Li**, “Peptidergic signaling in a small nervous system: mass spectrometry as a tool for neuropeptide discovery,” Neuroscience Satellite Meeting on Dynamic Neural Networks: The Stomatogastric Ganglion, 2004, San Diego, CA.
10. K. Kutz, J. Schmidt, and **L. Li**, “Direct tissue analysis of neuroendocrine organs of *Cancer borealis* and *Cancer productus* by MALDI-FTMS using in cell accumulation,” ASMS 2004, Nashville, TN.
9. **L. Li**, Y. Wang, Q. Fu, K. Kutz, and J. Schmidt, “Global analysis of neuropeptides using multidimensional MS approaches,” ASMS 2004, Nashville, TN.
8. K. Kutz, J. Schmidt, Q. Fu, and **L. Li**, “*In situ* peptide analysis of neuroendocrine tissues from *Cancer borealis* and *Cancer productus* by MALDI FTMS,” Oral presentation, PittCon 2004, Chicago, IL.
7. J. J. Schmidt, K. K. Kutz, and **L. Li**, “In cell accumulation in MALDI FT-MS as a method of detecting very low concentration analytes with high mass accuracy and more possibilities for MS/MS,” PittCon 2004, Chicago, IL.
6. Q. Fu and **L. Li**, “Developing offline two-dimensional LC MS/MS for neuropeptide analysis,” Oral presentation, PittCon 2004, Chicago, IL.

2003

5. J. M. Edwards, J. J. Schmidt, K. K. Kutz, Q. Fu, L. V. Ambroggio, K. Graubard, A. E. Christie, and **L. Li**, “Differential distribution of hormones in the neuroendocrine organs of *Cancer productus*,” Society for Neuroscience Annual Meeting 2003, New Orleans, LA.
4. A. K. Friedman, A. Proekt, V. Brezina, J. Jing, Y. Zhurov, V. Alexeeva, **L. Li**, J. V. Sweedler, K. R. Weiss, and F. S. Vilim, “Identification and characterization of the orphan myomodulin precursor of *Aplysia*,” Society for Neuroscience Annual Meeting 2003, New Orleans, LA.
3. **L. Li**, J. Schmidt, K. Kutz, and Q. Fu, “A peptidomics approach to neuromodulation in crustacean nervous systems: a comparative study using high resolution mass spectrometry,” 51st Annual Meeting for American Society for Mass Spectrometry (ASMS) 2003, Montreal, Canada.
2. **L. Li** “A peptidomics approach to neuromodulation in a small nervous system,” Proteomics Workshop, Wisconsin Symposium III: From DNA to Molecular Medicine 2003, Madison, WI.
1. **L. Li**, W. P. Kelley, and A. Christie, “Measuring neuropeptides in crustacean nervous systems using MALDI FTICR MS,” The Fourth North American FT-ICR MS Conference 2003, Marshall, CA.

Note: There are also 53 conference abstracts (oral and poster presentations) with Dr. Li being first author or co-author prior to her independent faculty position at UW-Madison (titles are omitted for space consideration).

Research Support:

(a) Current funding:

- 1) Title: Mass Spectrometric Studies of Neuropeptides in Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIDDK
Type: R01 DK071801-16 Competitive Renewal
Period: 3/10/22-2/28/27
Total Costs (TC): \$2,157,855
Received impact score of 15, 1% ranking at EBIT panel.

- 2) Title: DiLeu-enabled Multiplexed Quantitation for Biomarker Discovery and Validation in Alzheimer's Disease
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH
Type: R01 (R01AG052324-02) Competitive renewal
Period: 6/1/23-2/29/28
TC: \$2,835,460
- 3) Title: Creating a Region-Specific Biomolecular Atlas of the Brain of Alzheimer's Disease
Principal Investigators (Multi-PIs): Lingjun Li, Ph.D. (contact PI); Luigi Puglielli, M.D., PhD.
Agency: NIH
Type: R01 (R01AG078794)
Period: 9/15/22-6/30/27
TC: \$3,738,865
Received impact score of 21
- 4) Title: Leveraging ion mobility and high resolution mass spectrometry to probe neuropeptide modifications in environmental stress
Principal Investigator: Lingjun Li, Ph.D.
Agency: NSF, CHE-2108223
Period: 9/1/21-8/31/24
TC: \$435,000
- 5) NSF Special Creativity Award: Leveraging ion mobility and high-resolution mass spectrometry to probe neuropeptide modifications in environmental stress
Principal Investigator: Lingjun Li, Ph.D.
Agency: NSF, CHE-2108223
Period: 9/1/24-8/31/26
TC: \$360,000
- 6) Title: Defining a Proteomic Signature for Soy-Induced Metabolic Changes in Mice
Principal Investigators (Multi-PIs): Cara Westmark and Lingjun Li
Agency: USDA (Project Number: 2018-67001-28266)
Period: 07/01/18-07/31/24
TC: \$1,880,700
- 7) Title: Probing Protein Structural Changes in Alzheimer's Disease
Principal Investigator: Lingjun Li, PhD
Agency: NIH
Type: R21 AG065728
Period: 0/15/2020-12/31/2023 (NCE)
TC: \$420,010
- 8) Title: National Center for Quantitative Biology of Complex Systems
Principal Investigator: Joshua Coon, Ph.D.; Co-PIs: Lingjun Li, Robert Kennedy
Technology and Research Development (TR&D) Project #2 Title: Isobaric Mass Tags for Ultra-plexed Protein Quantitation
TR&D 2 PI: Lingjun Li, Ph.D.
Agency: NIH
Type: NIGMS NIH P41
Period: 7/1/21-6/30/26
TC: \$5,657,542; DC: \$4,000,000 for the entire P41, Lingjun Li Portion TC: \$933,000
- 9) Title: Hormonal Tuning of Specific Circuit States from a Well-Defined Connectome
Principal Investigator: Michael Nusbaum, Ph.D.; Co-PI: Lingjun Li, Ph.D.

Agency: NIH
Type: R01
Period: 6/15/23-5/31/28
TC: \$3,045,775, Lingjun Li Portion TC: \$964,820

- 10) Title: Molecular targeted radionuclide therapy for tumor immunomodulation and enhancing immunotherapy response
Principal Investigator: Jamie Weichert, Ph.D.
Agency: NIH
Type: P01 CA250972
Period: 7/1/20-6/30/25
TC: \$15,055,340
- 11) Title: TRTech-PGR: A mass spectrometric based interdisciplinary approach to deciphering the molecular dialogue between crop plants and their microbial friends and foes
Principal Investigator: Mike Sussman, Ph.D.; Co-PIs: Lingjun Li, Josh Coon, Jean-Michel Ane
Agency: NSF
Type: NIGMS NIH P41
Period: 6/15/20-5/31/24
TC: \$3,027,018 for the entire NSF Project Grant; Lingjun Li Portion TC: \$221,386
- 12) Title: Development of new agents for treating endocrine resistant breast cancer
Principal Investigator: Wei Xu, Ph.D., Co-PIs: Lingjun Li, PhD, Weiping Tang, PhD
Agency: DOD
Period: 1/01/20-12/31/23 (NCE)
TC: \$1,599,480; Li Lab portion \$222,822 (TC)
- 13) Title: A mass spectrometry-enabled multiomic investigation of pancreatic islets in diabetes
Principal Investigator: Lingjun Li, PhD
Agency: Washington University/University of Wisconsin DRC Pilot and Feasibility Award
Period: 12/1/2021-03/31/2024
TC: \$78,120
- 14) Title: Mass spectrometry-based study on the pancreatic cancer stromal microenvironment: PSC-derived chemoresistance and crosstalk
Principal Investigator: Lingjun Li, PhD
Agency: UWCCC Pancreas Cancer Pilot Grant Program
Period: 3/1/2021-08/31/2023
TC: \$75,000
- 15) Title: Charles Melbourne Johnson Distinguished Chair Professorship
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW School of Pharmacy
Type: Unrestricted Research Funding
Period: 10/01/2018-09/30/2023
DC: \$250,000
- 16) Title: Mass Spectrometry Investigations into the Neuropeptidome in Response to Hypoxic Stress
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIGMS
Type: NRSA F31 Predoctoral Fellowship to Ashley Phetsanthad
Period: 09/01/22-08/31/23
TC: \$35,413

- 17) Title: The role of estrogen receptor alpha in prostatic fibrosis contributing to benign prostatic hyperplasia
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIDDK
Type: NRSA F31 Predoctoral Fellowship to Hannah Miles
Period: 04/01/23-03/31/24
TC: \$72,694

(b) Past funding:

- 1) Title: Mass Spectrometric Studies of Neuropeptides in Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIDDK
Type: R01 DK071801 Competitive Renewal
Period: 7/1/12-5/31/17
Total Costs (TC): \$1,577,815
Received priority score of 10 (perfect score), 1% ranking at EBIT panel on June 2, 2011.
- 2) Title: Developing New MS Strategies for Probing Neurochemical Communications
Principal Investigator: Lingjun Li, Ph.D.
Agency: American Society for Mass Spectrometry, Sponsored by Thermo Electron Corp.
Type: Research Award for Young Investigator (3 awards/yr to institutions in North America)
Period: 7/1/04-funds expended, TC: \$25,000
- 3) Title: In Situ Quantitation of Neuropeptides in Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NINDS
Type: NRSA F31 Predoctoral Fellowship to Stephanie S. DeKeyser
Period: 01/01/07-12/31/08
Total DC: \$63,342
- 4) Title: A Proteomic Approach to Biomarker Discovery in Prion Disease
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: Research grant
Period: 07/01/07-06/30/08
Total DC: \$34,766
- 5) Title: A Peptidomic Approach to the Development of Neural Circuitry
Principal Investigator: Lingjun Li, Ph.D.
Agency: University of Wisconsin Graduate School
Type: Research grant
Period: 07/01/08-06/30/09
Total DC: \$32,266
- 6) Title: Genomic Approach to Understanding TCDD Toxicity in Zebrafish
Principal Investigator: Warren Heideman, Ph.D.
Co-PI: Lingjun Li, Ph.D., Richard E. Peterson, Ph.D.
Agency: National Sea Grant Institute
Type: Research grant
Period: 03/01/06-02/28/10
TC: \$382,807

- 7) Title: CAREER: Development of Integrated MS Strategies for Probing Peptidergic Signaling
Principal Investigator: Lingjun Li, Ph.D.
Agency: NSF
Type: Faculty CAREER Award CHE-0449991
Period: 2/1/05-8/31/10
TC: \$546,000
- 8) Title: A Proteomic Approach to Biomarker Discovery in Prion Disease
Principal Investigator: Lingjun Li, Ph.D.
Co-PI: Judd Aiken, Ph.D., C. David Page Jr., Ph.D.
Agency: NIH/NIAID
Type: R21 AI0272588
Period: 09/30/07-08/31/10
TC: \$363,360
- 9) Title: Developing an Integrated Analytical Platform for Functional Discovery of Novel Neuropeptides
Principal Investigator: Lingjun Li, Ph.D.
Agency: Alfred P. Sloan Foundation
Type: Research Fellowship
Period: 09/15/06-09/15/10
TC: \$45,000
- 10) Title: CSF Biomarkers for Alexander Disease
Principal Investigator: Albee Messing, Ph.D.
Co-PI: Lingjun Li, Ph.D.
Agency: NIH (NINDS administrative supplements for CAPTR)
Period: 09/30/08-09/29/10
TC: \$72,053, DC: \$49,827
- 11) Title: Implementation of Cross-linked Enzyme Aggregate of Trypsin for High Throughput Proteomics
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Graduate School IEDR Program 2009-2010
Period: 7/01/09-06/30/10
TC: \$46,230
- 12) Title: Combining Imaging Mass Spectrometry and Capillary Electrophoresis Coupled to Mass Spectrometric Detection for Probing Chemistry in a Developing Neural Network
Principal Investigator: Lingjun Li, Ph.D.
Agency: Vilas Associate Award Program
Period: 07/01/09-06/30/11
TC: \$80,090, DC: \$80,090
- 13) Title: CSF Biomarkers for Alexander Disease
Principal Investigator: Lingjun Li, Ph.D.
Co-PI: Albee Messing, Ph.D.
Agency: University of Wisconsin Institute for Clinical and Translational Research (UW ICTR), funded in part through an NIH Clinical and Translational Science Award (CTSA), grant number 1UL1 RR025011
Period: 10/01/09-02/01/11
DC: \$49,880
- 14) Title: *N,N*-Dimethyl Leucines as Novel Isobaric Tandem Mass Tags for Quantitative Proteomics,

