Wimal Pathmasiri, PhD
Assistant Professor (*Research track*)
Department of Nutrition
University of North Carolina at Chapel Hill
Nutrition Research Institute
wimal_pathmasiri@unc.edu
919-951-4086

Education

Ph.D., Chemistry, Uppsala University, Uppsala, Sweden, 2007.

Licentiate of Philosophy, Pharmacognosy, Uppsala University, Uppsala, Sweden, 2003.

Master of Philosophy, Chemistry, University of Colombo, Colombo, Sri Lanka, 1996.

B.S., Biology, University of Colombo, Colombo, Sri Lanka, 1991.

Professional Experience

Mar 01, 2017 to date. Assistant Professor, Department of Nutrition, University of North Carolina at Chapel Hill, Chapel Hill, NC.

2010 to 2017. RTI International, Research Triangle Park, NC.

Research Biochemist, Systems and Translational Sciences (STS) (2012-2017)

Postdoctoral Scientist, Biomarker Discovery, the Consortium for Molecular Epidemiology, Genomics, Environment and Health (MEGEH) (2010-2012)

2007 to 2010. University of North Carolina at Chapel Hill, Chapel Hill, NC.

Postdoctoral Research Associate, School of Pharmacy and the Metabolomics Laboratory

Postdoctoral Research Associate, Department of Biochemistry and Biophysics

2001 to 2007. Uppsala University, Uppsala, Sweden.

Graduate student, Department of Organic Chemistry and Biochemistry, Department of Bioorganic Chemistry (2003-2007)

Licentiate Student, Division of Pharmacognosy, Department of Medicinal Chemistry (2001-2003)

1992 to 2003. University of Colombo, Colombo, Sri Lanka.

Engineering Teaching Assistant, Department of Chemistry (1995-2003)

Research Assistant, Department of Chemistry (1992-1995)

Continuing Education

- IBM Data Science Professional Certificate (Coursera, November 2020)
- Processing 16S microbiome sequencing results with QIIME2, UNC Chapel Hill (Conducted by UNC ITS Teaching and Learning), NC
- Analyzing Genomic Data, Held at UNC NRI (Conducted by UNC Bioinformatics), NC.
- Proteomics, Cold Spring Harbor Laboratory, NY.
- Theory and applications of Thermo LTQ-FT Orbitrap with ETD, Thermo Scientific on-site training course, RTI, Research Triangle Park, NC.
- Integrated Liquid Chromatography–Mass Spectrometry, Department of Chemistry, Uppsala University, Uppsala, Sweden
- Modern High-Resolution NMR Spectroscopy, Department of Chemistry, Uppsala University, Uppsala, Sweden.
- Radiation Protection Training, Uppsala University, Sweden
- Research Ethics Training, University of North Carolina at Chapel Hill, Chapel Hill, NC
- Triple Resonance Backbone NMR experiments, conducted by Swedish NMR Centre, sponsored by SBNet, Swedish NMR Center, Gothenburg University, Gothenburg, Sweden

Teaching and Course Development Activities

2021	Expert contributor NUTR845
2019	Course Development for NUTR 715 (Sumner and Hursting)
2018	Lecturer for NUTR 845 (3 classes)
2018	Invited to Dartmouth College to teach Metabolomics Workflows to Karagas group (January 25-26, 2018)
2014-2017	Invited lecturer, NIH Common Fund-Sponsored Metabolomics Hands-on Workshop (2nd to 5th) at University of Alabama at Birmingham (received scores of 4-5/5 from attendee evaluations)
2015-2017	Invited lecturer for Skype-based learning on NMR metabolomics data processing and analysis the graduate level class – Class GBS 748, Advanced Special Topics Course in Metabolomics, University of Alabama at Birmingham (Steve Barnes)
2016	Invited lecturer for Skype-based learning on NMR metabolomics data processing and analysis for the bioinformaticians in Mali, Africa (Steve Barnes)

Mentoring Experience

2017-to date. University of North Carolina at Chapel Hill, Nutrition Research Institute, Kannapolis, NC. Supports Metabolomics and Exposome Laboratory by training new staff on metabolomics workflows and laboratory safety.

2010-2017. RTI International, Research Triangle Park, NC. Supported RCMRC by training interns, postdoctoral fellows, and other technical staff members on metabolomics workflows.

In addition, Dr. Pathmasiri has mentored undergraduate and graduate students on pharmacognosy and analytical chemistry.

Honors and Awards

Recipient, Helmsley Fellowship, Proteomics, Cold Spring Harbor Laboratory, NY, June 14-28, 2016.

Recipient, Internal Research and Development (IR&D) Award: To Set Up a Platform to Evaluate Natural Products and Drugs Interactions, 2016.
Recipient, RTI Professional Development Award, 2016.
Recipient, RTI Outstanding Paper Award, 2016.

Recipient, RTI Highly Cited Author, 2015.
Recipient, Best Paper Award, (for Church, R.J., H. Wu, M. Mosedale, S.J. Sumner, W. Pathmasiri, L. Kurtz, et al. 2014. A systems biology approach utilizing a mouse diversity panel identifies genetic differences influencing isoniazid-induced microvesicular steatosis. Toxicological Sciences 140:481–492), 2014.
Recipient, RTI Early Career Author, 2013.
Recipient, RTI President's Award, 2012.

