

CCURRICULUM VITAE

YUAN LIU

CONTACT INFORMATION

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EDUCATION

| | | |
|------|-----------------------------|---|
| 2003 | Ph.D. (Biochemistry) | University of Rochester School of Medicine and Dentistry, NY, USA |
| 1998 | M.S. (Toxicology) | Rutgers University, NJ, USA |
| 1991 | M.M. (Master of Medicine) | Tongji Medical University, School of Public Health, Wuhan, Hubei, P. R. China |
| 1988 | M.D. (Bachelor of Medicine) | Tongji Medical University, School of Public Health, Wuhan, Hubei, P. R. China |

RESEARCH AND PROFESSIONAL EXPERIENCE

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| June 2016-present | Associate Professor, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA |
| Aug. 2010-June 2016 | Assistant Professor, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA |
| Jan. 2006-Aug. 2010 | Research Fellow, Laboratory of Structural Biology, Institute of Environmental National Health Sciences (NIEHS)/National Institutes of Health, NC, USA (Mentor: Dr. Samuel H. Wilson) |
| Oct. 2003-Dec. 2005 | Postdoctoral Fellow, Laboratory of Structural Biology, National Institute of Environmental Health Sciences (NIEHS)/National Institutes of Health (NIH), NC, USA (Mentor: Dr. Samuel H. Wilson) |
| Sept. 1998-Oct. 2003 | Graduate Research Assistant, Department of Biochemistry and Biophysics, School of Medicine and Dentistry, University of Rochester, NY, USA (Advisor: Dr. Robert A. Bambara) |
| Sept. 1995-May 1998 | Graduate Teaching Assistant, Department of Pharmacology and Toxicology, Rutgers University, NJ, USA |
| Sept. 1991-May 1995 | Assistant Investigator, Department of Environmental Health Impact, Institute of Environmental Health Monitoring, Chinese Academy of Preventive Medicine (Chinese Center for Disease Control and Prevention), Beijing, P. R. China |
| Sept 1988-May 1991 | Graduate Student, Department of Environmental Health, School of Public Health, Tongji Medical University, Wuhan, Hubei, P. R. China |
| Sept.1987-May 1988 | Undergraduate research internship, Institute of Environmental Medicine, School of Public Health, Tongji Medical University, Wuhan, Hubei, P. R. China |

GRANT FUNDING

Grant funded

NIH R01-ES023569 Yuan Liu (PI)
Trinucleotide repeat instability via DNA damage and repair

12/9/13-10/31/18

COMMUNITY FOUNDATION OF BROWARD (PI: Yuk-Ching Tse-Dinh) 07/01/16-06/30/17
Investigation of a Novel Treatment for Advanced Prostate Cancer
In this project, we developed a novel approach for measuring the total DNA repair capacity of prostate cancer cell lysates that can be used in high throughput screening of new DNA repair inhibitors for improving prostate cancer drug resistance.
Role: Co-PI

Completed

Broward Foundation Yuk-Ching Tse-Dinh (PI), Yuan Liu (Co-PI) 01/01/15-12/31/15
Investigation of a novel treatment for advanced prostate cancer

NIHR00-ES017476 Yuan Liu (PI) 09/03/10-05/31/14
Mechanisms of trinucleotide repeat expansion
via oxidative DNA damage and repair

AWARDS AND HONORS

October 2016 2016 College of Arts, Sciences and Education (CASE) Award for Research, Florida International University, Miami, FL, USA
March 2014 2014 Top Scholar of Florida International University, Miami, FL, USA
July 1998-Oct. 2003 Scholarship for graduate student, University of Rochester, NY USA
Sept.1995-May1998 Scholarship for graduate student, Rutgers University, NJ, USA
May 1995 Outstanding Achievement Award for Young Investigator, Chinese Academy of Preventive Medicine (Chinese Center for Disease Control and Prevention), Beijing, P.R. China
May 1994 Third Grade Award of Science and Technology Progress, National Committee of Patriotic Health Campaign and Ministry of Health, Beijing, P. R. China
Sept.1983-May1988 Award for Study Excellency, Tongji Medical University, Wuhan, Hubei, P. R. China