- Peptidomics, and Metabolomics
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: Draper Technology Innovation Fund (TIF)
Period: 09/01/10-6/30/11
TC: \$13,500
- 15) Title: Exploring Glycoproteomic Profiles for Prion Disease Diagnostics
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: Research grant
Period: 07/01/11-06/30/12
Total DC: \$11,000
- 16) Title: Comparative Peptidomics for Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: University of Wisconsin Graduate School
Type: Research grant
Period: 07/01/11-06/30/12
Total DC: \$34,010
- 17) Title: Mining the Immune Cell Proteome to Identify Ovarian Cancer-Specific Biomarkers
Principal Investigator: Manish Patankar, Ph.D.
Co-PI: Lingjun Li, Ph.D.
Agency: Department of Defense
Type: Pilot Award
Period: 01/01/11-10/14/13
DC: \$200,000; TC: \$289,240
- 18) Title: Acquisition of a High-Field Dual Source FTICR-MS for Pharmaceutical Research
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH (high-end shared instrumentation grant program)
Period: 5/15/11-04/30/13 (received impact score of 22)
TC: \$2,070,000, DC: \$2,070,000
- 19) Title: Mass Spectrometric Studies of Neuropeptides in Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH R56DK071801
Period: 7/01/11-06/30/12
TC: \$216,115, DC: \$150,000
- 20) Title: CSF Biomarkers in Alzheimer's Disease
Principal Investigator: Lingjun Li, Ph.D.
Agency: WCMP Pilot Grant Program in Alzheimer's Disease Research
Type: Pilot research grant
Period: 10/01/12-09/30/13
Total DC: \$30,010
- 21) Title: Molecular Imaging of Metabolites in Legume Nodule Development and Biological Nitrogen Fixation by MALDI Mass Spectrometry
Principal Investigator: Lingjun Li, Ph.D.
Agency: University of Wisconsin Graduate School
Type: Research grant
Period: 07/01/12-06/30/13

Total DC: \$45,962

- 22) Title: DiLeu as New Tandem Mass Tags for Quantitative Proteomics and Peptidomics
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Graduate School IEDR Program 2012-2013
Period: 7/01/12-06/30/13
TC: \$50,000 plus a 50% WARF Technology Development RA
- 23) Title: Combining Imaging Mass Spectrometry and Capillary Electrophoresis to Decipher Chemical Signaling in the Nervous System in Response to Environmental Stress
Principal Investigator: Lingjun Li, Ph.D.
Agency: NSF
Period: 05/15/10-4/30/14
TC: \$450,000
- 24) Title: Proteomic Evaluation of the Blood-Brain Barrier Receptor-Mediated Transportome
Principal Investigator: Eric Shusta, Ph.D.
Co-PI: Lingjun Li, Ph.D.
Agency: NIH/NINDS
Type: EUREKA R01 NS071513 (Exceptional, Unconventional Research Enabling Knowledge Acceleration)
Period: 08/01/10-05/31/15
TC: \$1,155,048
- 25) Title: Urinary Biomarkers of Lower Urinary Tract Symptoms (LUTS) in Men
Principal Investigator: Wade Bushman, M.D., Ph.D.
Co-Investigator: Lingjun Li, Ph.D.
Agency: NIH 1P20DK097826-01
Period: 9/29/2012-8/31/2015
TC: \$593,920, DC: \$400,000
- 26) Title: Evaluating the Stability of Alpha/Beta-Parathyroid Hormone Analogues in Kidney using Mass Spectrometry
Principal Investigator: Lingjun Li, Ph.D., Robert Thorne, Ph.D. Sam Gellman, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: WARF Discovery Challenge Grant
Period: 7/01/14-06/30/16
DC: \$7,500
- 27) Title: Antemortem Biomarkers of Prion Disease
Principal Investigator: Judd Aiken, Ph.D.
Co-PI: Lingjun Li, Ph.D.
Agency: Alberta Innovates Biosolutions
Period: 01/01/2013 – 02/29/2016
TC: \$118,751 (To Li Lab)
- 28) H. I. Romnes Faculty Fellowship
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: flexible research funds
Period: 7/01/11-06/30/16
DC: \$50,000

- 29) Title: Novel Imaging Mass Spectrometry-based Proteomics Technology to Identify Autism Biomarkers
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Institute for Clinical and Translational Research (ICTR)
Type: Pilot Grant
Period: 7/01/15-01/31/17
DC: \$50,000
- 30) Title: Mass Defect-Based Multiplex Dimethyl Pyrimodinyln Ornithine (DiPyrO) Tags for High-Throughput Quantitative Proteomics and Peptidomics
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Office of the Vice Chancellor for Research and Graduate Education
Type: Robert Draper Technology Innovation Fund (TIF) funding
Period: 7/01/15-06/30/16
DC: \$50,000
- 31) Title: Identification and Evaluation of Biomarkers in Alzheimer's Disease Using a Multi-faceted Approach
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: Graduate School Fall Research Competition
Period: 7/01/15-06/30/16
DC: \$34,424
- 32) Title: Functional Metabiome of Lower Urinary Tract Syndrome
Principal Investigator: Tony Goldberg; Co-Investigators: Lingjun Li, Kristina Penniston
Agency: NIH
Type: U54 O'Brien Center Pilot Grant
Period: 02/01/16-01/31/17
TC: \$223,139; DC: \$149,999
- 33) Title: Characterizing the Cocaine-Responsive Peptidome in Mammalian Telecephalon
Principal Investigators (Multi-PI): Lingjun Li, Ph.D.; Brian Baldo, Ph.D.
Agency: NIH
Type: NIDA R21
Period: 4/1/15-3/31/18
TC: \$417,358
- 34) Title: Identification and Evaluation of Biomarkers in Alzheimer's Disease Using a Multi-faceted Approach
Principal Investigator: Lingjun Li, Ph.D.
Agency: Wisconsin Alumni Research Foundation
Type: Graduate School Fall Research Competition
Period: 7/01/15-06/30/16
DC: \$34,424
- 35) Title: Multifaceted Mass Spectrometric Investigation of Neuropeptides in *Callinectes sapidus* during Hypoxia
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIGMS
Type: NRSA F31 Predoctoral Fellowship to Amanda Buchberger
Period: 06/01/16-05/31/18
TC: \$62,384
- 36) Title: Multi-modal Imaging: Combining Mass Spectrometry Imaging with Optical Imaging to

Understand the Pancreatic Cancer Tumor Microenvironment

Principal Investigator: Lingjun Li, Ph.D.; Co-Investigators: Kevin Eliceiri, Ph.D.; Melissa Skala; Ph.D.; Dustin Deming, MD.

Agency: University of Wisconsin Carbone Cancer Center (UWCCC) Pancreas Cancer Task Force

Type: UWCCC Pancreas Cancer Research Task Force Investigator Initiated Project Award

Period: 12/1/17-11/30/19

TC: \$75,000

37) Title: Mass Spectrometric Studies of Neuropeptides in Feeding

Principal Investigator: Lingjun Li, Ph.D.

Agency: NIH/NIDDK

Type: R01 DK071801 Competitive Renewal

Period: 6/1/17-5/31/21

Total Costs (TC): \$2,085,490

Received priority score of 16, 4% ranking at EBIT panel.

38) Title: DiLeu-enabled Multiplexed Quantitation for Biomarker Discovery and Validation in Alzheimer's Disease

Principal Investigator: Lingjun Li, Ph.D.

Agency: NIH

Type: R01 (R01AG052324-01A1)

Period: 1/15/18-12/31/22

TC: \$2,424,837

Received impact score of 27, 8% ranking at the EBIT panel on June 1, 2017.

39) Title: Exploiting ion mobility and high performance mass spectrometry for in-depth characterization of neuropeptides in hypoxia and pH stress

Principal Investigator: Lingjun Li, Ph.D.

Agency: NSF

Period: 9/1/17-8/31/20

TC: \$425,000

40) Title: In Situ Protein Characterization and Visualization in the Brain of a Mouse Model for Autism

Principal Investigators (Multi-PI): Lingjun Li, Ph.D.; Hrissanthi Ikonomidou, Ph.D.

Agency: NIH (R56 MH110215)

Type: NIMH R56

Period: 1/1/17-12/31/20

TC: \$714,666

41) Title: Acquisition of a High Resolution High Speed MALDI Mass Spectrometer for Biomedical Research at UW-Madison

Principal Investigator: Lingjun Li, Ph.D.

Agency: NIH

Type: S10 (S10OD025084) Shared Instrument Grant

Period: 2/01/18-1/31/19

TC: \$599,500

Received impact score of 19 at the BCMB-T panel on 9/28/2017. After two-levels of NIH review, this application was identified as belonging to the most meritorious for funding.

42) Title: Acquisition of a Dual-Source, High-Performance, Ion Mobility, Quadrupole Time-of-Flight Mass Spectrometry System for Biomedical Research at UW-Madison.

Principal Investigator: Lingjun Li, Ph.D.

Agency: NIH

Type: S10 (S10OD025084) High-end Shared Instrument Grant

Period: 6/01/21-5/31/22

TC: \$1,275,704

Received impact score of 21.

43) Title: Natural vs. Pathogenic Th17 Responses to Col Va1, Ka1 tubulin and Vimentin
Principal Investigator: Will Burlingham, Ph.D., Co-Investigator: Lingjun Li, Daniel Greenspan
Agency: NIH
Type: 1R01 GM108538-01A1
Period: 4/01/16-03/31/21
DC: \$250,000/year

44) Title: Combining microseparations and ion mobility mass spectrometry to probe peptidergic signaling in environmental stress
Principal Investigator: Lingjun Li, Ph.D.
Agency: NSF
Period: 9/1/14-6/30/17
TC: \$405,000

45) Title: Vilas Distinguished Achievement Professorship
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Office of the Provost and Vice Chancellor for Academic Affairs
Type: Unrestricted Research Funding
Period: 7/01/14-06/30/19
DC: \$75,000

46) Title: National Center for Quantitative Biology of Complex Systems
Principal Investigator: Joshua Coon, Ph.D.; Co-PIs: Lingjun Li, David Pagliarini
Technology and Research Development (TR&D) Project #1 Title: Isobaric Mass Tags for Ultra-plexed Protein Quantitation
TR&D 1 PI: Lingjun Li, Ph.D.
Agency: NIH
Type: NIGMS NIH P41
Period: 9/1/15-8/31/20
TC: \$5,657,542; DC: \$4,000,000 for the entire P41, Lingjun Li Portion DC: \$500,000

47) Title: Feeding state-dependent hormonal modulation of a well-defined microcircuit
Principal Investigator: Michael Nusbaum, Ph.D.; Co-PI: Lingjun Li, Ph.D.
Agency: NIH
Type: R01
Period: 4/1/16-3/31/21
TC: \$3,045,775, Lingjun Li Portion DC: \$652,865, TC: \$967,080

48) Title: Mass Spectrometric Profiling of Secreted Neuropeptides in the Stomatogastric Nervous System in Response to Feeding
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH/NIGMS
Type: NRSA F31 Predoctoral Fellowship to Kellen DeLaney
Period: 07/01/18-06/30/20
TC: \$62,384

Received Impact Score of 20, Ranked at 8%

49) Title: RESEARCH PGR: An interdisciplinary approach to deciphering molecular signaling pathways controlling plant-symbiont associations in legumes and cereals
Principal Investigator: Mike Sussman

Co-PIs: Jean-Michel Ane, Joshua Coon, Lingjun Li, Sushmita Roy

Agency: NSF

Type: NSF project grant

Period: 9/1/15-8/31/18

TC: \$3,851,096 for the entire NSF Project Grant

- 50) Title: Transformational platform for regenerating autologous transplantable endocrine tissue from human pancreatic matrix and pluripotent stem cells
Principal Investigator: Jon S. Odorico, MD, Co-investigators: Lingjun Li PhD., Sean Palecek PhD, Peiman Hematti MD.
Agency: NIH
Period: 07/01/16-06/30/19
TC: \$408,030
- 51) Title: Mass Defect-based Chemical Tags for Multiplex Glycan Quantitation
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH
Type: Glycoscience Common Funds R21
Period: 09/15/16-06/30/18
TC: \$621,152
- 52) Title: Acetyl-CoA flux and mitochondrial adaptation: a pathogenic role in aging and AD?
Principal Investigator: Luigi Puglielli, Co-I: Rozalyn Anderson, Lingjun Li, Ph.D.
Agency: NIH
Type: R01 (1RF1AG057408)
Period: 09/15/17-06/30/22
TC: \$3,533,415, Lingjun Li Portion TC: \$897,860
- 53) Title: Optical Imaging of Pancreas Cancer Organoids for Drug Development and Personalized Treatment
Principal Investigator: Melissa Skala, Co-Is: Dustin Deming, Lingjun Li, Ph.D.
Agency: NIH
Type: R01
Period: 08/01/17-07/31/22
TC: \$648,387 for Year 1
- 54) Title: Molecular Mechanism of Abdominal Aortic Aneurysm
Principal Investigator: Bo Liu, Co-Is: Emery Bresnick, Lingjun Li, Ph.D.
Agency: NIH
Type: R01
Period: 04/07/17-03/31/21
TC: \$499,585 for Year 1
- 55) Title: Targeting Lipid Regulation Pathways by Novel Small Molecules
Principal Investigator: Weiping Tang, Co-Is: Alan Attie, Lingjun Li, Ph.D.
Agency: NIH
Type: R01
Period: 08/01/17-06/30/21
TC: \$321,163 for Year 1
- 56) Title: Chemical Probes to Characterize the Functional States of O-GlcNAc Transferase
Principal Investigator: Jiaoyang Jiang, Co-Investigator, Lingjun Li, Ph.D.
Agency: NIH
Type: R01