Professional Service and Memberships

Reviewer for Journals: Analytical Chemistry, Analytical and Bioanalytical Chemistry, Environment and Health Perspectives, Frontiers in Pharmacology, Frontiers in Genetics, Journal of Applied Toxicology, Metabolomics, Scientific Reports (Nature Publishing Group), Methods and Protocols (Pharmaceutics; Journal of Clinical Medicine), Metabolites, BMJ Nutrition, Prevention & Health.

NIH Reviewer for NIH Dissemination and Implementation in Health (DIRH) Study Section, 2018

Member, Metabolomics Association of North America (MANA), 2019 to date

Member, Metabolomics Society, 2009 to date

Member, Society of Toxicology NC Chapter, 2011 to date

Member, Swedish South Asian Network (SASNET), 2002 to date

Member, American Association for the Advancement of Science, 2008 to 2009

Member, Swedish Pharmaceutical Society, 2002 to 2003

Member, Society for Medicinal Plants and Natural Products Research, 2002 to 2003

Workshops and Symposia

Nutrigenetics, Nutrigenomics, and Precision Nutrition, UNC Nutrition Research Institute, Kannapolis, NC, May 22-25, 2017
11th International Conference of the Metabolomics Society, San Francisco, CA, June 29–July 2, 2015.

National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) Workshop, Host-Microbiota Interactions, NIH, Bethesda, MD, September 9–10, 2014.

National Institute of Environmental Health Sciences Workshop, Advancing Research on Mixtures: New Perspectives and Approaches for Predicting Adverse Human Health Effects, Sheraton, Chapel Hill, NC, September 26–27, 2011.

National Toxicology Program Workshop, Role of Environmental Chemicals in the Development of Diabetes and Obesity, Crabtree Marriott, Raleigh, NC, January 11–13, 2011.

50th Anniversary Annual Meeting and Toxexpo, Society of Toxicology, Washington, DC, March 6–10, 2011.

Health Consequences from Xenobiotics—Gut Microbiome—Host Interactions, National Institute of Environmental Health Sciences, Research Triangle Park, NC, November 17–18, 2010.

NIH Workshop, State of Metabolomics Technologies in Translational Research, NIH, Bethesda, MD, September 17, 2010.

Personalized Medicine in the 21st Century, symposium organized by RTI International and the North Carolina Biotechnology Center, Sheraton Hotel, Research Triangle Park, NC, June 15, 2010.

5th Annual Metabolomics Society International Conference, Edmonton, Alberta, Canada, August 30–September 2, 2009.

15th European Symposium on Organic Chemistry, Dublin, Ireland, July 8–13, 2007.

50th Annual Congress of the Society of the Medicinal Plant Research (GA), Barcelona, Spain, September 9–12, 2002.

Refereed Articles

1. Quinn, R., Hagiwara, K., Liu, K., Goudarzi, M., Mathe, E., Pathmasiri, W., Sumner, L., and Metz, T. (2021) Bridging the Gap Between Analytical and Microbial Sciences in Microbiome Research. Molecular Biosystems (Molecular Systems Biology, Accepted).

2. Mortensen, N. P., Snyder, R. W., Pathmasiri, W., Caffaro, M. M., Sumner, S. J., Fennell, T. R. (2021) Intravenous Administration of Three Multi-Walled Carbon Nanotubes to Female Rats and their Effect on Urinary Biochemical Profile (Journal of Applied Toxicology, Accepted)

3. Nguyen, Q. P., Karagas, M. R., Madan, J. C., Dade, E., Palys, T. J., Morrison, H. G., Pathmasiri, W. W. **, McRitchie, S., Sumner, S. J., Frost, H. R., & Hoen, A. G. (2021) Associations between the gut microbiome and metabolome in early life, BMC Microbiology, 21:238 https://doi.org/10.1186/s12866-021-02282-3)
   ** Corresponding author (Metabolomics)

4. Harville, E. W., Li, Y. Y., Pan, K., McRitchie, S., **Pathmasiri, W.**, and Sumner, S., Untargeted analysis of first trimester serum to reveal biomarkers of pregnancy complications: a case-control discovery phase study. Sci Rep, 2021. 11(1): p. 3468.

5. Ghanbari, R., Li, Y., **Pathmasiri, W. ***, McRitchie, S., Etemadi, A., Pollock, J. D., Poustchi, H., Rahimi-Movaghar, A., Amin-Esmaeili, M., Roshandel, G., Shayanrad, A., Abaei, B., Malekzadeh, R., and Sumner, S. C. J., Metabolomics reveals biomarkers of opioid use disorder. Transl Psychiatry, 2021. 11(1): p. 103.
   *Co-first Author

6. Li, Y. Y., Ghanbari, R., **Pathmasiri, W.**, McRitchie, S., Poustchi, H., Shayanrad, A., Roshandel, G., Etemadi, A., Pollock, J. D., Malekzadeh, R., and Sumner, S. C. J., Untargeted Metabolomics: Biochemical Perturbations in Golestan Cohort Study Opium Users Inform Intervention Strategies. Front Nutr, 2021. 7: p. 584585.