TEACHING EXPERIENCE

Sept. 2016-Dec. 2016 Biochemistry Graduate Seminar I
Sept. 2015-Dec. 2016 Advanced Biochemistry I
Jan. 2016-Apr. 2016 Special Topics in Biological Chemistry
Jan. 2016-May 2016 Biochemistry Graduate Seminar II
Sept. 2015-Dec. 2015 Biochemistry Graduate Seminar I
Sept. 2015-Dec. 2015 Advanced Biochemistry I
Jan. 2015-Apr. 2015 Special Topics in Biological Chemistry
Jan. 2015-May 2015 Biochemistry Graduate Seminar II
Sept. 2014-Dec 2014 Biochemistry Graduate Seminar I
Sept. 2014-Dec 2014 Advanced Biochemistry I
Jan. 2014-Apr. 2014 Advanced Biochemistry II
Jan. 2014-Apr. 2014 Chemistry Graduate Seminar
Sept. 2013-Dec. 2013 Biological Chemistry I
Jan. 2013-Apr. 2013 Advanced Biochemistry II
Oct. 2012-Dec. 2012 Biochemical Techniques
Jan. 2012-Apr. 2012 Advanced Biochemistry II
Aug. 2011-Dec. 2011 Biological Chemistry I
Jan. 2011-Apr. 2011 Biological Chemistry I

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| Sept. 2001-Dec. 2001 | Research Assistant, University of Rochester, Rochester, NY, USA (trained and mentored new graduate students) |
| Jan. 1999-May 1999 | Teaching Assistant, University of Rochester, Rochester, NY, USA (Molecular genetics lab) |
| Sept.1995-May 1998 | Teaching Assistant, Rutgers University, NJ, USA (Microbiology lab) |
| Jan. 1991-May 1991 | Teaching Assistant, Department of Environment Health, School of Public Health, Tongji Medical University, Wuhan, Hubei, P. R. China (Environmental health lab and environmental epidemiology lectures) |

MEMBERSHIP

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| 2003-present | Member, American Association for the Advancement of Science (AAAS) |
| 2012-present | Member, American Association for Cancer Research (AACR) |
| 2013-present | Member, Environmental Mutagenesis and Genomics Society (EMGS) |

PROFESSIONAL SERVICE

1. 2009, Lead Judge, NIEHS Summers of Discovery 2009 Poster Session, July, 2009
2. 2012, NIH Study section MESH (Biobehavioral Mechanisms of Emotion, Stress and Health Study Section) February 16-17, 2012
3. 2013, Ad hoc grant reviewer for Medical Research Council (MRC), UK, May, 2013
4. 2014, Judge, EMGS 45th Annual Meeting Poster Session, September 13-17, 2014, Orlando, FL
5. 2014, Panelist, EMGS 45th Annual Meeting Students and New Investigators Luncheon, September 14, 2014, Orlando, FL
6. 2014, Panelist, Chemistry Graduate School Symposium, Florida International University, October 2, 2014,
7. 2015, Judge, 17th Annual Biological and Comparative Immunology Symposium, poster session, March 26-27, 2015,
8. 2015, Judge, FIU's annual Scholarly Forum during Graduate Student Appreciation Week (GSAW), Florida International University, Miami, FL, April 6-10, 2015
9. 2015, Judge, EMGS 46th Annual Meeting Poster Session, September 26-30, 2015, New Orleans, LA
10. 2015, Co-chair, Symposium of New Frontiers in Control of Genome Stability, EMGS 46th Annual Meeting Poster Session, September 26-30, 2015, New Orleans, LA
11. 2015, Ad hoc grant reviewer for Worldwide Cancer Research, UK, April, 2015
12. 2016, Ad hoc grant reviewer for Medical Research Council (MRC), UK, May 20, 2016
13. 2016, Judge, EMGS 47th Annual Meeting Poster Session, September 17-24, 2016, Kansas City, MO

JOURNAL REVIEWERS

Biochemistry
 Cell Research
 Critical Reviews in Biochemistry and Molecular Biology
 DNA Repair
 Electrophoresis
 Frontiers in Biosciences
 Genes