- Period: 08/01/17-06/30/22
TC: \$293,389 Annual, Lingjun Li Portion TC: \$17,901
- 57) Title: Structure, Function and Regulation of Human O-GlcNAcase
Principal Investigator: Jiaoyang Jiang, Co-Investigator, Lingjun Li, Ph.D.
Agency: NIH
Type: R01
Period: 09/20/17-08/31/21
TC: \$289,628/yr, Lingjun Li Portion TC: \$7,000
- 58) Title: The Human Microbiome in Health and Disease
Principal Investigator: Cameron Currie, Co-Investigator, Lingjun Li, Ph.D.
Agency: UW VCRGE
Type: UW2020
Period: 05/01/17-06/30/18
TC: \$250,000
- 59) Title: US HUPO 2018: Technology Accelerating Discovery
Principal Investigators: Timothy Griffin (PI), Josh Coon (MPI), Lingjun Li (MPI), Laurie Parker (MPI)
Agency: NIH
Type: R13 Conference Grant (NIH support for conference and scientific meetings)
Period: 1/01/18-12/31/18
TC: \$10,000
Received impact score of 16.
- 60) Title: Developing Isobaric Multiplex Reagents for Carbonyl Containing Compound (SUGAR) Tags for High-Throughput Quantitative Glycomics
Principal Investigator: Lingjun Li, Ph.D.
Agency: UW Office of the Vice Chancellor for Research and Graduate Education
Type: Robert Draper Technology Innovation Fund (TIF) funding
Period: 1/15/18-12/31/18
DC: \$50,000
- 61) Title: Novel NeuCode Tagging Reagents for Identification and Quantification of Intact Proteoforms in Cancer Tissues
Principal Investigator: Lloyd Smith, Ph.D., Co-I: Lingjun Li
Agency: National Institute of Cancer/NIH
Type: R21
Period: 4/1/18-3/31/21
TC: \$597,690
- 62) Title: Multiplex Chemical Tags for High-Throughput Glycan and Glycopeptide Quantitation and Characterization
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH
Type: U01
Period: 7/01/18-6/30/21
TC: \$1,443,025
- 63) Title: A Novel Multi-Faceted Method for Large-Scale Characterization and Relative Quantitation of Citrullinated Proteins for Biological Samples and Its Application to Alzheimer's Disease
Principal Investigator: Lingjun Li, Ph.D.
Agency: NIH

Type: R21
 Period: 7/01/18-4/30/21
 TC: \$408,030

Misc. funding:

- Eli Lilly Analytical Young Investigator Travel Award (\$1,000)
- UW Graduate School
 Awards were approved as insurance grants for NSF CAREER and NIH R01 applications. Funds were not used due to successful obtaining external grant applications. Two separate awards of \$27,362 and \$18,000 were made.
- School of Pharmacy Robinson Faculty Travel Award (\$2,000)

TEACHING**Formal Course Assignments:**

Year	Semester	Course Number	Course Title	Enrollment
2003	Spring	Chem 638	Topics in Chemical Instrumentation: Introduction to Mass Spectrometry	20
		Chem 993	Thesis Research (Graduate)	2
		Pharm Sci 990	Thesis Research (Graduate)	1
	Summer	Chem 993	Thesis Research (Graduate)	2
		Pharm Sci 990	Thesis Research (Graduate)	1
	Fall	Pharm Sci 780	Principles in Pharmaceutical Sciences	6
		Pharm Sci 990	Thesis Research (Graduate)	2
		Chem 993	Thesis Research (Graduate)	5
		URS-250	Undergraduate Research Project	2
		Neuro 500	Neuroscience Seminars for Undergraduates	30
2004	Spring	Chem 638	Topics in Chemical Instrumentation: Introduction to Mass Spectrometry	36
		Chem 993	Thesis Research (Graduate)	5
		Chem 116	Chemical Principles II (Undergraduate Research Project)	1
		Pharm Sci 990	Thesis Research (Graduate)	2
	Summer	Chem 993	Thesis Research (Graduate)	5
		Chem 699	Directed Undergraduate Study	1
		Pharm Sci 990	Thesis Research (Graduate)	2
	Fall	Pharm Sci 780	Principles in Pharmaceutical Sciences	9
		Chem 993	Thesis Research (Graduate)	5
		Chem 699	Directed Undergraduate Study	3
		Pharm Sci 990	Thesis Research (Graduate)	2
2005	Spring	Pharm Sci 492	Selected Topics: Mass Spectrometry in Health Sciences	New course
		Chem 993	Thesis Research (Graduate)	5
		Chem 699	Directed Undergraduate Study	3
		Pharm Sci 990	Thesis Research (Graduate)	3
	Fall	Chem 622	Organic Analysis	16
		Pharm Sci 493	Biological Mass Spectrometry	16
		Pharm Sci 780	Principles in Pharmaceutical Sciences	6
		Chem 699	Directed Undergraduate Study	3
		Chem 993	Thesis Research (Graduate)	5
		Pharm Sci 990	Thesis Research (Graduate)	3
		Pharm Sci 999	Advanced Independent Study (1 st year graduate)	2
2006	Spring	Chem 993	Thesis Research (Graduate)	8

		Pharm Sci 990	Thesis Research (Graduate)	5
		Pharm Sci 699	Directed Undergraduate Study	4
	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	120
2007	Spring	Pharm Sci 780	Principles in Pharmaceutical Sciences (graduate students)	14
		Chem 993	Thesis Research (Graduate)	8
		Pharm Sci 990	Thesis Research (Graduate)	5
		Pharm Sci 699	Directed Undergraduate Study	1
		Chem 699	Directed Undergraduate Study	1
	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	118
		Pharm Sci 493/Chem 622	Biological Mass Spectrometry: Fundamentals and Applications	24
		Pharm Sci 780	Principles in Pharmaceutical Sciences (graduate students)	11
		Pharm Sci 990	Thesis Research (Graduate)	7
		Pharm Sci 999	Rotation Research (1 st year PharmSci graduate students)	3
2008	Spring	Chem 993	Thesis Research (Graduate)	8
		Pharm Sci 990	Thesis Research (Graduate)	7
		Chem 993	Thesis Research (Graduate)	9
	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	86
		Pharm Sci 780	Principles in Pharmaceutical Sciences (graduate students)	7
		Pharm Sci 990	Thesis Research (Graduate)	5
		Pharm Sci 999	First-Year Graduate Student Advising	2
		Chem 993	Thesis Research (Graduate)	9
2009	Spring	Pharm Sci 932	Pharmaceutical Sciences Seminars (for graduate students)	55
		Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	132
	Fall	Chem 622/Pharm Sci 493	Biological Mass Spectrometry: Fundamentals and Applications	18
2010	Fall	Pharm Sci 780	Principles in Pharmaceutical Sciences (graduate students)	14
		Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	128
		Pharm Sci 780	Principles in Pharmaceutical Sciences (graduate students)	6
		Pharm Sci 990	Thesis Research (Graduate)	8
		Chem 993	Thesis Research (Graduate)	7
2011	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	131
		Chem 622/Pharm Sci 493	Biological Mass Spectrometry: Fundamentals and Applications	19
		PharmSci 990	Thesis Research (Graduate)	7
		Chem 993	Thesis Research (Graduate)	7
		Neuroscience 990	Thesis Research (Graduate)	1
2012	Spring	PharmSci 699	Undergraduate Independent Research	4
		PharmSci 990	Thesis Research (Graduate)	8
		Chem 993	Thesis Research (Graduate)	9
	Summer	Neuroscience 675	Molecular Approaches to Neuroscience	14
	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	140
		PharmSci 990	Thesis Research (Graduate)	8
		Chem 993	Thesis Research (Graduate)	8
		Neuroscience 990	Thesis Research (Graduate)	1
		PharmSci 999	Rotation Student Research	1
		Chem 299	Undergraduate Research	1

		Chem 699	Undergraduate Independent Research	1
		PharmSci 699	Undergraduate Independent Research	3
2013	Spring	Medical Physics 719	Guest lecture 1	20
		PharmSci 990	Thesis Research (Graduate)	7
		Chem 993	Thesis Research (Graduate)	9
		Chem 299	Undergraduate Research	1
		Chem 699	Undergraduate Independent Research	2
	Summer	PharmSci 699	Undergraduate Independent Research	6
	Fall	Neuroscience 675	Molecular Approaches to Neuroscience	14
		Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	136
		Chem 622/Pharm Sci 493	Biological Mass Spectrometry: Fundamentals and Applications	28
		PharmSci 990	Thesis Research (Graduate)	9
		Chem 993	Thesis Research (Graduate)	7
		Neuroscience 990	Thesis Research (Graduate)	1
		PharmSci 999	Rotation Student Research	2
		PharmSci 699	Undergraduate Independent Research	4
2014	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	131
2015	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	150
		Chem 622/Pharm Sci 493	Biological Mass Spectrometry: Fundamentals and Applications	28
	Winter	Jilin University College of Pharmacy	Biological Mass Spectrometry: Fundamentals and Applications	70
2016	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	145
	Spring	Tianjin University	Biological Mass Spectrometry: Fundamentals and Applications	
2017	Fall	Pharm Sci 432	Pharmaceutical Biochemistry (for 1 st -year PharmD students)	144
		Chem 622/Pharm Sci 493	Biological Mass Spectrometry: Fundamentals and Applications	29 (2 audits)
2018	Spring	MCP	Molecular and Cellular Principles in Pharmacology	15

Research Training:

Graduate Students Supervised – Ph.D. (92 total, 23 current, 65 graduated with PhD degrees, 4 MS degrees)

Qiang Fu	Peking University, B.S. and M.S. Chemistry	2002-2006
•	Thesis: <i>Global analysis of neuropeptides in a small nervous system and mass spectrometric study of gas-phase fragmentation of protonated biomolecules</i> ; Ph.D. July 2006; Senior Scientist, Schering-Plough	
Kimberly Kutz-Naber	UW-Whitewater, B.S. Chemistry	2002-2006
•	Thesis: <i>Mass spectral characterization of neuropeptides in Cancer crabs: method development and biological application</i> ; Ph.D. December 2006; Declined job offers from UW-Whitewater and UW-Rock County due to family reasons	
Joshua Schmidt	Bethel College, B.S. Chemistry, Biology, and Biochemistry	2002-2007
•	Thesis: <i>From crabs to hamsters: bioanalytical mass spectrometry for peptidomic analysis and biomarker discovery</i> ; Ph.D. August 2007; Scientist, Bruker Daltonics	
Stephanie DeKeyser (Cape)	University of Illinois at Urbana-Champaign	2003-2007
•	Thesis: <i>Development of mass spectrometric techniques for the analysis of neuropeptides: differential display, quantitation, and imaging</i> ; Ph.D. December 2007; Associate Director, Covance Inc.	
Heidi Behrens	University of California-Irvine	2003-2008

- Thesis: *Coupling in vivo microdialysis sampling to mass spectrometry to monitor neuropeptide secretion in a decapod crustacean*; Ph.D. June 2008; Postdoctoral fellow, UC-Irvine
- James Dowell University of Kansas 2003-2008
- Thesis: *Mammalian neuroproteomics and neuropeptidomics: analysis by mass spectrometry*; Ph.D. August 2008; Assistant Scientist, Wisconsin Institute of Discovery, 2012-
- Mingming Ma Zhejiang University 2004-2008
- Thesis: *Exploring neuropeptidomes via novel mass spectral techniques*; Ph.D. December 2008; Senior Scientist, Dow AgroSciences Inc.
- Ruibing Chen Peking University 2005-2009
- Thesis: *Multi-faceted mass spectrometric approaches for the analysis of neuropeptides in crustacean: toward functional discovery*; Ph.D. December 2009; Associate Professor, Tianjin Medical University
- Xin Wei Hongkong Baptist University 2005-2010
- Thesis: *Facilitating protein identification and biomarker discovery by chromatographic separation and mass spectrometry*; Ph.D. January 2010; Postdoctoral Associate, University of North Carolina at Chapel-Hill (Prof. Xian Chen)
- Jiang Zhang Tongji University 2005-2010
- Thesis: *Exploring the Cardiac Proteome: Integrating Bottom-up and Top-down Mass Spectrometry Strategies*; Ph.D. August 2010; Postdoctoral Fellow, Northwestern University (Profs. Bill Funk and Neil Kelleher)
- Feng Xiang Sichuan University (BS in Chemistry), South Dakota State Univ. (MS) 2006-2011
- Thesis: *Developing Novel Labeling Tools for Neuropeptide Quantitation and Identification by Mass Spectrometry*; Ph.D. March 2011; Scientist, Dow Chemicals Inc.
- Yuzhuo Zoe Zhang Peking University (BS in Chemistry) 2006-2011
- Thesis: *Neuropeptidomic Studies in Crustacean via Multi-faceted Mass Spectrometric Techniques*; Ph.D. April 2011; Scientist, Blue Stream Laboratories.
- Xiaoyue Jiang Nankai University (BS in Biochemistry) 2007-2011
- Thesis: *Neurotransmitters in Crustaceans: Expression, Quantitation and Distribution Probed by Mass Spectrometry*; Ph.D. September 2011; Scientist, Thermo Fisher Scientific Inc.
- Limei Hui Peking University (BS in Chemistry) 2006-2012
- Thesis: *Neuropeptidomic Probed by Mass Spectrometry*; Ph.D. May 2012; Senior Scientist, PPD, Inc.
- Weifeng Cao East China University of Science and Technology (BS in Chemistry) and University of Missouri-Rolla (MS in Analytical Chemistry) 2006-2012
- Thesis: *MS Informatics: Using Bioinformatic Tools to Enhance MS-based Neuropeptidomics and Proteomics*; Ph.D., May 2012; Software Engineer, Huawei Technologies Co. Ltd.
- Robert Sturm Aquinas College (BS in Chemistry and Biology) 2007-2012
- Thesis: *Mass Spectrometry Method Development for Targeted and Discovery Neuroproteomics and Peptidomics*; Ph.D., September 2012; Research Scientist at Advion Bioanalytical Labs/Quintiles Co.
- Robert Cunningham University of Northern Iowa (BS in Chemistry and Biology) 2007-2012
- Thesis: *Mass Spectrometry Applications for Comparative Proteomics and Peptidomic Discovery*; Ph.D., October 2012; Research Scientist at ThermoFisher Scientific/Pierce Inc..
- Di Ma Peking Union Medical College (MS in Microbiology) 2007-2012
- Thesis: *Comparative Proteomic Profiling and Biomarker Discovery in Complex Biological Samples by Mass Spectrometry*; Ph.D., November 2012; Senior Scientist, PPD, Inc.; Wuxi AppTech
- Claire Schmerberg Northwestern University 2007-2012
- Thesis: *Functional Neuropeptidomics in the Decapod Crustacean: Method Development and Application to Behavioral Neuroscience Research*; Ph.D., December 2012; Postdoctoral Researcher, Duke University, School of Medicine
- Vivian Hui Ye Sichuan University, BS in Chemistry 2008-2013
- Thesis: *A Mass Spectrometry Imaging-Based Platform: Towards Discovery in Metabolomics, Neuropeptidomics and Proteomics*; Ph.D., May 2013; Associate Professor, China Pharmaceutical University
- Zichuan Zhang Peking University Health Sciences Center, BS and MS in Pharmaceutical Sciences, 2008-2013