7. CHEAR Metabolomics Analysis Team, Mazzella M, Sumner SJ, Gao S, Su L, Diao N, Mostofa G, Qamruzzaman Q, **Pathmasiri W**, Christiani DC, Fennell T, Gennings C (2019). Quantitative methods for metabolomic analyses evaluated in the Children's Health Exposure Analysis Resource (CHEAR). J Expo Sci Environ Epidemiol. 2019 Sep 23. doi: 10.1038/s41370-019-0162-1. [Epub ahead of print] PMID: 31548623

8. Schulfer, A. F., Schluter, J., Zhang, Y., Brown, Q., **Pathmasiri, W.**, McRitchie, S., Sumner, S., Li, H., Xavier, J. B., Blaser, M. J. 2019. The impact of early-life sub-therapeutic antibiotic treatment (STAT) on excessive weight is robust despite transfer of intestinal microbes. ISME J, 16. doi: 10.1038/s41396-019-0349-4. [Epub ahead of print]

9. Li, Y. Y., D. A. Stewart, X. M. Ye, L. H. Yin, **W. W. Pathmasiri**, S. L. McRitchie, T. R. Fennell, H. Y. Cheung and S. J. Sumner (2018). "A Metabolomics Approach to Investigate Kukoamine B-A Potent Natural Product With Anti-diabetic Properties." Front Pharmacol 9: 1575.

10. Winnike, J. H., Stewart, D. A., **Pathmasiri, W. W.**, McRitchie, S. L., Sumner, S. J. 2018. Stable Isotope-Resolved Metabolomic Differences between Hormone-Responsive and Triple-Negative Breast Cancer Cell Lines. Int J Breast Cancer, 018:2063540. doi: 10.1155/2018/2063540. eCollection 2018.

11. Elsherif, L., **Pathmasiri, W.**, McRitchie, S., Archer, D. R., and Ataga, K. I. 2018. Plasma Metabolomics Analysis in Sickle Cell Disease Patients with Albuminuria – An Exploratory Study. Br J Haematol. 2018 Sep 10. doi: 10.1111/bjh.15592. [Epub ahead of print]

12. Chou, H., **Pathmasiri, W.**, Deese-spruill, J., Sumner, S. J., Jima, D. D., Funk, D. H., Jackson, J. K., Sweeney, B. W., and Buchwalter, D. B. 2018. The Good, the Bad, and the Lethal: Gene Expression and Metabolomics Reveal Physiological Mechanisms Underlying Chronic Thermal Effects in Mayfly Larvae (Neocloeon triangulifer), Front. Ecol. Evol., 23 March 2018 | https://doi.org/10.3389/fevo.2018.00027

13. Zhang, X., Li, J., Krautkramer, K. A., Badri, m., Battaglia, T., Borbet, T. C., Koh, H., Ng, S., Sibley, R. A., Li, Y., **Pathmasiri, W.**, Jindal, S., Shields-Cutler, R. R., Hillmann, B., Al-Ghalith, G. A., Ruiz, V. E., Livanos, A., Wout, A., Nagalingam, N., Rogers, A. B., Sumner, S. J., Knights, D., Denu, J. M., Li, H., Ruggles, K. V., Bonneau, R., Williamson, A. R., Rauch, and Blaser, M. J.. 2018. Antibiotic-induced acceleration of type 1 diabetes alters maturation of innate intestinal immunity. ELife (Accepted for publication).

14. Sun X, Stewart DA, Sandhu R, Kirk EL, **Pathmasiri WW**, McRitchie SL, Clark RF, Troester MA, Sumner SJ. 2018. Correlated metabolomic, genomic, and histologic phenotypes in histologically normal breast tissue. PLoS One. 2018 Apr 18;13(4):e0193792. doi: 10.1371/journal.pone.0193792. eCollection 2018.

15. Brim, H., Yooseph, S., Lee, E., Sherif Z, Abbas, M., Laiyemo A. O., Varma, S., Torralba, M., Dowd, S. E., Nelson, K. E., **Pathmasiri, W.**, Sumner, S., de Vos. W., Liang, Q., Yu, J., Zoetendal, E., and Ashktorab, H. (2017) A Microbiomic Analysis in African Americans with Colonic Lesions Reveals Streptococcus sp.VT162 as a Marker of Neoplastic Transformation. Genes (Basel). 2017 Nov 9;8(11). pii: E314. doi: 10.3390/genes8110314.

16. Johnson-Weaver, B. T., McRitchie, S., Mercier, K. A., **Pathmasiri, W.**, Sumner, S. J., Chan, C., Germolec, D., Kulis, M., Burks, A. W., and Staats, H. F. (2017) Effect of endotoxin and alum adjuvant vaccine on peanut allergy. J Allergy Clin Immunol, pii: S0091-6749(17)31437-9. doi: 10.1016/j.jaci.2017.07.043.