Human Genetics
International Journal of Molecular Sciences
Journal of Biological Chemistry
Molecular Carcinogenesis
Mutation Research
Nucleic Acids Research
PLOS ONE
PLOS Genetics

PUBLICATIONS

** corresponding author

* co-first author

1. Chen C, Jiang X, Gu S, Lai Y, **Liu Y****, Zhang Z (2016) Protection of Nrf2 against arsenite-induced oxidative damage is regulated by the cyclic guanosine monophosphate-protein kinase G signaling pathway. **Environmental Toxicology** 2016 Oct 24. doi: 10.1002/tox.22374.
2. Beaver JM, Lai Y, Rolle SJ, **Liu, Y**** (2016) Proliferating cell nuclear antigen prevents trinucleotide repeat expansions by promoting repeat deletion and hairpin removal. **DNA Repair (Amst)** 48: 17-29.
3. Lai Y, Budworth H, Beaver JM, Chan NL, Zhang Z, McMurray CT, **Liu Y**** (2016) Crosstalk between MSH2- MSH3 and pol β promotes trinucleotide repeat expansion during base excision repair. **Nat Commun.** 7:12465. doi: 10.1038/ncomms12465.
4. Lai Y, Jiang Z, Zhou J, Osemota E, and **Liu Y**** (2016) AP endonuclease 1 prevents the extension of a T/G mismatch by DNA polymerase β to prevent mutations in CpGs during base excision repair. **DNA Repair (Amst)** 43: 89-97.
5. Jiang Z, Xu M, Lai Y, Laverde EE, and **Liu Y**** (2015) Bypass of a 5',8-cyclo-2'-deoxypurine by DNA polymerase β during DNA replication and base excision repair leads to nucleotide misinsertions and DNA strand breaks. **DNA Repair (Amst)** 33: 24-34.
6. Beaver JM, Lai Y, Xu M, Casin, AH, Laverde EE, and **Liu Y**** (2015) AP endonuclease 1 prevents trinucleotide repeat expansion via a novel mechanism during DNA base excision repair. **Nucleic Acids Res** 43(12):5948-5960.
7. Chen C, Jiang X, Lai Y, **Liu Y****, Zhang Z (2015) Resveratrol protects against arsenic trioxide-induced oxidative damage through maintenance of glutathione homeostasis and inhibition of apoptotic progression. **Environ Mol Mutagen** 56:333-346.
8. Xu M, Lai Y, Jiang Z, Terzidis MA, Masi A, Chatgililoglu C and **Liu Y**** (2014) A 5', 8-cyclo-2'-deoxypurine lesion induces trinucleotide repeat deletion via a unique lesion bypass by DNA polymerase β . **Nucleic Acids Res** 42(22):13749-13763.
9. Jiang X, Chen C, **Liu Y**, Zhang P and Zhang Z (2014) Critical role of cellular glutathione homeostasis for trivalent inorganic arsenite-induced oxidative damage in human bronchial epithelial cells. **Mut Res-Genetic Tox Environ Mut** 770: 35-45.
10. Wu S, Liang P, Yu H, Xu X, **Liu**, Lou X and Xiao Y (2014) Amplified Single Base-Pair Mismatch Detection via Aggregation of Exonuclease-Sheared Gold Nanoparticles. **Anal Chem** 86(7): 3461-7.
11. Lai, Y., Beaver J.M., Lorente, K., Melo, J., Ramjagsingh, S., Agoulnik, I.U., Zhang, Z. and **Liu, Y. **** (2014) Base excision repair of chemotherapeutically-induced alkylated DNA damage predominantly causes contractions of expanded GAA repeats associated with Friedreich's ataxia. **PLoS One** 9(4): e93464.
12. Xu, M., Lai, Y., Torner, J., Zhang, Y., Zhang, Z., **Liu, Y. **** (2014) Base excision repair of oxidative DNA damage coupled with removal of a CAG repeat hairpin attenuates trinucleotide repeat expansion. **Nucleic Acids Res.** 42(6):3675-3691.
13. Zhao, W., Wu, M., Lai, Y., Deng, W., **Liu, Y. ****, and Zhang, Z. (2013) Involvement of DNA