- Thesis: *Novel Micro-Separation Techniques and Their Couplings to Mass Spectrometry for the Analysis of Complex Peptides and Proteins*; Ph.D., May 2013; Senior Scientist, PPD, Inc.
- Nicole Woodards University of New Mexico, BS in Chemistry and BA in Criminology 2007-2013
- Thesis: *Mass Spectral Analysis of Crustacean Signaling Peptides Using a Multi-dimensional Strategy*; Ph.D., August 2013; Chemist, Department of Agriculture for the State of Wisconsin
- Chenxi Jia Tianjin University, Ph.D. in Chemical Engineering, Tianjin University 2009-2013
- Thesis: *A Mass Spectrometry-Based Neuropeptide Discovery Pipeline: Sequence, Structure and Functionality*; Ph.D., December 2013; Associate Professor (Principal Investigator), National Center for Protein Sciences – Beijing (PHOENIX), Beijing Proteomics Research Center, China
- Tyler Greer University of Michigan, BS in Chemistry 2009-2014
- Thesis: *Advancing Mass Spectrometry Methods for Quantification and Characterization of Peptides and Proteins in Complex Biological Samples*; Ph.D., November 2014; senior scientist, Regeneron Inc.
- Dustin Frost University of Wisconsin, BS in Chemistry 2009-2015
- Thesis: *Development and Application of Novel Chemical Labels for Highly Multiplexed Quantitative Proteomics by Mass Spectrometry*; Ph.D., May 2015; Postdoctoral Associate, UW-Madison
- Chenxi Yang East Tennessee State University, BS in Chemistry 2008-2010
- Thesis: *Revealing Differential Proteomic Events in Various Biological Systems by Mass Spectrometry*; Ph.D., June 2015; Lecturer, Wuhan Technology University, Wuhan, China
- Chris Lietz Wayne State University, BS in Chemistry 2011-2016
- Thesis: *Novel Mass Spectrometry-based Method Development and Applications to Signaling Peptides and Proteins*; Ph.D., January 2016; NRSA Postdoctoral Fellow, University of California-San Diego, Prof Vivian Hook and Prof. Nuno Bandeira
- Erin Gemperline Carthage College, BA in Chemistry and Theatre 2011-2016
- Thesis: *Method Development and Application of Mass Spectrometry Imaging to Study Symbiotic Relationships between Bacteria and Host Organisms*; Ph.D., April 2016; Senior Scientist, Dow AgroSciences Inc.
- Zhidan Liang Tianjin University, BS in Pharmaceutical Sciences, MS in Medicinal Chemistry 2010-2016
- Thesis: *Neuropeptide Signaling in Crustaceans Probed by Mass Spectrometry*; Ph.D., May 2016; Postdoctoral Fellow, Merck Co.
- Jingxin Wang Harbin Medical University, MD (Bachelor of Clinical Medicine) 2011-2016
- Thesis: *Mass Spectrometric Application in Neuroscience*; Ph.D., April 2016; Medical Resident in Neurology, Baylor College of Medicine
- Shan Jiang Shenyang Pharmaceutical University, Bachelor in Pharmacy Degree, School of Pharmacy 2011-2016
- Thesis: *Investigation of Neuropeptidomics and Proteomics by Multifaceted Approaches Coupled to Mass Spectrometry*; Ph.D., October 2016; Senior Scientist, Boehringer Ingelheim.
- Chuanzi OuYang University of Science and Technology (USTC), BS in Chemistry, 2002-2007; Virginia Tech, MS in Polymer Physics, 2007-2010 2010-2016
- Thesis: *Neuropeptides in Crustaceans: Expression, Quantitation and Distribution Probed by Multi-Dimensional Mass Spectrometric Approaches*; Ph.D., December 2016; Postdoctoral Fellow at Professor Hui Zhang's lab, Johns Hopkins University
- Bingming Chen University of Wisconsin-Madison, BS in Biochemistry and Microbiology 2012-2017
- Thesis: *Development of Matrix-Assisted Laser Desorption/Ionization and Liquid Chromatography-Electrospray Ionization Based Mass Spectrometric Techniques for Characterizing and Quantifying Endogenous and Therapeutic Biomolecules*; Ph.D., March 2017; Senior Scientist, Merck Co.
- Qing Yu Tianjin University, BS in Pharmaceutical Sciences 2012-2017
- Thesis: *Advancing Qualitative and Quantitative Proteomics/Peptidomics via Development of Novel Mass Spectrometry-Based Approaches*; Ph.D., April 2017; Postdoctoral Fellow in Professor Steven Gygi's lab, Harvard Medical School
- Ling Hao China Agricultural University, BS in Chemistry 2012-2017
- Thesis: *Advancing Mass Spectrometry-Based Metabolomics and Proteomics: From Method Development to Disease Applications*; Ph.D., May 2017; Postdoctoral Fellow, NIH/NINDS; Assistant Professor, Department of Chemistry, George Washington University
- Amanda Buchberger Jones University of Wisconsin-Eau Claire, BS in Chemistry 2013-2018

- Thesis: *Development and Application of Quantitative and Qualitative Mass Spectrometry Techniques to Probe Crustacean Neuropeptides and Beyond*; Ph.D., June 2018; Postdoctoral Fellow, Prof. Rebekah Gundry's Lab at Medical College of Wisconsin
- Zhengwei Tony Chen China Pharmaceutical University, MS in Pharmaceutical Analysis 2013-2018
- Thesis: *Advancing Mass Spectrometry Methods for Glycosylation Analysis and Their Application to Disease-related Glyco-alteration Study*; Ph.D., July 2018; Senior Scientist, Regeneron, Inc.
- Xueqin Pang Sichuan University, BS in Bioengineering and English, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, PhD in Physical Chemistry 2013-2018
- Thesis: *Integrating Supervised/Unsupervised Machine Learning and Molecular Modeling with Ion Mobility Mass Spectrometry: Novel Multidisciplinary Approach for Neuropeptide Characterization*; Ph.D., August 2018; Analyst, Children's Hospital of Philadelphia.
- Fengfei Ma China Pharmaceutical University, BS in Pharmacy 2013-2018
- Thesis: *Advancing Bottom-up Proteomics and PTM Characterization via Development of Novel Mass Spectrometry-based Approaches*; Ph.D., September 2018; Senior Scientist, Merck Co.
- Qinjingwen Cao University of Science and Technology of China (USTC) BS in Chemistry 2014-2019
- Thesis: *Biofunctional Molecule Discovery and Characterization via Multifaceted Mass Spectrometry Approaches*; Ph.D., May 2019; Scientist, Regeneron Pharmaceuticals.
- Caitlin Keller Valparaiso University BS in Biochemistry 2014-2019
- Thesis: *Mass Spectrometry Method Development and Application to Investigate Plant-Microbe and Microbiome-Host Symbiosis*; May 2019; Scientist
- Xiaofang Zhong Wuhan University BS in Pharmaceutical Sciences and MS in Microbiology & Biochemical Pharmacy 2014-2019
- Thesis: *Advancing Mass Spectrometry-based Discovery and Targeted Approaches for Disease Proteomic and PTM Analyses*; Ph.D., May 2019; Postdoctoral Research Associate, UCSF, Prof. Nevan Krogan Lab.
- Yu Feng Peking University BS in Chemistry and Economics 2015-2019
- Thesis: *Developing and Applying Cutting-Edge Mass Spectrometry Technology for Qualitative and Quantitative Biomolecule Characterization*; Ph.D., July 2019; Scientist, Regeneron Pharmaceuticals.
- Jillian Johnson Rensselaer Polytechnic Institute (RPI) BS in Biology 2013-2019
- Thesis: *The Power of Mass Spectrometry Imaging in Pharmaceutical Development: Biomarker & Drug Penetration Analysis*; Ph.D., July 2019; Senior Scientist, GSK.
- Samuel Thomas University of Wisconsin-Stevens Point BS in Water Resources and Chemistry 2014-2019
- Thesis: *A systems biology perspective on environmental exposures and inflammation in prostatic diseases via mass spectrometry*; Ph.D., May 2019; Postdoctoral Research Associate, UW-Madison, Prof. Joel Pedersen Lab.
- Yang Liu Jilin University, BS in Chemistry 2014-2019
- Thesis: *Mass Spectrometry-based Neuropeptidomic Study and Functional Discovery of Signaling Peptides*; Ph.D., November 2019; Application Scientist, Thermo Fisher Scientific, Life Sciences Mass Spectrometry, Proteomics.
- Yatao Shi China Pharmaceutical University BS Pharmacy; MS Natural Medicine Chemistry and Pharmaceutical Analysis 9/2014-12/2019
- Thesis: *Development of Enabling Tools for Global Profiling and Quantitative Analysis of Protein Post-translational Modifications*; Ph.D., December 2019; Proteomics Scientist, Kymera Therapeutics.
- Pingli Wei China Pharmaceutical University BS Pharmacy 2015-2020
- Thesis: *Method Development and Application of Mass Spectrometry-based Omics Analyses*; Ph.D., May 2020; Associate Research Scientist, PPD.
- Kellen DeLaney The Pennsylvania State University BS Chemistry 2015-2020
- Thesis: *Mass Spectrometry Methods and Applications for Functional Characterization of the Crustacean Neuropeptidome*; Ph.D., June 2020; Postdoctoral Research Associate, University of Maryland at College Park, Prof. Peter Nemes Lab. Senior Scientist, Waters Corp.
- Yusi Cui University of Science and Technology BS Chemistry 2016-2021
- Thesis: *Development and Application of Isobaric Labeling, ERLIC Separation, and Chemoproteomics Methods for Bioanalytical Research*; Ph.D., June 2021; Scientist, Genentech.