17. Chou, H., **Pathmasiri, W.**, Deese-Spruill, J., Sumner, S., and Buchwalter, D. B. (2017) Metabolomics reveal physiological changes in mayfly larvae (Neocloeon triangulifer) at ecological upper thermal limits. J Insect Physiol. 101:107-112. doi: 10.1016/j.jinsphys.2017.07.008

18. Audet, G.N., Dineen, S.M., Stewart, D.A., Plamper, M. L., **Pathmasiri. W. W.**, McRitchie, S. L, Sumner, S.J., and Leon, L.R. (2017) Pretreatment with indomethacin results in increased heat stroke severity during recovery in a rodent model of heat stroke. J Appl Physiol, 123(3):544-557. doi: 10.1152/japplphysiol.00242.2017. Epub 2017 Jun 8.

19. McClenathan, B. M, Stewart, D. A., Spooner, C. E., **Pathmasiri, W. W.**, Burgess, J. P., McRitchie, S. L., Choi, Y. S., Sumner, S. C. (2017) Metabolites as biomarkers of adverse reactions following vaccination: A pilot study using nuclear magnetic resonance metabolomics. Vaccine, 1;35(9):1238-1245. doi: 10.1016/j.vaccine.2017.01.056.

20. Chavez, J. D., Eng, J. K., Schweppe, D. K., Cilia, M., Rivera, K., Zhong, X., Wu, X., Allen, T., Khurgel, M., Kumar, A., Lampropoulos, A., Larsson, M., Maity, S., Morozov, Y., **Pathmasiri, W.**, Perez-Neut, M., Pineyro-Ruiz, C., Polina, E., Post, S., Rider, M., Tokmina-Roszyk, D., Tyson, K., Sant'Ana, D. V. P., and Bruce, J. E. (2017) A General Method for Targeted Quantitative Cross-Linking Mass Spectrometry. PloS one, 11(12), e0167547

21. Laine, J. E., Bailey, K. A., Olshan, A. F., Smeester, L., Drobná, Z., Stýblo, M., Douillet, C., García-Vargas, G., Rubio-Andrade, M., **Pathmasiri, W.**, McRitchie, S., Sumner, S. J., and Fry, R. C. (2017) Neonatal Metabolomic Profiles Related to Prenatal Arsenic Exposure. Environ. Sci. Technol., 51 (1), pp 625–633

22. Neveux, S., Smith, N. K., Roche, A., Blough, B. E., **Pathmasiri, W.**, & Coffin, A. B. (2016). Natural Compounds as Occult Ototoxins? Ginkgo biloba Flavonoids Moderately Damage Lateral Line Hair Cells. Journal of the Association for Research in Otolaryngology, 1-15.

23. Livanos, A. E., Greiner, T. U., Vangay, P., **Pathmasiri, W.**, Stewart, D., McRitchie, S., Li, H., Chung, J., Sohn, J., Kim, S., Gao, Z., Barber, C., Kim, J., Ng, S., Rogers, A. B., Sumner, S., Zhang, X., Cadwell, K., Knights, D., Alekseyenko, A., Backhed, F., & Blaser, M. J. (2016). Antibiotic-mediated gut microbiome perturbation accelerates development of type 1 diabetes in mice. Nature Microbiology, 1 (16140), 1–13. i:doi:10.1038/nmicrobiol.2016.140

24. Vickery, B. P., Kulis, M. D., Stewart, D. A., **Pathmasiri, W. W.**, Hamilton, D. K., McRitchie, S. L., Burgess, J. P., Sumner, S. J., & Burks, A. W. (2016). NMR-Based Metabolomics Analysis Reproducibly Identifies Unique Subject-Specific Profiles That Change during Peanut Oral Immunotherapy. The Journal of Allergy and Clinical Immunology, 137(2), AB132–AB132.

25. Fennell TR, Mortensen NP, Black SR, Snyder RW, Levine KE, Poitras E, Harrington JM, Wingard CJ, Holland NA, **Pathmasiri W**, Sumner SC (2016) Disposition of intravenously or orally administered silver nanoparticles in pregnant rats and the effect on the biochemical profile in urine. J Appl Toxicol., doi: 10.1002/jat.3387.

26. Dhungana S, Carlson JE, **Pathmasiri W**, McRitchie S, Davis M, Sumner S, Appt SE (2016) Impact of a western diet on the ovarian and serum metabolome. Maturitas. 2016 Oct;92:134-42. doi: 10.1016/j.maturitas.

27. Stewart DA, Winnike JH, McRitchie SL, Clark RF, **Pathmasiri WW**, Sumner SJ (2016) Metabolomics Analysis of Hormone-Responsive and Triple-Negative Breast Cancer Cell Responses to Paclitaxel Identify Key Metabolic Differences. J Proteome Res. 2016 Sep 2;15(9):3225-40. doi: 10.1021/acs.jproteome.6b00430.

28. Barnes S, Benton HP, Casazza K, Cooper SJ, Cui X, Du X, Engler JA, Kabarowski JH, Li S, **Pathmasiri W**, Prasain JK, Renfrow MB, Tiwari HK. (2016) Training in metabolomics research. I. Designing the experiment, collecting and extracting samples and generating metabolomics data. J Mass Spectrom. 2016 Jul;51(7):ii-iii. doi: 10.1002/jms.3672.