- polymerase beta overexpression in the malignant transformation induced by benzo[a]pyrene. **Toxicology** 5 (309):73-80.
14. Lai, Y., Xu, M., Zhang, Z. and Liu, Y.** (2013) Instability of CTG Repeats Is Governed by the Position of a DNA Base Lesion through Base Excision Repair. **PLoS One** 8(2): e56960.
 15. Xu, M., Gabison J and **Liu, Y.**** (2013) Trinucleotide repeat deletion via a unique hairpin bypass by DNA polymerase β and alternate flap cleavage by flap endonuclease 1. **Nucleic Acids Res** 41(3):1684-1697.
 16. Luo, Q., Lai, Y., Liu S., Wu, M., **Liu, Y.**** and Zhang, Z. (2012) Deregulated expression of DNA polymerase β is involved in the progression of genomic instability. **Environ Mol Mutagen** 53: 325-333.
 17. **Liu, Y.**** and Wilson, S.H. (2012) DNA base excision repair: a mechanism of trinucleotide repeat expansion. **Trends Biochem Sci** 37 (4): 162-172.
 18. Naidu, M.D., Agarwal R., Pena, L. A., Cunha, L., Mezei, M., Shen M., Wilson III, D.M. **Liu, Y.**, Sanchez, Z., Wilson, S.H. and Waring, M.J. (2011) Lucanthone and its derivative Hycanthone inhibit Apurinic Endonuclease-1 (APE1) by direct protein binding **PLoS One** 6 (9):e23679.
 19. Prasad, R. Beard, W.A., Batra, V., **Liu, Y.** and Wilson, S.H. (2011) A Review of recent experiments on step-to-step “hand-off” of the DNA intermediates in mammalian base excision repair pathways. **Mol. Biol (Mosk)**. 45(4):586-600.
 20. Wilson, S.H., Beard, W.A., Shock, D. D., Batra, V.K., Cavanaugh, N. A., Prasad, R., Hou, E. W., **Liu, Y.**, Asagoshi, K., Horton, J.K., Stefanick, D. F., Kedar, P.S., Carrozza, M. J., Masaka, A., Heacock, M.L. (2010) Base excision repair and design of small molecule inhibitors of human polymerase β . **Cell Mol Life Sci** 67: 3633-3647.
 21. Khodyeva, S.N., Prasad, R., Iilina, E.S., Sukhanova, M.V.m Kutuzov, M.M., **Liu, Y.**, Hou, E.W., Wilson, S.H., Lavrik, O.I. (2010) Apurinic/apyrimidinic (AP) site recognition by the 5'-dRP/AP lyase in poly(ADP-ribose) polymerase-1 (PARP-1). **Proc Natl Acad Sci USA** 107(51): 22090-5.
 22. Asagoshi, K., **Liu, Y.**, Masaoka, A., Lan, L., Prasad, R., Horton, J.K., Brown, A.R., Wang, XH., Bdour, H.M., Sobol, R.W., Taylor, J., Yasui, A. and Wilson, S.H. (2010) DNA polymerase β –dependent long patch base excision repair of UV-induced pyrimidine photoproducts in nucleotide excision repair-deficient cells. **DNA repair (Amst)** 9 (2): 109-119.
 23. **Liu, Y.**, Prasad, R. Wilson, S.H. (2010) HMGB1: roles in base excision repair and related function. **Biochim Biophysica Acta-Gene Regulatory Mechanisms-2010 Jan-Feb Special Edition** (ed. Michael Bustin), 1799 (1-2): 119-130.
 24. **Liu, Y.**, Prasad, R., Beard, W.A., Hou, E.W., Horton, J.K., McMurray, C.T. and Wilson, S.H. (2009) Coordination between polymerase β and FEN1 modulate CAG repeat expansion. **J Biol Chem** 284 (41): 28352-28366.
 25. Prasad, R., **Liu, Y.**, Deterding, L.J., Poltorasky, V.P., Kedar, P.S., Horton, J.K., Kanno, S., Asagoshi, K., Hou, E.W., Khodyeva, S.V., Lavrik, O.I., Tomer, K.B., Yasui, A. and Wilson, S.H. (2007) HMGB1 is a cofactor in mammalian base excision repair. **Mol Cell** 27:829-841.
 26. Kovtun, I.V., **Liu, Y.**, Bjoras, M., Klungland, A., Wilson, S.H. and McMurray, C.T. (2007) OGG1 initiates age-dependent CAG trinucleotide expansion in somatic cells. **Nature**, 447 (24):447-452.
 27. **Liu, Y.**, Prasad, R., Beard, W.A., Kedar, P.S., Hou, E.W., Shock, D.D. and Wilson, S.H. (2007) Coordination of steps in single-nucleotide base excision repair mediated by apurinic/apyrimidinic endonuclease 1 and DNA polymerase β . **J Biol Chem** 282 (18):13532-13541.
 28. **Liu, Y.**, Beard, W.A., Shock, D.D., Prasad, R., Hou, E.H. and Wilson, S.H. (2005) DNA polymerase β and flap endonuclease 1 enzymatic specificities sustain DNA synthesis for long-patch base excision repair. **J Biol Chem** 280 (5):3665-3674.
 29. **Liu, Y.**, Kao, H., and Bambara, R.A. (2004) Flap Endonuclease 1: A central component of DNA metabolism. **Annu Rev Biochem** 73:589-615.
 30. **Liu, Y.**, Zhang, H., Veeraraghavan, J., Bambara, R.A., and Freudenreich, C.H. (2004) *Saccharomyces cerevisiae* flap endonuclease 1 uses flap equilibration to maintain triplet repeat stability. **Mol Cell Biol** 24 (9):4049-4064.