- Qinying Yu Shandong University BS Pharmacy 2016-2021
- Thesis: *Expanding the Application of Mass Spectrometry-based Qualitative and Quantitative Strategies in “Omics” Studies*; Ph.D., October 2021; Scientist, Genentech.
- Zihui (Jerry) Li Jilin University BS Chemistry 2016-2021
- Thesis: *Advancing Quantitative Proteomics and Protein Post-translational Modification Analyses by Multi-Dimensional Mass Spectrometric Approaches*; Ph.D., October 2021; Scientist, Amgen.
- Christopher Sauer University of Minnesota BS Chemistry 2016-2021
- Thesis: *Development of Multiplex Mass Spectrometry Methods for Probing the Response to Copper Toxicity in the Blue Crab*; Ph.D., December 2021; Scientist, Janssen.
- Miyang (Mike) Li National University of Defense Technology/PKU BS Chemistry 2017-2022
- Thesis: *Development of Novel Chemical Probes to Facilitate the Qualitative and Quantitative Analysis of Biomolecules Enabled by Mass Spectrometry*; Ph.D., June 2022; Scientist, Gilead.
- Meng Xu University of Wisconsin-Madison BS Biochemistry 2017-2022
- Thesis: *Mass Spectrometry Imaging for Multimodal, Multiomic Analysis and Quantification*; Ph.D., June 2022; Representative, Bruker.
- Nhu Vu California State University BS Biochemistry 2017-2022
- Thesis: *Discovery and Quantification of Crustacean Neuropeptides Using Mass Spectrometry and Informatics Approaches*; Ph.D., December 2022; Scientist, Amgen.
- Daniel Graham Delafield University of Oklahoma BS: Biochemistry/Music; MS: Analytical Chemistry 2018-2023
- Thesis: *Standing in the Way of Profiling Depth: How the Selection of Chromatography and Mass Spectrometry Data Acquisition Limit Our View of the Proteome*; Ph.D., March 2023; Scientist, Calico.
- Ashley Phetsanthad Drexel University BS and MS in Chemistry 2018-2023
- Thesis: *Developing Mass Spectrometry for the Enhanced Characterization of Biomolecules in the Nervous System*; Ph.D., March 2023. Postdoc UW-Madison
- Danqing Wang Fudan University BS Chemistry 2018-2023
- Thesis: *Development and Application of Mass Spectrometry Methods for Proteomics and Protein Post-translational Modification Analysis*; Ph.D., May 2023; Scientist, Genentech.
- Bin Wang Tianjin University BE Chemical Engineering, MS Biology 2018-2023
- Thesis: *Advancing Multi-Dimensional Mass Spectrometric Approaches for Protein Citrullination/Structural Proteomics Analysis and Their Biomedical Applications*; Ph.D., May 2023; Scientist, Merck.
- Ting-Jia (Gutin) Gu National Taiwan University BS and MS Chemistry 2018-2023
- Thesis: *Development and Application of Isobaric Labeling Strategy for Multiplexed Relative Quantification of Biomolecules in Complex Biological Samples*; Ph.D., May 2023; Scientist, Genentech.
- Yuan Liu Wuhan University BE Biopharmaceuticals 2018-2023
- Thesis: *Method Development and Application of Mass Spectrometry for Better Understanding of Disease Mechanisms and Diagnosis*; Ph.D., May 2023; Postdoc, Columbia University (Prof. Yonghao Yu’s lab).
- Dylan Tabang University of Illinois at Chicago BS Chemistry 2018-2023
- Thesis: *Leveraging Mass Spectrometry to Probe Protein Post-translational Modifications in Pancreatic Disease*; Ph.D., June 2023; Postdoc, Boston Children’s Hospital/Harvard Medical School (Prof. Hanno/Judith Steen’s labs).
- Jericha Mill Butler University BS Chemistry; BA French Language 2018-2023
- Thesis: *Mass Spectrometry Techniques for Metabolomic Studies of Aging and Age-related Diseases*; Ph.D., June 2023; Postdoc, UW-Madison (Prof. Judith Simcox’s lab).

A. Current group members

Postdoctoral Associates (5): Dr. Min Ma (Tianjin Univ.), Dr. Hua Zhang (Jilin Univ.); Dr. Haiyan Lu (Jilin University); Dr. Shuling Xu (Chinese Academy of Agricultural Sciences), Dr. Wei (Wilson) Li (China Pharmaceutical University)

Graduate Students (23): Wenxin Wu, Zhijun Zhu, Zicong Wang, Hannah Miles, Malik Ebbini, Haoran Zhang, Olga Riusech, Zexin Zhu, Lauren Fields, Peng-Hsuan (Timo) Huang, Angel Ibarra, Cameron Kaminsky, Peng-Kai Liu, Gaoyuan Lu, Feixuan Wu,

- Jingwei Zhang, Eric Chiang, Tina Dang, Thao Duong, Mitch Gray, Kelly Lu, Huong (Jacey) Tran, Ching-Yuan (Lily) Yang
- Rotation Students* (17): Yuge Han Bryner, Bin Wang, Xueqing Nie, Jericha Mill, Jiabao Guo, Ashley Phetsanthad, Dylan Tabang, Jake Melby, Danqing Wang, Elizabeth Bayne, Trent Peters-Clarke, Ting-Jia Gu, Ao Wang, Junguang Yu, Yuan Liu, Xiangmei Hua, Adam Drelich
- Undergraduates* (6): Kylie Helfenbein, Michael Wong, Robert Chubb, Trinh Ngoc Viet Trinh, Clara Hu, Eric Miesbauer, Xindi Tang, Michael James, Megan Ford, Caroline Roycroft, Qianlu (Farrah) Feng, Simon Yen, Jenny Park, Swayam Chakraborty
- High School Intern* (1): Jason Yang

B. Former group members

- Assistant Scientist* (1): Dr. Dustin Frost (Now Senior Scientist at Thermo Fisher Scientific)
- Visiting Professors* (6): Prof. Dr. Yan Liu (Department of Chemical Biology, College of Chemistry and Chemical Engineering, Xiamen University, P.R. China); Dr. Wei Wang, Department of Chemistry, Fuzhou University, Fujian, China; Dr. Shengli Han (School of Pharmacy, Xi'an Jiaotong University); Dr. Xin Peng (School of Life Sciences, Tianjin University); Dr. Haidan Sun (Peking Union Medical College); Professor Xiangwei He (Beijing Forest University); Professor Rui Liu (Nanjing University of Chinese Medicine); Professor Xiaorong Lin (South China Agricultural University)
- International Exchange Students* (4): Jinxin Dou, Vanessa Linke, Ruohong Rachel Shi, Yijia Wang
- Postdoctoral Fellow* (9): Dr. Yun Wang (Current position: Dept of Analytical Development, PPD, Inc.), Dr. Junhua Wang (Current position: Senior Scientist, Denali Therapeutics), Dr. Jun Wang (PPD, Inc.)
- Dr. Chenxi Jia (Current position: PI and faculty at the PHOENIX National Center for Protein Sciences, Beijing Proteomics Research Center, China)
- Dr. Xuefei Zhong (Current position: postdoc at University of Washington-Seattle)
- Dr. Matthew Glover (Current position: Senior Scientist, MedImmune)
- Dr. Xiaofang Zhong (Current position: Postdoc Associate, UCSF)
- Dr. Gongyu Li (Current position: Assistant Professor at Nankai University)
- Dr. Junfeng Huang (Current position: Associate Professor, Guangzhou Institute of Biomedicine and Health, Chinese Academy of Sciences)
- Ph.D. Graduates* (65): Qiang Fu (Current position: Senior Scientist, Merck)
- Stephanie DeKeyser (Cape) (Current position: Senior Scientist, Covance, Inc.)
- Kimberly Kutz-Naber (Current position: Lecturer at UW-Whitewater)
- Joshua Schmidt (Current position: Scientist, Bruker Daltonics)
- Heidi Behrens (Current position: Lecturer, San Diego State University)
- James Dowell (Current position: Assistant Scientist, Wisconsin Institute of Discovery)
- Mingming Ma (Current position: Senior Scientist, Dow AgroSciences)
- Ruibing Chen (Current position: Professor, Tianjin Medical University)
- Xin Wei (Current position: Senior Scientist, Procter & Gamble, Inc.)
- Jiang Zhang (Current position: Postdoctoral fellow, University of California at Los Angeles, Professor Joseph Loo Lab)
- Zoe Zhang (Current position, Scientist, Leoch Battery Corp.)
- Feng Xiang (Current position: Analytical Scientist, Dow Chemicals Inc.)
- Limei Hui (Current position: Senior Scientist, PPD, Inc.)
- Weifeng Cao (Current position: Engineer, Huawei Technologies Co. Ltd)
- Robert Sturm (Current position: Research Scientist at Advion Bioanalytical Labs/Quintiles Co.)
- Robert Cunningham (Current position: Research Scientist at Thermofisher Scientific/Pierce Inc.)
- Di Ma (Current position: Senior Scientist, PPD, Inc.)

- Claire Schmerberg (Current position: Postdoc at Dr. William Wetsel's lab at Duke University School of Medicine)
- Vivian Hui Ye (Current position: Associate Professor, China Pharmaceutical University)
- Zichuan Zhang (Current position: Senior Scientist, PPD, Inc.)
- Nicole Woodards (Current position: Scientist, Wisconsin State Hygiene Lab)
- Chenxi Jia (Current position: PI, Associate Professor, Phoenix National Center of Protein Sciences, Beijing China)
- Tyler Greer (Current position: Senior Scientist, Regeneron)
- Dustin Frost (Current position: Postdoctoral Associate, UW-Madison)
- Chenxi Yang (Current position: Lecturer, Wuhan Technology University, China)
- Chris Lietz (Current position: Postdoctoral Associate, UC-San Diego)
- Erin Gemperline (Current position: Senior Scientist, Dow Agrosiences Inc.)
- Zhidan Liang (Current position: Postdoctoral Fellow, Merck Co.)
- Jingxin Wang (Current position: Medical Resident in Neurology, Baylor College of Medicine)
- Shan Jiang (Current position: Senior Scientist, Boehringer Ingelheim)
- Chuanzi OuYang (Current position: postdoctoral Fellow, Johns Hopkins University)
- Bingming Chen (Current position: Senior Scientist, Merck Co.)
- Qing Yu (Current position: Postdoctoral Fellow, Harvard Medical School)
- Ling Hao (Current position: Postdoctoral Fellow, NIH/NINDS)
- Amanda Buchberger (Current position: Postdoctoral Fellow, Medical College of Wisconsin)
- Zhengwei (Tony) Chen (Current position: Senior Scientist, Regeneron Inc.)
- Kellen DeLaney, Pingli Wei, Zihui Jerry Li, Yusi Cui, Chris Sauer, Qinying Yu, Nhu Vu, Meng Xu, Mike Li, Graham Delafield, Dylan Tabang, Danqing Wang, Jericha Mill, Ashley Phetsanthad, Bin Wang, Ting-Jia Gu, Yuan Liu,
- M.S. Students (7):* Kankai Chen (Current position: Sanofi-Aventis R&D), Christopher Collington
- John Dopp (MS Program in Clinical Investigation, current position: Assistant Professor at School of Pharmacy, UW-Madison)
- Zichuan Tian (Facebook)
- Jiabao Guo
- Michael Sivanich (Scientist-Mass Spectrometry, PPD)
- Maixee Yang (Chemistry Technologist, Wisconsin Diagnostic Laboratories)
- Rotation Students (46):* Joe Su, Yu Huang, Jun Huang, Xiaohua Zheng, Jing Chen, Hanmi Xi, Michael Levine (MD/PhD), Laurelis Santiago, April Jue, Kenneth Simmons, Di Ma, Javier Velasco, Siwei Zhang, Qiyao Li, Wei Zhang, Nicholas W. Kwiecien, Matt Dorris, Niyanta Kumar, Rattavut Teerakapibal, Zhilin Yang, Yinshan Chen, Yutong Jin, Paul Hutchins, Vanessa Linke, Lei Lu, Ka Yang, Pawel Zbyszynski, Shaurya Chanana, Katie Buxton, Casey Howdieshell, Zach Rolfs, Kyle Brown, Dain Brademan, Yumin Lian, Abe Wu, Leah Schaffer, Trisha Tucholski, Mike Li, Nhu Vu, Meng Xu, Xiaolei Li, Xin Yao, Sean Peters, Laura Muehlbauer, Yuhui Li
- Undergraduates (52):* Shelly Heinzelman, Amara Pulver (URS program, currently School of Nursing), Martin Treu, Christopher Schlieve, Mingzi Zhang (URS program), Adonis Ducre (NSF REU student through SRP-Bio program), William Vander Heyden (Currently graduate student in Neuroscience Dept at Washington Univ.), Nathan Smith, Anne Drehfal, Megan Kultgen (Currently PharmD student), Jin Young Maeng, Yuet Fai (Gordon) Tse, Teresa Chiang, Jeffrey Guokas, Dustin Frost, Justin Vrana, Eric Mortensen, Charles Dulberger (Research specialist in Prof. Michael Cox's lab at UW-Madison), Philip Song, Dae Kyu Choi, Claire Seidler, Carol Lam, Jenny Vue, Andy Kozicki, Gajan Muthuvel (UW-Madison, Medical Schhol), Katherine Zimny (School of Pharmacy, UW-Madison), Brock Hensen (Epic), Daniel Wellner (School of Pharmacy, UW-Madison), Chen Chen (Purdue

Univ Grad School), Lauren Putterman (School of Pharmacy, UW-Madison), Kevin Hayes, Maxwell Meller, Yuanyuan Qiu, Jun Kuang, Grover Chang, James Bychinski, Anatoliy Nechyporenko (UW-Madison, Medical School), Sujin Yoo, Katie Lynn, Albert Kim, Bowen Hu (UC-Berkeley), Fatima Khusro (UW-Madison, PharmD program), Eric Englin, Kallie Grassinger, Stephanie Rawson, Ahn Van, Danny Liang, Catherine Pearce, Yanrong Ji (now a PhD student at Northwestern University), Meng Xu (now a PhD student in Chemistry Dept at UW-Madison), Matthew Huppert (now a PharmD student at UWM), Clayton Rust

High School Students (4): Mary Q. Zhang (MIT, Department of Biomedical Engineering), Connie Wang, Santhoshini Ramani, Kelly Shen (UC-Berkeley)

Visiting Student (1): Aryel Lyra (Brazil Scientific Mobility Program)

Joint supervision of Loren Stallcop (Biomedical Engineering/GSTP) with Prof. David Beebe