29. Barnes S, Benton HP, Casazza K, Cooper SJ, Cui X, Du X, Engler J, Kabarowski JH, Li S, **Pathmasiri W**, Prasain JK, Renfrow MB, Tiwari HK (2016) Training in metabolomics research. I. Designing the experiment, collecting and extracting samples and generating metabolomics data. J Mass Spectrom. 2016 Jul;51(7):461-75. doi: 10.1002/jms.3782

30. Mortensen NP, Mercier KA, McRitchie S, Cavallo TB, **Pathmasiri W**, Stewart D, Sumner SJ (2016) Microfluidics meets metabolomics to reveal the impact of Campylobacter jejuni infection on biochemical pathways. Biomed Microdevices. 2016 Jun;18(3):51. doi: 10.1007/s10544-016-0076-9.

31. Mercier, K., McRitchie, S., **Pathmasiri, W.**, Novokhatny, A., Koralkar, R., Askenazi, D., Brophy, P. D., Sumner, S. (2016) Preterm Neonatal Urinary Renal Developmental and Acute Kidney Injury Metabolomic Profiling: An Exploratory Study. Pediatric Nephrology (In Press).

32. Loeser, R. F., **Pathmasiri, W.**, Sumner, S., McRitchie, S., Beavers, D., Saxena, P., Nicklas, B. J., Jordan, J., Hunter, D. J., and Messier, S. P. (2016) Association of urinary metabolites with radiographic progression of knee osteoarthritis in overweight and obese adults. Osteoarthritis Cartilage. 2016 Aug;24(8):1479-86. doi: 10.1016/j.joca.2016.03.011.

33. Sandlers, Y., K. Mercier, **W. Pathmasiri**, J. Carlson, S. McRitchie, S. Sumner and H. J. Vernon (2016). "Metabolomics Reveals New Mechanisms for Pathogenesis in Barth Syndrome and Introduces Novel Roles for Cardiolipin in Cellular Function." PloS one 11(3): e0151802.

34. Szabo, D. T., **Pathmasiri, W.**, Sumner, S., and Birnbaum, L. S. (2016) Different Serum Metabolomic Profiles in Neonatal Mice Following Oral Brominated Flame Retardant Exposures to Hexabromocyclododecane (HBCD) Alpha, Gamma, and Commercial Mixture, Environmental Health and Perspectives, 125(4):651-659. doi: 10.1289/EHP242. Epub 2016 Nov 4.

35. Sumner, S. C., Snyder, R. W., Wingard, C., Mortensen, N. P., Holland, N. A., Shannahan, J. H., Dhungana S, **Pathmasiri W**, Han L, Lewin AH, Fennell TR.et al. (2015). Distribution and biomarkers of carbon-14 labeled fullerene C60 ([14C(U)]C60) in female rats and mice for up to 30 days after intravenous exposure. *Journal of Applied Toxicology*, *35*(12), 1452–1464.

36. Snyder, R. W., Fennell, T. R., Wingard, C. J., Mortensen, N. P., Holland, N. A., Shannahan, J. H., **Pathmasiri, W.**, et al. (2015). Distribution and biomarker of carbon-14 labeled fullerene C60 ([14C (U)] C60) in pregnant and lactating rats and their offspring after maternal intravenous exposure. *Journal of Applied Toxicology, 35*(12), 1438–1451.

37. Mazagova, M., Wang, L., Anfora, A.T., Wissmueller, M., Lesley, S.A., Miyamoto, Y., Eckmann, L., Dhungana, S., **Pathmasiri, W.**, Sumner, S., Westwater, C., Brenner, D.A., and Schnabl, B., (2015). Commensal microbiota is hepatoprotective and prevents liver fibrosis in mice. *The FASEB Journal: Official Publication of the Federation of American Societies for Experimental Biology, 29*(3), 1043–1055.

38. Chatterjee, S., **W. Pathmasiri** and J. Chattopadhyaya (2015). "Single-stranded DNA and RNA adopt sequence-specific solution conformation." Collection of Czechoslovak Chemical Communications 10: 1-16.

39. Church, R.J., Wu, H., Mosedale, M., Sumner, S.J., **Pathmasiri, W.**, Kurtz, C.L., Pletcher, M.T., Eaddy, J.S., Pandher, K., Singer, M., Batheja, A., Watkins, P.B., Adkins, K., and Harrill, A.H. (2014). A systems biology approach utilizing a mouse diversity panel identifies genetic differences influencing isoniazid-induced microvesicular steatosis. *Toxicological Sciences, 140*(2), 481–492.

40. Banerjee, R., **Pathmasiri, W. W.**, Snyder, R., McRitchie, S., & Sumner, S. (2012). Metabolomics of brain and reproductive organs: Characterizing the impact of gestational exposure to butylbenzyl phthalate on dams and resultant offspring. *Metabolomics*, *8*(6), 1012–1025.

41. **Pathmasiri, W. W.**, Pratt, K. J., Collier, D. N., Lutes, L. D., McRitchie, S., & Sumner, S. C. (2012). Integrating metabolomic signatures and psychosocial parameters in responsivity to an immersion treatment model for adolescent obesity. *Metabolomics*, *8*(6), 1037–1051.