31. **Liu, Y.** and Bambara, R.A. (2003) Analysis of human flap endonuclease 1 mutants reveals a mechanism to prevent triplet repeat expansion. **J Biol Chem** 278:13728-13739.
32. Kao, H., Henricksen, L.A., **Liu, Y.** and Bambara, R.A. (2002) Cleavage specificity of *Saccharomyces cerevisiae* flap endonuclease 1 suggests a double-flap structure as the cellular substrate. **J Biol Chem** 277:14379-14389.
33. Xie, Y., ***Liu, Y.**, Argueso, J.L., Henricksen, L.A., Kao, H., Bambara, R.A. and Alani, E. (2001) Identification of *rad27* mutations that confer differential defects in mutation avoidance, repeat track instability, and flap cleavage. **Mol Cell Biol**, 21:4889-4899.
34. Henricksen, L.A, Tom, S., **Liu, Y.**, and Bambara, R.A. (2000) Inhibition of flap endonuclease 1 by flap secondary structure and relevance to repeat sequence expansion. **J Biol Chem** 275:16420-16427.
35. Smith, T.J., Liao, A.M., **Liu, Y.**, Jones, A.B., Anderson, L.M. and Yang, C.S. (1997) Enzymes involved in the bioactivation of 4-(methylnitrosamino)-1-(3-pyridyl)-1- butanone in Patas monkey lung and liver microsomes. **Carcinogenesis** 18:1577-1584.
36. **Liu, Y.**, Liu, J., Zhang, X., Guo, R., Fan, M., Tao, Y. and Cao, Z. (1996) Studies on mutagenicity, teratogenicity and reproductive toxicity of magnetized water. **J Hygiene Res** 25:291-293.
37. **Liu, Y.**, Lin, S., Wang, Q., Chen, C., Yang, S. and Han, Y. (1996) Study on the effect of total intakes of calcium, magnesium and protein on fluorosis and fluoride tolerance. **J Hygiene Res** 25:213-216.
38. **Liu, Y.**, Lin, S., Wang, Q., Chen, C., Yang, S., Han, Y., Liu, X., Yang, Y., Zang, Z. and Zhang, F., (1995) Study on adequate and safe level of fluoride in drinking water and total intake of fluoride. **J Hygiene Res** 24:335-338.
39. Chen, C, **Liu, Y.** and Wang, X. (1995) Study on deterioration of environmental and ecosystem and its effect on human health, Science Foundation in China. **Bull Sci Foundation China** 3 (3):1-4.
40. Chen, C. and **Liu, Y.** (1993) International guideline for drinking water quality. **Water Supply Health China** 2:20-25.
41. **Liu, Y.**, Pan, X., Liu, S., Wang, J. and Xia, S. (1993) Study on correlation between organochloride pesticide exposure and adverse reproductive outcome in rural area in China. **Chinese J Public Health**, 12(1):54.
42. **Liu, Y.**, Pan, X., Liu, S., Wang, J. and Xia, S. (1993) Study of relationship between activity of cholinesterase and pesticide exposure in cotton growing and rice growing area. **Chinese J Public Health** 12(1):21-23.
43. **Liu, Y.**, Pan, X., Liu, S., Wang, J. and Xia, S. (1993) Comparison between organochloride pesticides in chicken eggs in cotton growing and rice growing areas in Hubei province. **Chinese J Public Health** 9 (1):3.
44. Pan, X., Wang, J., Wu, Z., **Liu, Y.**, Liu, S., Xia, S., Li, J., Chen, D., Liu, C. (1993) A cohort study on correlation between pesticide exposure and adverse reproductive outcome. **Chinese J Eugenics** 4 (2):79-83.
45. Pan, X., Wang, J., Wu, Z., **Liu, Y.**, Xia, S. and Liu, S. (1992) A cohort study of effects of pesticide exposure on human fetal development. **Chinese J Public Health** 11(4):249
46. Liang, G., **Liu, Y.**, Xiao, C. and Zhou, Y. (1991) Determination of cobalt in serum by flow injection-chemiluminescence analysis. **Spectroscopy Spectral Analysis**. 11 (1):21-23.
47. Zhou, Y., Li, H. and **Liu, Y.** Liang, G. (1991) Chemiluminescence determination of vitamin B12 by a flow injection method. **Anal Chim Acta.**, 243, 127-130.
48. Zhou, Y., Li, H. and **Liu, Y.** (1989) Determination of vitamin B₁₂ by chemiluminescence analysis. **Acta Pharm Sinica**, 24 (8):611-617.