C. Student awards

Heidi Behrens	NIH Biotechnology Traineeship
Heidi Behrens	American Chemical Society (ACS) Women Chemists Committee Travel Award
Heidi Behrens	Vilas Travel Fellowship
Amanda Buchberger	NRSA F31 Predoctoral Fellowship (score 20, 9%)
Amanda Buchberger	Invited Participant of the 67 th Lindau Nobel Laureate Meeting (June 2017)
Amanda Buchberger	Chemistry Department Catalyst Mentor Award (2017)
Amanda Buchberger	ASMS Sanibel Conference Student Travel Award, 2017
Amanda Buchberger	Wisconsin Initiative for Science Literacy (WISL) Award for Communicating Graduate Chemistry Research to the Public, 2018
Weifeng Cao	Vilas Travel Fellowship 2009
Qinjingwen Cao	UW GSFLC Travel Award, 2018
Bingming Chen	UW School of Pharmacy HHMI Predoctoral Fellowship Finalist
Bingming Chen	UW School of Pharmacy Witiak Graduate Student Travel Award 2014-2015
Bingming Chen	2014 WARF Discovery Challenge Research Award
Bingming Chen	2017 ASMS Graduate Student Travel Award
Ruibing Chen	Vilas Travel Fellowship
Ruibing Chen	Department of Chemistry Graduate Travel Award
Ruibing Chen	Gary Parr Memorial Award for outstanding bioanalytical chemistry student
Ruibing Chen	Society for Neuroscience Graduate Student Travel Award
Zhengwei Chen	Chinese American Chromatography Association Excellent Student Award 2018
Zhengwei Chen	Chinese American Chemical Society Great Lakes (GLCACS) Chapter 22 nd Annual Conference Student Research Presentation Contest, 3 rd Prize, 2018
Robert Cunningham	Vilas Travel Fellowship
Yusi Cui	University Housing's Honored Instructor Award 2017
Yusi Cui	Department of Chemistry Schrag Travel Award 2018
Stephanie DeKeyser	Merck Travel Award
Stephanie DeKeyser	NRSA Predoctoral Fellowship (score 162, 12.8% percentile)
Stephanie DeKeyser	Pfizer ACS Analytical Division Graduate Travel Award
Kellen DeLaney	UW Cardiovascular Research Center, NRSA Traineeship, Training Program in Translational Cardiovascular Science (2017-2019)
Kellen DeLaney	ASMS Sanibel Conference Student Travel Award, 2017
Kellen DeLaney	NRSA F31 Predoctoral Fellowship (score 20, 8%), 2018-2020
Kellen DeLaney	GSFLC Travel Award, 2018
James Dowell	American Foundation for Pharmaceutical Education (AFPE) Fellowship
James Dowell	Witiak Graduate Student Travel Award
Yu Feng	Pharmaceutical Sciences Graduate Travel Award 2017-2018
Yu Feng	2018 Asilomar Conference on Quantitative PTM Analysis, Student Travel Award
Dustin Frost	Rennebohm TA Award 2010
Dustin Frost	IEDR Program, Wisconsin Alumni Research Foundation Technology Development Research Assistantship, 2012

Dustin Frost	Pharmaceutical Sciences Graduate Travel Award, 2013
Dustin Frost	School of Pharmacy Dissertation of the Year Award, 2015
Qiang Fu	Vilas Travel Fellowship
Qiang Fu	Merck Analytical/Physical Graduate Fellowship
Qiang Fu	Cohen-McElvain Travel Grants
Qiang Fu	Research Excellence Award in Analytical Chemistry, UW-Madison
Qiang Fu	American Chemical Society Division of Analytical Chemistry Graduate Fellowship
Qiang Fu	American Association for Pharmaceutical Scientist (AAPS) Graduate Student Symposium in Analysis and Pharmaceutical Quality Award
Erin Gemperline	NSF Graduate Research Fellowship (2013-2016)
Erin Gemperline	UW-Madison Finalist for Graduate Student Awards for the Lindau Meeting of Nobel Laureates and Students (2013)
Erin Gemperline	Graduate Student/Faculty Liaison Committee Travel Award, UW-Madison (2014)
Erin Gemperline	American Society for Mass Spectrometry Travel Stipend Recipient (2014)
Erin Gemperline	2015 Vilas Travel Award Recipient, UW-Madison
Erin Gemperline	Research Excellence Award in Analytical Chemistry, UW-Madison (2015)
Erin Gemperline	Department of Chemistry GSFLC Mentor Award (2015)
Erin Gemperline	Gary Parr Memorial Award for outstanding bioanalytical chemistry student (2016)
Erin Gemperline	Leah Berk Award for a top female graduate student in Department of Chemistry (2016)
Erin Gemperline	The WISL Award for Communicating Graduate Chemistry Research to the Public (2016)
Tyler Greer	Outstanding Chemistry Teaching Assistant Award (2010-2011)
Tyler Greer	Department of Chemistry Graduate Travel Award
Jillian Johnson	2017 William J. Tillman Teaching Award
Kimberly Kutz	NIH Chemistry-Biology Interface Training Grant
Kimberly Kutz	Department of Chemistry Teaching Assistant Excellence Award
Kimberly Kutz	Gary Parr Memorial Award for outstanding bioanalytical chemistry student
Kimberly Kutz	Vilas Travel Fellowship
Ling Hao	Drug Action Graduate Student Travel Award (2015-2016)
Ling Hao	Mern Keir Wisconsin Distinguished Graduate Fellowship (2013)
Ling Hao	Vilas Conference Travel Award, UW-Madison (2015)
Bowen Hu	The Walter W. and Young-Ja C. Toy Summer Research Fellowship for the Summer 2014 term, Department of Chemistry, UW-Madison
	UW-Madison Department of Chemistry Ackerman Undergraduate Scholarship, 2014-2015 Academic Year
Limei Hui	Department of Chemistry Graduate Travel Award
Limei Hui	Vilas Travel Fellowship 2009
Chenxi Jia	HHMI International Research Fellowship UW Finalist 2012
Chenxi Jia	2013 UW International Student Academic Achievement Award, UW-Madison
Xiaoyue Jiang	Vilas Travel Fellowship 2009
Xiaoyue Jiang	Witiak Graduate Student Travel Award (2010)
Jillian Johnson	Drug Action Graduate Student Travel Award (2016-2017)
Caitlin Keller	UW Biotechnology Center Morgridge Fellowship (2016-2017)
Caitlin Keller	GSFLC Travel Award 2018
Zihui (Jerry) Li	Department of Chemistry Schrag Travel Award 2018
Zhidan Liang	Pharmaceutical Sciences Drug Action Graduate Travel Award (2013)
Zhidan Liang	Teaching Assistant Excellent Award (2012-2013)
Zhidan Liang	Vilas Travel Award (2014)
Christopher Lietz	NIH Chemistry-Biology Interface Traineeship (2012-2015)
Christopher Lietz	NSF Graduate Research Fellowship (2013-2016)
Christopher Lietz	2014 ASMS Fall Workshop on Ion Mobility Mass Spectrometry Student Travel Award

Yang Liu	ASMS Sanibel Conference Student Travel Award, 2017
Yang Liu	UW-Madison Graduate School Conference Travel Award, 2018
Fengfei Ma	Drug Action Graduate Student Travel Award (2016-2017)
Fengfei Ma	UW-Madison Graduate School Conference Travel Award, 2018
Mingming Ma	Vilas Travel Fellowship
Mingming Ma	Bausch & Lomb Student Innovation Award
Mingming Ma	Rennebohm Dissertation Award (2009)
Mingming Ma	Witiak Graduate Student Travel Award
Anatoliy Nechyporenko	Wisconsin Hilldale Undergraduate Research Fellowship (2013-2014)
Anatoliy Nechyporenko	Department of Chemistry Undergraduate Research Scholarship (Declined)
Chuanzi Ouyang	Department of Chemistry Graduate Travel Award
Chuanzi Ouyang	Department of Chemistry Beverly and John Schrag Analytical Travel Award 2014
Chuanzi Ouyang	Vilas Travel Award 2014
Christopher Sauer	NIH Biotechnology Traineeship (2017-2019)
Chris Sauer	NRSA F31 Predoctoral Fellowship (2020-2022)
Claire Schmerberg	Connors Wisconsin Distinguished Fellowship
Claire Schmerberg	NIH Biotechnology Traineeship
Claire Schmerberg	American Chemical Society (ACS) Women Chemists Committee Travel Award
Claire Schmerberg	Vilas Travel Fellowship
Claire Schmerberg	Peterson Graduate Student Travel Award (2011)
Joshua Schmidt	American Foundation for Pharmaceutical Education (AFPE) Fellowship
Joshua Schmidt	Vilas Travel Fellowship
Yatao Shi	Drug Discovery Graduate Student Travel Award (2016-2017)
Robert Sturm	Clinical Neuroengineering Training Program (CNTP) Fellowship
Robert Sturm	Department of Chemistry Graduate Travel Award
Robert Sturm	Department of Chemistry GSFLC Mentor Award
Sam Thomas	Molecular Environmental Toxicology Center Training Program Predoctoral Fellowship (2015-2017)
Sam Thomas	Graduate Student Travel Award for the SBUR Fall Symposium (2015)
Justin Vrana	Sophomore Honors Summer Research Apprenticeship
Nhu Vu	NIH Biotechnology Traineeship (2017-2019)
Pingli Wei	Vilas Conference Travel Award
Pingli Wei	GSFLC Conference Travel Award 2018
Xin Wei	Vilas Travel Fellowship
Xin Wei	Department of Chemistry Graduate Travel Award
Nicole Woodards	UW-Madison Advanced Opportunity Fellowship
Nicole Woodards	Department of Chemistry GSFLC Mentor Award
Feng Xiang	Midwestern Universities Analytical Chemistry Conference (MUACC) 2010 Graduate Student Travel Award
Feng Xiang	Vilas Travel Fellowship
Hui Vivian Ye	Vilas Travel Fellowship
Chenxi Yang	Department of Chemistry GSFLC Travel Grant, 2014
Chenxi Yang	Department of Chemistry Beverly and John Schrag Analytical Travel Award 2014
Qing Yu	Witiak Drug Discovery Graduate Student Travel Award 2015-2016
Qing Yu	ASMS Sanibel Conference Student Travel Award, 2017
Yuzhuo (Zoe) Zhang	Department of Chemistry Graduate Travel Award
Yuzhuo (Zoe) Zhang	Vilas Travel Fellowship
Zichuan Zhang	Vilas Travel Fellowship
Zichuan Zhang	HHMI International Research Fellowship UW Finalist 2011
Xiaofang Zhong	Drug Discovery Graduate Student Travel Award (2016-2017)
Dr. Xuefei Zhong	2014 ASMS Asilomar Conference Travel Grant

D. Temporary advisors for new graduate students – Fall 2007

Tsz Chung Lai, Claire Schmerberg, and Kenneth Simmons

E. Temporary advisors for new graduate students – Fall 2008, Fall 2011, Fall 2012, Fall 2013

Hui Ye, Zichuan Zhang, Wei Zhang, Ling Hao, Fengfei Ma, Xueqin Pang

Service as Committee Member for Ph.D. Candidacy Exams and Final Thesis Defenses:

Student	Research Area	Research Advisor	Examination/Committee
Jian Zhang	Analytical/Natural Product	Ben Shen	Ph.D. candidacy
Dalia Dhingra	Analytical Chemistry	David Schwartz	Ph.D. candidacy/Thesis defense
Kimberly Kutz	Analytical Chemistry	Lingjun Li	Ph.D. candidacy/Thesis defense
Qiang Fu	Analytical Chemistry	Lingjun Li	Ph.D. candidacy/Thesis defense
Joshua Schmidt	Pharmaceutical Sciences	Lingjun Li	Research progress/ Prelim/Thesis defense
Lu Shang	Analytical Chemistry	Robert Hamers	Ph.D. candidacy/Thesis defense
Bei Nie	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy, Ph.D. thesis defense
Xu Zhang	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy/Ph.D. thesis defense
Siyuan Chen	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Jie Yang	Pharmaceutical Sciences	Jon Thorson	Ph.D. candidacy (Prelim)/Ph.D. thesis defense
Jieun Lee	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy/Thesis defense
Yuan Lin	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy
Stephanie DeKeyser	Analytical Chemistry	Lingjun Li	Ph.D. candidacy/Thesis defense
Heidi Behrens	Analytical Chemistry	Lingjun Li	Ph.D. candidacy
Mingming Ma	Pharmaceutical Sciences	Lingjun Li	Research progress/PhD thesis committee
James Dowell	Pharmaceutical Sciences	Lingjun Li/Jeff Johnson	Qualifier exam/Prelim/PhD thesis committee
Claire Schmerberg	Pharmaceutical Sciences	Lingjun Li	Research progress/Thesis committee
Xiaoyue Jiang	Pharmaceutical Sciences	Lingjun Li	PhD thesis committee
Catherine Rideaux	Pharmaceutical Sciences	Jeffrey Johnson	Research progress
Jeffrey Jones	Neuroscience Training Program	Su-chun Zhang	Thesis research/Prelim exam committee
Timothy LaVaute	Neuroscience Training Program	Su-chun Zhang	Research progress/Prelim/PhD thesis committee
Jessica Jarecki	Neuroscience Training Program	Tony Stretton	Research progress/Prelim
Katherine (Kari) Andersen	Zoology	Tony Stretton	M.S. thesis committee
Christopher J Konop	Zoology	Tony Stretton	Ph.D. thesis committee
Rita Buresh	Pharmaceutical Sciences	Darin Furgeson	Ph.D. thesis committee
Howard Chen	Pharmaceutical Sciences	Darin Furgeson/Glen Kown	PhD Thesis Committee
Nella Barshteyn	Pharmaceutical Sciences	Adnan Elfarrar	Research progress/Prelim