42. Brim, H., Lee, E. L., Nelson, K. E., Smoot, D. T., Sears, C. L., Hassanzadeh, H., **Pathmasiri, W. W.**, et al. (2012). A comprehensive taxonomic, metagenomic and metabolomic gut flora analysis reveals distinct profiles in healthy and colon adenoma African Americans. *Gastroenterology*, *142*(5, Supplement 1), S-655.

43. Bhattacharyya, D., Ramachandran, S., Sharma, S., **Pathmasiri, W.**, King, C. L., Baskerville-Abraham, I., et al. (2011). Flanking bases influence the nature of DNA distortion by platinum 1,2-intrastrand (GG) cross-links. *PLoS One*, *6*(8), e23582.

44. Chatterjee, S., **W. Pathmasiri**, and J. Chattopadhyaya. 2008 Sequence-specific solution structures of the four isosequential pairs of single-stranded DNAs and RNAs. Available from *Nature Precedings* at http://hdl.handle.net/10101/npre.2008.1685.1.

45. Srivastava, P., Barman, J., **Pathmasiri, W.**, Plashkevych, O., Chattopadhyaya, J., & Wenska, M. (2007). Five- and six-membered conformationally locked 2',4'-carbocyclic ribo-thymidines: Synthesis, structure, and biochemical studies. *Journal of the American Chemical Society*, *129*(26), 8362–8379.

46. Wenska, M., D. Honcharenko, **W. Pathmasiri**, and J. Chattopadhyaya. 2007. Synthesis of conformationally-constrained 2'-N-4' C-ethylene bridged adenosine (Aza-ENA A). *Heterocycles 73*:303–324.

47. Plashkevych, O., S. Chatterjee, D. Honcharenko, **W. Pathmasiri**, and J. Chattopadhyaya. 2007. Chemical and structural implications of 1',2'- versus 2',4'-conformational constrains in the sugar moiety of modified thymine nucleosides. *Journal of Organic Chemistry 72*(13):4716–4726.

48. Zhou, C., D. Honcharenko, **W. Pathmasiri**, S. Chatterjee, and J. Chattopadhyaya. 2007. High-quality oligo-RNA synthesis using the new 2'-OTEM protecting group by selectively quenching the addition of p-tolyl vinyl sulphone to exocyclic amino functions, *Canadian Journal of Chemistry 85*:293–301.

49. Varghese, O.P., J. Barman, **W. Pathmasiri**, O. Plashkevych, D. Honcharenko, and J. Chattopadhyaya. 2006. Conformationally constrained 2'-N,4'-C-ethylene-bridged thymidine (Aza-ENA-T): Synthesis, structure, physical, and biochemical studies of Aza-ENA-T-modified oligonucleotides, *Journal of the American Chemical Society 128*(47):15173–15187.

50. Chatterjee, S., **W. Pathmasiri**, O. Plashkevych, D. Honcharenko, O.P. Varghese, M. Maiti, and J. Chattopadhyaya. 2006. The chemical nature of the 2'-substituent in the pentose-sugar dictates the pseudoaromatic character of the nucleobase (pK_a) in DNA/RNA. *Organic & Biomolecular Chemistry 4*(9):1675–1686.

51. Chatterjee, S., **W. Pathmasiri**, and J. Chattopadhyaya. 2005. The 5-Me of thyminyl (T) interaction with the neighboring nucleobases dictate the relative stability of isosequential DNA-RNA hybrid duplexes. *Organic & Biomolecular Chemistry 3*(21):3911–3915.

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53. Bogucka, M., P. Naus, **W. Pathmasiri**, and J. Chattopadhyaya. 2005. Facile preparation of the Oxetane-Nucleosides. *Organic & Biomolecular Chemistry 3*:4362–4372.

54. **Pathmasiri, W.**, H.R. El-Seedi, X. Han, J-C. Janson, U. Huss, and L. Bohlin. 2005. Aryl ketones from *Acronychia pedunculata* with cyclooxygenase-2 inhibitory effects. *Chemistry & Biodiversity 2*(4):463–469.

55. Han, X., **W. Pathmasiri**, L. Bohlin, and J-C. Janson. 2004. Isolation of high purity 1-[2',4'-dihydroxy-3',5'-di-(3'-methylbut-2'enyl)-6'-methoxy] phenylethanone from *Acronychia pedunculata* (L.) Miq. by high-speed counter-current chromatography. *Journal of Chromatography A 1022*(1–2):213–216.

56. Amarasekara, A.S., and **W.W. Pathmasiri**. 2000. Competitive [3+2] and [4+2] cycloaddition reactions of 2-furaldehyde phenylhydrazone with alkenes. *Bulletin of the Chemical Society of Japan 73*(2):395–399.

57. H.M. T.B. Herath & **Wimal Padmasiri** 1999. Demethyldactyloidin and Other Constituents in Myristica Ceylanica. Natural Product Letters, Volume 14, 1999 - Issue 2

58. Amarasekara, A.S., and **W.W. Pathmasiri**. 1998. Regiochemical control in the addition of aryl N-sulfinylamines to juglone and juglone derivatives. *Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry 37B*(10):961–962.