BOOK CHAPTER

Liu, Y., Prasad, R. and Wilson, S.H. (2006) DNA Repair models for understanding triplet repeat instability. In Wells, R.D. and Ashizawa, T. Eds. **Genetic Instability and Neurological Diseases** 2nd edition, Elsevier-Academic Press, 2006, pp. 667-678.

INVITED SCIENTIFIC PRESENTATIONS

- Liu, Y.** (2016) Applications of DNA repair in human disease prevention and treatment. 2016 Annual Meeting of Sichuan Environmental Health Society and Sichuan Disinfection Agents and Vector Organisms Society, Mianzhu, Sichuan, China, November 23-26, 2016
- Liu, Y.** (2016) Environmentally-induced Oxidative DNA damage disrupts DNA methylation pattern in human breast cancer 1 (BRCA1) gene via base excision repair. Environmental Mutagenesis and Genomics Society 47th Annual Meeting, Kansas City, MO, September 17-24, 2016.
- Liu, Y.** (2016) Functional Coordination of DNA polymerase β dual enzymatic activities prevents trinucleotide repeat instability. FASEB SRC Dynamic DNA Structures in Biology, Saxon River, VT, July 10-15, 2016.
- Liu, Y.** (2016) Chemotherapeutic treatment of trinucleotide repeat expansion diseases via DNA damage and repair. National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH), Bethesda, MD, May 5, 2016.
- Liu, Y.** (2016) DNA lesion repair and trinucleotide repeat instability. Gordon Research Conference DNA Damage, Mutation & Cancer, Ventura Beach Marriott, Ventura, CA, March 13-18, 2016.
- Liu, Y.** (2015) DNA damage repair regulates genome instability to prevent human neurodegeneration. Florida Memorial University, Miami, FL, October 27, 2015.
- Liu, Y.** (2015) Oxidative DNA damage repair and repeat sequence instability. COST action CM1201: Biomimetic Radical Chemistry, 4th MC meeting and 3rd Annual Scientific Meeting, Athens, Greece, May 11-14, 2015.
- Liu, Y.** (2014) Somatic Trinucleotide repeat instability and treatment of human neurodegenerative diseases, Sichuan University West China School of Public Health, Chengdu, Sichuan, China May 22, 2014.
- Liu, Y.** (2013) Trinucleotide repeat expansion via DNA base lesion repair. EMGS DNA Repair Special Interest Group, Environmental Mutagenesis and Genomics Society 42nd Annual Meeting, Monterey, CA, September 21-25, 2013.
- Liu, Y.** (2013) Trinucleotide repeat instability via DNA base lesion repair. Department of Biochemistry and Biophysics, University of Rochester School of Medicine and Dentistry, August 7, 2013, Rochester, NY.
- Liu, Y.** (2012) The position of a DNA base lesion governs the stability of trinucleotide repeats through DNA base excision repair. FASEB SRC: Scientific Research Conferences-Dynamic DNA Structures in Biology, June 17-22, 2012.
- Liu, Y.** (2012) Trinucleotide repeat deletion via a unique hairpin bypass by DNA polymerase β and FEN1. Gordon Research Conference-DNA Damage, Mutation & Cancer, Ventura, CA, March 25-30, 2012.