Roy Irving	Molecular and Environmental Toxicology Program	Adnan Elfarra	Ph.D. thesis committee
Manchun Lu	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Xiaoyu Chen	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Cheng Hsien Wu	Cellular & Molecular Biology	Lloyd Smith	Ph.D. thesis/Prelim
Suzie Kulevich	Analytical Chemistry	Lloyd Smith	Ph.D. thesis
Daniel Lador	Analytical Chemistry	Lloyd Smith	Research proposal committee
Yuan Yuan	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Gloria Sheynkman	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Ranran Liu	Analytical Chemistry	Lloyd Smith	Ph.D. thesis defense
Qiyao Li	Analytical Chemistry	Lloyd Smith	Ph.D. thesis committee
Katie Buxton	Analytical Chemistry	Lloyd Smith	Ph.D. thesis committee
Eileen Dimalanta	Analytical Chemistry	David Schwartz	Ph.D. thesis defense
Sang Alex Lim	Analytical Chemistry	David Schwartz	Ph.D. thesis defense
Lisa Jungbauer	Biophysics	Silvia Cavagnero	Ph.D. thesis defense
Daria Fedukina	Organic Chemistry	Silvia Cavagnero	Research progress committee
Clark Nelson	Cellular & Molecular Biology	Michael Sussman	Ph.D. thesis defense
Melanie Ivancic	Biochemistry	Michael Sussman	Ph.D. thesis committee/defense
Edward Huttlin	Biochemistry	Michael Sussman	Ph.D. thesis research/defense
Rachel Rodrigues	Biochemistry	Michael Sussman	Ph.D. thesis research/defense
Sean Zuckerman	Biomedical Engineering	John Kao	M.S. thesis defense/PhD thesis committee
Sean McIwain	Biostatistics/Medical Informatics	David Page	Prelim exam/Ph.D. thesis defense
Michael Conway	Pharmaceutical Sciences	Warren Heideman	Qualifier exam
Jing Chen	Pharmaceutical Sciences	Warren Heideman	Research progress
Di Ma	Pharmaceutical Sciences	Warren Heideman	Ph.D. thesis committee
Matthew Slattery	Pharmaceutical Sciences	Warren Heideman	Ph.D. thesis defense
Shiping Fang	Analytical Chemistry	Robert Corn	Ph.D. thesis defense
Xin Wei	Analytical Chemistry	Lingjun Li	Ph.D. candidacy
Ryan Hilger	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy
Gloria Kreitinger	Analytical Chemistry	Lloyd Smith	Ph.D. candidacy
Ruibing Chen	Analytical Chemistry	Lingjun Li	Ph.D. candidacy
Jiang Zhang	Pharmaceutical Sciences	Lingjun Li	Research progress
Danielle Swaney	Analytical Chemistry	Joshua Coon	Ph.D. candidacy
David Good	Analytical Chemistry	Joshua Coon	Ph.D. candidacy
April Jue	Analytical Chemistry	Joshua Coon	Ph.D. candidacy
Aaron Ledvina	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO)
Jason Russell	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO/Prelim)
Graeme McAllister	Analytical Chemistry	Joshua Coon	Ph.D. thesis defense
Craig Wenger	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO)
Nicole Beauchene	Integrated program in biochemistry	Joshua Coon	Prelim exam committee
Alex Hebert	Integrated program in biochemistry	Joshua Coon	Prelim exam committee, PhD thesis defense committee
Amelia Peterson	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), Thesis Defense
Violet Lee	Analytical Chemistry	Joshua Coon	Ph.D. thesis defense
Doug Phanstiel	Analytical Chemistry	Joshua Coon	Ph.D. thesis defense
Chris Rose	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP

Anna Larson	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP
Alecia Richards	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP
Nicholas Kwiecien	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP
Nicholas Riley	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP
Matt Rush	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP
Arne Ulbrich	Analytical Chemistry	Joshua Coon	Ph.D. candidacy (TBO), RP, PhD thesis defense committee
Evgenia Shishkova	Intergrated Biochemistry	Joshua Coon	PhD thesis committee
Heidi Horn	Zoology	Cameron Currie	PhD thesis committee
Jenny Bratburd	Microbiology Doctoral Training Program	Cameron Currie	PhD thesis committee
Tian Wu	Analytical Chemistry	David Schwartz	Ph.D. thesis defense
India Viola	Neuroscience	Tony Stretton	Ph.D. thesis committee
Hua Bai	Neuroscience	Ed Chapman	Ph.D. thesis committee
Ryan Selleck	Neuroscience	Brian Baldo	Ph.D. thesis committee
Ting Lu	Pharmaceutical Sciences	Richard Hsung	Prelim exam committee
Yonggang Wei	Pharmaceutical Sciences	Richard Hsung	Prelim exam committee
Gang Li	Pharmaceutical Sciences	Richard Hsung	Prelim exam committee
Hongyan Li	Pharmaceutical Sciences	Richard Hsung	Prelim exam committee
Xuejun Zhang	Pharmaceutical Sciences	Richard Hsung	Ph.D. thesis defense
Feng Xiang	Pharmaceutical Sciences	Lingjun Li	Prelim exam committee
Vivian Hui Ye	Pharmaceutical Sciences	Lingjun Li	Thesis research committee
Zichuan Zhang	Pharmaceutical Sciences	Lingjun Li	Thesis research committee
Limei Hui	Analytical Chemistry	Lingjun Li	Prelim exam committee
Yuzhuo Zhang	Analytical Chemistry	Lingjun Li	Prelim exam committee
Weifeng Cao	Analytical Chemistry	Lingjun Li	Prelim exam committee
Robert Sturm	Analytical Chemistry	Lingjun Li	Prelim exam/thesis defense committee
Robert Cunningham	Analytical Chemistry	Lingjun Li	Prelim exam/Thesis defense committee
Nicole Woodards	Analytical Chemistry	Lingjun Li	Prelim exam/Thesis defense committee
Tyler Greer	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Chenxi Jia	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Jingxin Wang	Neuroscience	Lingjun Li	Ph.D. thesis committee
Shan Jiang	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Zhidan Liang	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Chenxi Yang	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Chuanzi Ouyang	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Chris Lietz	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Erin Gemperline	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Bingming Chen	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Qing Yu	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Ling Hao	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Amanda Buchberger	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Zhengwei Tony Chen	Analytical Chemistry	Lingjun Li	Ph.D. thesis committee
Xueqin Pang	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Fengfei Ma	Pharmaceutical Sciences	Lingjun Li	Ph.D. thesis committee
Shan Ke	Analytical Chemistry	John Wright/Glen Kwon	Prelim exam/Ph.D. thesis defense committee

Daniel Tremmel	Cellular and Molecular Biology Program	Jon Odorico	Ph.D. thesis committee
Kartik Kumar	Molecular & Environmental Toxicology Program	Joel Pedersen	Ph.D. thesis committee
Christen Bell	Environmental Chemistry & Technology	Joel Pedersen	Ph.D. thesis committee
Clarissa Booth	Molecular & Environmental Toxicology Program	Joel Pedersen	Ph.D. thesis committee
Mercedes Ruiz Velez	Molecular & Environmental Toxicology Program	Joel Pedersen	Ph.D. thesis committee
Serife Ayaz-Guner	Cellular & Molecular Biology	Wei Xu	Ph.D. thesis committee
Renhe Liu	Pharmaceutical Sciences	Weiping Tang	Prelim exam committee
Xiaoxun Li	Pharmaceutical Sciences	Weiping Tang	Prelim exam committee
Gabrielle Winston-McPherson	Pharmaceutical Sciences	Weiping Tang	Prelim exam committee
Wangze Song	Pharmaceutical Sciences	Weiping Tang	Prelim exam committee
Na Liu	Pharmaceutical Sciences	Weiping Tang	Prelim exam committee
Paige Jany	Cellular and Molecular Pathology	Albee Messing	Ph.D. thesis committee
Abha Rajbhandari	Neuroscience Training Program	Vaishali Bakshi	Ph.D. thesis committee
Tom Wyche	Pharmaceutical Sciences	Tim Bugni	Ph.D. thesis committee/PhD thesis defense committee
Navid Adnani	Pharmaceutical Sciences	Tim Bugni	Ph.D. thesis committee
John Dopp	Graduate Program in Clinical Investigation (ICTR)	Lingjun Li	M.S. Thesis Committee (Chair)
Julia Schwartzman	Department of Medical Microbiology & Immunology	Edward Ruby	Prelim Exam Committee
Daniel Wolak	Pharmaceutical Sciences Division	Robert Throne	Ph.D. thesis committee
Katie Hurley	Pharmaceutical Sciences Division	Jon Thorson	Ph.D. Thesis Committee
Ivy Chen	Chemical Biology	Ying Ge	Prelim Exam Committee
Zachery Gregorich	Molecular and Cellular Pharmacology	Ying Ge	Ph.D. thesis committee
Deyang Yu	Molecular & Environmental Toxicology Program	Ying Ge	Ph.D. thesis committee
Lichen Xiu	Materials Science Division Department of Chemistry	Song Jin	Ph.D. thesis committee
Jalissa Wynder	Molecular and Environmental Toxicology Program	Will Ricke	Ph.D. thesis committee
Jennifer Grant	Molecular and Cellular Pharmacology	Arnold Ruoho	Ph.D. thesis defense
Hanzhi Wu	Hong Kong Baptist University Department of Chemistry	Zongwei Cai	External Member of PhD thesis committee

SERVICE

A. Professional Affiliations and Service Leadership

- American Chemical Society (ACS)
- American Chemical Society, Division of Analytical Chemistry
- American Society for Mass Spectrometry (ASMS)
- Fellow, Royal Society for Chemistry (2014)

- ASMS Education Committee (2010-current)
- Society for Neuroscience (SFN)
- American Association of Colleges of Pharmacy (AACP)
- New York Academy of Sciences
- American Association for the Advancement of Science (AAAS)
- Human Proteome Organization (US HUPO)
- The American Society for Biochemistry and Molecular Biology (ASBMB)
- Board Member for the Chinese American Society for Mass Spectrometry (CASMS)
- President-Elect, CASMS, 2013-2015
- President, CASMS, 2015-2017
- Immediate Past President, CASMS, 2017-2019
- Board of Directors, US HUPO, 2015-2018
- Chair, Board of Directors, CASMS, 2018

B. Grant Review and Meeting Organizational Activities

- Permanent member on the NIH Enabling Bioanalytical and Imaging Technologies (EBIT) Study Section, July 2011-July 2015
- NIDDK Developmental Centers for Interdisciplinary Research in Benign Urology (P20) Review Panel, March 13, 2014
- NIDDK Special Emphasis Panel, Feb 5, 2016
- NIH P41 Center Grant Review Panel, June 25-27, 2014, March 19, 2018
- NHLBI (NIH National Heart, Lung and Blood Institute) “Proteomics Initiative” Special Emphasis Review Panel, 2002
- Reviewer, NIH P41 Biomedical Technology Research Center grant applications, 2012
- Reviewer, NIH COBRE (Center of Biomedical Research Excellence) grant application, 2012
- NSF Collaborative Research in Chemistry (CRC) Proposal Review Panel, 2004
- Ad hoc reviewer for NSF Chemistry Division, Analytical and Surface Chemistry Program, 2004, 2005, 2006, 2007
- Ad hoc reviewer for NSF CAREER program, 2005
- Ad hoc reviewer for NSF International Research Fellowship Program, 2005
- Ad hoc reviewer for NSF National High Magnetic Field Laboratory renewal proposal, 2006
- Ad hoc reviewer for NSF Chemistry Division, Chemical Measurement and Imaging Program, 2010
- Panelist, NSF Chemistry Division, Chemical Measurement and Imaging Program, 2011
- Panelist, NSF CAREER Panel, Chemistry Division, Chemical Measurement and Imaging Program, 2013; Declined invitation due to scheduling conflict
- Department of Energy (DOE) Genome Science Program Review Panel, 2010
- NSF Review Panel on Disease Diagnostics and Prognostics for the Small Business Innovation Research (SBIR) program, 2007
- NSF Analytical and Surface Chemistry (ASC) CAREER Review Panel, 2008
- NSF Analytical and Surface Chemistry (ASC) CAREER program ad hoc reviewer, 2009
- NIH National Institute of Diabetes & Digestive & Kidney Diseases, SEP Review Panel, 2009, 2011
- NIH National Center for Research Resources Mass Spectrometry-related Shared Instrumentation Grant (S10) Program Review Panel, 2009
- Reviewer on NIH Study Section Enabling Bioanalytical/Biophysical Technologies (EBT), 2010
- NSF Major Research Instrumentation (MRI) Program, Ad hoc reviewer, 2009
- Ad hoc reviewer for the March of Dimes Foundation grant application, 2009
- Reviewer, Mass Spectrometry Capability at the DOE's Environmental Molecular Sciences Laboratory (EMSL) User Facility Peer Review Panel, 2010, 2011, 2012
- Review panel invitation from the NIH Neurotechnology Study Section, 2011 (turned down due to schedule conflict)
- Ad hoc reviewer for neuroproteomics center, North Carolina Biotechnology Center’s Institutional Development Grants Program, 2003
- Ad hoc reviewer for the Collaborative Funding Grant Program, North Carolina Biotechnology Center, 2005