59. Amarasekara, A.S., and **W.W. Pathmasiri**. 1995. Reactions of N-sulfinylarylamines with 1,4-benzoquinone and 1,4-naphthoquinone: synthesis of N-arylsulfinamoyl quinones and their hydrolysis to hydroxyquinones. *Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry 13*:1653–1658.

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Book Chapters and Monographs

1. **Pathmasiri, W**.**, Kay, K., McRitchie, S., Sumner, S. (2020) Analysis of Metabolomics Data. Edited by Shuzhao Li., Computational Methods and Data Analysis for Metabolomics, Methods in Molecular Biology, vol. 2104, Springer, New York.

   ** Corresponding author

2. Sumner, S. C. J., McRitchie, S., and **Pathmasiri, W.** (2019) Metabolomics for Biomarker Discovery and to Derive Genetic Links to Disease. Edited by Raffaele De Caterina, J. Alfredo Martinez and Martin Kohlmeier, Principles of Nutrigenetics and Nutrigenomics: Fundamentals for Individualized Nutrition, 1st Edition, Academic Press (Elsevier), Cambridge, MA, USA. ISBN: 9780128045725 (Hardcover).

3. Sumner, S. C. J., **Pathmasiri, W.**, Carlson, J. E., McRitchie, S. L., and Fennell, T. R. 2018. Metabolomics. Book Chapter in molecular and Biochemical Toxicology. Edited by Rob Smart and Ernest Hodgeson. John Wiley & Sons Inc., Hoboken, NJ, USA. ISBN: 978-1-119-04241-9 (hardback).

4. Stewart, D. A., Dhungana, S., Clark, R. F., **Pathmasiri, W. W.**, McRitchie, S. L., & Sumner, S. J. (2015). Omics technologies used in systems biology. In Rebecca Fry (Ed.), *Systems Biology in Toxicology and Environmental Health. 1st Edition;* pp. 57–84. Waltham, MA: Academic Press.

5. **Pathmasiri W.**, R.W. Snyder, J.P. Burgess, J.A. Popp, T.R. Fennell, and S.C.J. Sumner. 2011. Metabolomics of urine and liver for the assessment of acetaminophen induced liver injury. Book Chapter in *Handbook of Systems Toxicology*. Edited by D. A. Casciano and S. Sahu. John Wiley & Sons Ltd.: West Sussex, UK. ISBN: 978-0-470-68401-6. March.

6. **Pathmasiri, W.** 2007. Ph.D. Thesis: Structural and Biophysical Studies of Nucleic Acids. Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science and Technology. ISSN 1651–6214; 349. ISBN: 978-91-554-6982-5. Available at http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-8245.

Presentations

1. Yuan-Yuan Li, Reza Ghanbari, **Wimal Pathmasiri**, Susan McRitchie, Hossein Poustchi, Amaneh Shayanrad, Gholamreza Roshandel, Arash Etemadi, Jonathan D. Pollock, Reza Malekzadeh, Susan Sumner (2021) Untargeted Metabolomics Reveals Biological Markers for Opioid Use Disorder Diagnosis and Intervention Strategies, Society of Biological Psychiatry's 2021 Annual Meeting.

2. Herman L. Freeman, III, Yuan-yuan Li, Susan L. McRitchie, **Wimal W. Pathmasiri**, Susan J. Sumner, Baba B. Mass, Brea C. Nance1, Saroja Voruganti and Delisha A. Stewart. Identification of genetic and metabolic impairments to improve chemotherapeutic efficacy (2021) AACR Annual Meeting (Virtual)

3. Emily M.J Fennell, Lucas J. Aponte-Collazo, Blake R. Rushing, Yuan-Yuan Li, **Wimal Pathmasiri**, Joshua Wynn, Paul R. Graves, Ekhson L. Holmuhamedov, Laura Herring, Ed J. Iwanowicz, Lee M. Graves (2021) Disruption of mitochondrial metabolism by ClpP activation in triple negative breast cancer, AACR Annual Meeting (Virtual)