- Liu, Y.** (2012) DNA base lesion repair and trinucleotide repeat instability. Department of Biochemistry and Molecular Biology, University of Miami School of Medicine, Miami, FL, January, 2012.
- Liu, Y.** (2011) Perspectives on DNA Base Lesion Repair: Cellular and molecular implications in human diseases, Department of Chemistry, Florida Institute of Technology, Melbourne, FL, February, 2011.
- Liu, Y.** (2010) Perspectives on DNA Base Lesion Repair: Cellular and molecular implications in human diseases, Department of Cellular Biology and Pharmacology, College of Medicine, Florida International University, Miami, FL, October, 2010.
- Liu, Y.** (2010) Perspectives on DNA base lesion repair, Department of Chemistry and Biochemistry, College of Arts and Sciences, Florida International University, Miami, FL, March, 2010.
- Liu, Y.** (2010) Perspectives on DNA base lesion repair, Department of Radiation Oncology, College of Physicians and Surgeons, Columbia University, New York, NY, February, 2010.
- Liu, Y.** (2010) Perspectives on DNA base lesion repair, Department of Biochemistry, University of Iowa, Iowa City, IA, January 2010.

- Liu, Y.** (2009) Implication of oxidative DNA damage and base excision repair in human diseases, Shenzhen Center for Disease Control and Prevention, Shenzhen, Guangdong, China, August, 2009.
- Liu, Y.** (2009) Implication of genomic damage in human neurodegeneration. Department of Environmental & Occupational Health, Robert Stempel College of Public Health and Social Work, Florida International University, Miami, Florida, USA, June, 2009.
- Liu, Y.** (2009) Implication of genomic damage in human neurodegeneration. Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, Florida, USA, May, 2009.
- Liu, Y., Prasad, R., Beard, W.A., Hou, E.W., Horton, J.K., McMurray, C.T. and Wilson, S.H.** (2009) Coordination between DNA polymerase β and flap endonuclease 1 modulates CAG repeat expansion associated with Huntington's disease 3rd US EU Conference-Repair of Endogenous Genome Damage, Galveston, TX, USA, Feb. 21-25, 2009.
- Liu, Y., Prasad R., Beard, W.A., Kedar, P.S., Shock, D.D., Hou, E.W. and Wilson, S.H.** (2006) Molecular coordination of DNA base excision repair mediated by protein-protein and protein-DNA interactions. *Fourth Annual NIEHS Science Awards Day, Nov. 2, 2006*, National Institute of Environmental Health Sciences (NIEHS)/National Institutes of Health (NIH), Research Triangle Park, NC, USA.
- Liu, Y.** (2003) Eukaryotic flap endonuclease 1 (FEN1) maintains stability of repeat sequence during DNA replication. Laboratory of Structural Biology, National Institute of Environmental Health Sciences (NIEHS)/National Institutes of Health (NIH), Research Triangle Park, NC. USA, July 2003.