- Ad hoc reviewer for the UW Graduate School Industrial & Economic Development Research (IEDR) program competition, 2006
- Ad hoc reviewer for the Netherlands Organization for Scientific Research (NWO) Council, 2008, 2009
- Ad hoc reviewer for the Research Foundation Flanders (FWO), 2011
- Ad hoc reviewer for the Institutional Hatch Grant Program, 2008
- External reviewer for the Vanderbilt University Intramural Discovery Grant Program (IDGP), 2009, 2010
- Stage I reviewer for NIH Challenge Grants, 2009
- Session Chair for Tissue Imaging and Miniaturization Mass Spectrometry for Lab of Automation 2010
- Session Chair for 24th International Symposium on Microscale Bioseparations, 2009
- American Society for Mass Spectrometry (ASMS) 2010 Program Review Committee
- American Society for Mass Spectrometry (ASMS) Education Committee, 2011
- Chinese American Society for Mass Spectrometry (CASMS) 3rd and 4th World Congress for Chinese Mass Spectrometry, Abstract Review Committee, 2010, 2011
- The 2011 and 2013 Wisconsin Human Proteomics Symposium Organizing Committee
- Organizing and chairing a symposium on peptidomics at PittCon 2012
- Max Planck Partner Group Grant program reviewer, 2013
- Scientific Program Committee, 5th World Congress for Chinese Mass Spectrometry, 2013-2014
- Chairing an oral session on imaging MS at the ASMS 2014
- Chairing an oral session on Chemical Proteomics in Living Systems + Imaging, US HUPO 2015
- American Society for Mass Spectrometry (ASMS) Asilomar Conference Committee, 2015-2017
- Co-Organizer, ASMS Sanibel Conference on Peptidomics, 2017
- ASMS Ron Hites Award Committee, 2016-2018
- ACS Award Judging Committee
- Conference Chair, the 6th World Chinese Mass Spectrometry Conference, June 4-7, 2016, San Antonio, TX
- Co-Organizer, US Human Proteomics Conference, March 2018
- Co-Organizer, Wisconsin Human Proteomics Symposium, 2018
- Co-Organizer, 1st Annual North American Mass Spectrometry Summer School, Madison, WI 2018
- NIH HuBMAP: Human BioMolecular Atlas Program Review Panel, June 2018
- Hong Kong Research Grants Council Research Impact Fund (RIF) Committee, May 2018-2021
- Instructor, 2nd-5th Annual North American Mass Spectrometry Summer School, Madison, WI (2019-2023)
- Co-Organizer, US HUPO 2023, Chicago, IL
- Co-Organizer, ASMS Asilomar Conference on Imaging Mass Spectrometry, October 2019
- Co-Organizer, International Imaging MS Society Imaging MS Workshop, July 2024

C. Journal Editorial and Review Activities

- Associate Editor, *Journal of the American Society for Mass Spectrometry*, 2017- current
- Associate Editor, *Analytical Methods* (The Royal Society of Chemistry Journal), 2013-2016
- International Advisory Board, *Analytical and Bioanalytical Chemistry*, 2016 -- current
- Editorial Board Member, *Journal of the American Society for Mass Spectrometry*, 2015- 2020
- Features Advisory Panel for the journal *Analytical Chemistry* 2012- 2015
- Advisory Board Member, *The Analyst* (The Royal Society of Chemistry Journal), 2011-current
- Review Editor of *Frontiers in Invertebrate Physiology*, 2011
- Section Editor for Proteomics, *Frontiers in Biology*, 2011
- Editorial Board Member, *The International Journal of Clinical and Experimental Pathology* (2008)
- Associate Editor-in-chief, *International Journal of Biochemistry and Molecular Biology* (2008)
- Editor-in-chief, *International Journal of Pathophysiology and Pharmacology* (declined invitation)
- Guest Editor, *Clinical Chimica Acta* Special Issue featuring the 4th World Congress of Chinese Mass Spectrometry, 2012
- Reviewer, *Science*
- Reviewer, *Proceedings of the National Academy of Sciences*
- Reviewer, *Chemical Reviews* (ACS journal)

- Reviewer, Nature Protocols
- Reviewer, ACS Chemical Neuroscience
- Reviewer, Molecular and Cellular Proteomics
- Reviewer, Organic Letters (ACS journal)
- Reviewer, Analyst (The Royal Society of Chemistry Journal)
- Reviewer, Mass Spectrometry Reviews (Wiley InterScience Journal)
- Reviewer, Journal of Mass Spectrometry (Wiley InterScience Journal)
- Reviewer, Journal of the American Society for Mass Spectrometry
- Reviewer, Rapid Communications in Mass Spectrometry (Wiley InterScience Journal)
- Reviewer, International Journal of Mass Spectrometry
- Reviewer, International Journal of Molecular Sciences (Open Access journal)
- Reviewer, Journal of Neurochemistry
- Reviewer, Analytical Chemistry (ACS journal)
- Reviewer, Journal of Proteome Research (ACS journal)
- Reviewer, Proteomics (Wiley InterScience Journal)
- Reviewer, Expert Review of Proteomics
- Reviewer, Journal of Proteomics
- Reviewer, Briefings in Functional Genomics and Proteomics (Oxford Journal)
- Reviewer, Journal of Neuroscience
- Reviewer, Journal of Neuroscience Methods
- Reviewer, Brain Research (Elsevier journal)
- Reviewer, Journal of Neurophysiology
- Reviewer, Developmental Neurobiology
- Reviewer, British Journal of Pharmacology
- Reviewer, Analytica Chimica Acta
- Reviewer, Lab On a Chip (The Royal Society of Chemistry Journal)
- Reviewer, Chemical Communications (The Royal Society of Chemistry Journal)
- Reviewer, Analytical Methods (The Royal Society of Chemistry Journal)
- Reviewer, Trends in Analytical Chemistry
- Reviewer, Trends in Biotechnology
- Reviewer, Peptides (Elsevier journal)
- Reviewer, General Comparative Endocrinology (Elsevier journal)
- Reviewer, Analytical Bioanalytical Chemistry
- Reviewer, Analytical Biochemistry
- Reviewer, Journal of Chromatography A
- Reviewer, Journal of Chromatography B
- Reviewer, Journal of Separation Science
- Reviewer, Journal of Lipid Research
- Reviewer, Journal of Neuroinflammation
- Reviewer, Biological Bulletin
- Reviewer, European Journal of Mass Spectrometry
- Reviewer, BioMed Central (BMC) Genomics
- Reviewer, AAPS Journal
- Reviewer, Journal of the Association for Laboratory Automation (2010)
- Reviewer, Journal of Toxicology and Environmental Health (PrioNet Open Call)
- Reviewer, Cellular and Molecular Life Sciences
- Reviewer, European Neuropsychopharmacology
- Reviewer, Pharmacology Research and Perspectives
- Reviewer, Methods in Molecular Biology Series, Peptidomics Protocols Book Chapter
- Reviewer, Journal of Undergraduate Chemistry Research
- Reviewer, Expert Opinion on Drug Discovery
- Consultant, IonSpec Corporation 2005
- Reviewer, 2006 Pacific Symposium on Biocomputing research papers
- Reviewer, American Chemical Society Symposium Series Volume on Smart Coatings 2005

D. University and School of Pharmacy Service Activities

- Served on Vice Chancellor for Research and Graduate Education (VCRGE) search and screen committee (2014-2015)
- Chaired and served on UW-Madison Biotechnology Center Faculty Advisory Board (2015-2018)
- Faculty Director, School of Pharmacy Analytical Instrumentation Center, Mass Spectrometry Facility
- Served on UW-Madison School of Pharmacy Drug Discovery Medicinal Chemistry Staff Search Committee (2014-current)
- Served on UW-Madison Department of Chemistry Analytical Path Graduate Admission Committee (2014-Current)
- Served on 2015 Wisconsin Human Proteomics Symposium Organizing Committee
- Chaired the faculty mentoring committee for Assistant Professor Jiaoyang Jiang, 2014-current
- Served on faculty mentoring committee for Assistant Professor Ying Ge, Department of Cell and Regenerative Biology, School of Medicine and Public Health, 2014
- Served on UW School of Pharmacy Research Committee 2012-current
- Served on UW School of Pharmacy Dean Search and Screen Committee 2012-2013
- Served on UW School of Pharmacy Pharmaceutical Sciences Faculty Search Committee, 2012-2013
- Chair, School of Pharmacy Analytical Instrumentation Center (AIC) Staff Search Committee, 2012
- Serve on School of Pharmacy PharmD Admissions Committee (2011-2012)
- Served on School of Pharmacy Instrumentation Committee (2003-2007)
- Served on School of Pharmacy Analytical Instrumentation Center Advisory Board (2007-current)
- Co-Chair, School of Pharmacy Analytical Instrumentation Center Committee, 2010-present
- Served on the Steering Committee for the UW-Madison Chemistry-Biology Interface Training Program (2010-current)
- Served on the Admission Committee for the UW-Madison Clinical Neuroengineering Training Program, 2011-current
- Served on the Steering Committee for the Neuroscience Training Program, 2011-2014
- Served on School of Pharmacy Graduate Student Admission Committee (2003-present)
- Served on School of Pharmacy Student Promotion Committee (2007-current)
- Served on School of Pharmacy Faculty Activities Review Committee (2008-2009)
- Served on School of Pharmacy Executive Committee (2008-current)
- Seminar Chair and Coordinator, Pharmaceutical Sciences Seminar Series (2009-current)
- Served on School of Pharmacy Mass Spectrometry Facility Director Search Committee, 2005-2006
- Served on UW-Madison Department of Chemistry Junior Faculty (Prof. Joshua Coon) Tenure Committee, 2008
- Served on Prof. Orly Vardeny (SoP Pharmacy Practice Division)'s Mentoring and Tenure Promotion Committee, 2009
- Served on Prof. May Xiong (SoP Pharmaceutical Sciences Division)'s Mentoring and Tenure Promotion Committee, 2009
- Served on Prof. Tim Bugni (SoP Pharmaceutical Sciences Division)'s Mentoring and Tenure Promotion Committee, 2009-current
- Chair the Mentoring and Tenure Promotion Committee for Assistant Professor Jiaoyang Jiang (SoP Pharmaceutical Sciences Division), 2013-current
- Chair the Mentoring and Tenure Promotion Committee for Assistant Professor Jun Dai (SoP Pharmaceutical Sciences Division), 2017-current
- Served on Prof. Jason Kwan (SoP Pharmaceutical Sciences Division)'s Mentoring and Tenure Promotion Committee, 2017-current
- Served on Prof. John Dopp (CHS Assistant Professor, SoP Pharmacy Practice Division)'s MS Thesis Research Committee, 2010
- Mentoring/Promoting/Review Committee for Prof. Mara Kieser, 2012-2013.
- Mentoring/Promoting/Review Committee for Prof. Weiping Tang, 2012-2013.
- Tenure package review for junior faculty at other institution, 2009
- School of Pharmacy Pharmaceutical Sciences Division Committee on Faculty Awards, Alumni Relations and Fundraising (2006-current)

- Invited speaker for UW-Madison Pharmaceutical Sciences Graduate Student Retreat, Academic career and lab management (2009)
- Participated as faculty representative for the Pharmaceutical Sciences Division in the School of Pharmacy Discovery Day to help recruit college students interested in professional (PharmD) and B.S. Pharmacology-Toxicology Programs (2007)
- Faculty Senate Alternative Representative, University of Wisconsin (2003-2006)
- Chair, Analytical Division Seminar Committee, 2004-2005
- Neuroscience Training Program, Neurobiology Undergraduate Research Award Committee, 2004
- Advisory committee for UW Medical School Proteomics Facility (2004-current)
- Advisory committee for the UW Biotechnology Center Mass Spectrometry Facility (2005-current)
- Organizing committee for the 2nd Annual Human Proteomics Symposium (2007)
- Session Chair for the Symposium on Cellular and Network Functions in the Spinal Cord 2007 (Madison, WI, June 2007)
- Faculty focus group on mass spectrometry for the Wisconsin Institutes for Discovery (2007)
- Served on UW Medical School Proteomics Center Mass Spectrometry Facility Operation Committee
- Reviewer, Graduate Women in Science Scholarship Applications, UW-Madison, 2006
- Served on Ad Hoc Nomination Committee for the Howard Hughes International Graduate Fellowship at the Neuroscience Training Program of UW-Madison (2010)
- Served on Awards Committee for the Neuroscience Training Program at UW-Madison (2011)
- Invitation to stand for Election to Board of Directors for US Human Proteomics Organization (2011-2012)
- Tenure promotion package and full professor promotion package reviews, 25 since 2015