4. Ke Pan, Yuanyuan Li, **Wimal Pathmasiri**, Susan McRitchie Susan Sumner, EW Harville (2020) BMI-associated metabolic profiles and pathways in the 1st trimester serum, The SPER conference will host a webinar about "Obesity in maternal and child health" on Dec. 7th 2020, and they gave us a 12-minutes presentation
5. W Pathmasiri, Y-Y Li, EW Harville, K Pan, S McRitchie, S Sumner. Untargeted Metabolomics Analysis of First-trimester Serum to Discover Biomarkers and Mechanism of Pregnancy Complications: A Case-Control Study. Presented at the Metabolomics Association of North America (MANA) annual meeting, September 14-16, 2020 (Virtual Meeting).
6. Sumner S, Ghanbari R, **Pathmasiri W**, Li Y, McRitchie S, Etemadi A, Abnet C, Pollock J, Malekzadeh R. The Internal Exposome, Opium Use Disorder, and Nutrition. November 15-17, 2019. Metabolomics Association of North America, Atlanta, GA
7. Li YY, Stewart DA, **Pathmasiri W**, McRitchie S, Cheung H, Sumner SJ. A Metabolomics Approach to Investigate Lycii Cortex and Kukomine B- Potent Natural Products with Anti-diabetic Properties, November 15-17, 2019. Metabolomics Association of North America, Atlanta, GA.
8. Stewart DA, **Pathmasiri WW**, McRitchie SL, Naab T, DeWitty RL, Fripp VT, Beyene DA, Kassim OO, Kanaan YM, Sumner SJ, Copeland RL. Common and Unique Breast and Prostate Cancer Metabolic Profiles in African Americans, September 20-23, 2019. American Association for Cancer Research - 12th Conference on The Science of Cancer Health Disparities in Racial/Ethnic Minorities and the Medically Underserved, San Francisco, CA
9. Karagas M, McRitchie S, Hoen A, Laue, Madan J, Sumner S, **Pathmasiri W**. Oral Presentation: Alterations in microbe-associated metabolites in the infant gut associate with in utero and early postnatal arsenic exposure, 31st Annual Conference of the International Society Of Environmental Epidemiology, August 25-28, 2019 Utrecht, The Netherlands.
10. Li Y, Stewart DA, **Pathmasiri WW**, McRitchie SL, Cheung H, Sumner SJ. A Metabolomics Approach to Investigate Lycii Cortex and Kukomine B- Potent Natural Products with Anti-diabetic Properties, Interdisciplinary Nutrition Sciences Symposium, July 24-25, 2019, Chapel Hill, NC.
11. Sumner S, Ghanbari R, **Pathmasiri W**, Li Y, McRitchie S, Etemadi A, Abnet C, Pollock J, Malekzadeh R. Untargeted Metabolomics of Urine from Opium Users and Non-Users: A Golestan Cohort Study. Metabolomics 2019, June 23-27, 2019, The Hague, The Netherlands.
12. Sumner S, Ghanbari R, **Pathmasiri W**, Li Y, McRitchie S, Etemadi A, Abnet C, Pollock J, Malekzadeh R. Untargeted Metabolomics of Urine from Opium Users and Non-Users: A Golestan Cohort Study. Building International Collaboration in Metabolomics: An Epidemiological Perspective, June 22, 2019, The Hague, The Netherland
13. Pan K, Li Y, **Pathmasiri W**, McRitchie S, Sumner S, Harville EW. Untargeted metabolomics of 1st trimester blood for biomarkers and causal mechanisms of hypertensive disorders of pregnancy. Society for Pediatric and perinatal Epidemiological Research, 32nd Annual Meeting, June 17-18, 2019, Minneapolis, MN

14. Ghanbari R, **Pathmasiri W**, McRitchie S, Stewart D, Li Y, Maleki H, Etemadi A, Abnet C, Pollock J, Malekzadeh R, Sumner S. Metabolomics Analysis of Opiate Abusers from Golestan Cohort Study (GCS). Experimental Biology, April 7-9, 2019, Orlando, FL

15. Smirnov, A.; Li, Y.; **Pathmasiri, W.**; Sumner, S.; Du, X. 2018. A workflow for detecting unknown compounds from untargeted GC/MS and LC/MS metabolomics data and an online library of unknowns detected in plasma and urine, 14th Internation Conference of the Metabolomics Society, Seattle, WA, USA, Jun3 24-28, 2018; Seattle, WA, USA.

16. Delisha A. Stewart, **Wimal W. Pathmasiri**, Susan L. McRitchie, Lance Buckley, Tammey J. Naab, Robert L. DeWitty, Jr, Vikisha T. Fripp, Estelle Cooke-Sampson, Desta A. Beyene, Luisel Ricks-Santi, Robert L. Copeland, Jr, Susan J. Sumner and Yasmine M. Kanaan. 2018. *Metabolic profiles distinguish breast cancer progression in African American women (nutritionally-focused)*. Poster presented at the Nutrition Research Institute's Defining Precision Nutrition Symposium, Kannapolis, NC.

17. Li Y, Stewart D, **Pathmasiri W**, McRitchie S, Urbina E, Mayer-Davis E, Dabelea D, and Sumner S. The impact of obesity on metabotype of type 1 and type 2 diabetes in youth. Poster at Defining Precision Nutrition, May 1-2, 2018, Kannapolis, NC.

18. Stewart, D. A., **Pathmasiri, W. W.**, McRitchie, S. L., Buckley, L., Naab, T. J., DeWitty, J., R. L.; Fripp, V. T.; Cooke-Sampson, E., Beyene, D. A., Ricks-Santi, L., Copeland, J., R. L., Sumner, S. J., Kanaan, Y. M. 2018. Metabolic profiles distinguish breast cancer progression in African American women. AACR Annual Meeting, Chicago, IL, USA., April 14-18 2018. Chicago, IL, USA.

19. Ghanbari R, **Pathmasiri WW**, Etemadi A, Abnet C, Malekzadeh R, Sumner SJ. Metabolomics Investigation of Opiate Addiction: Golestan Cohort Study. Poster at 7th Annual Catalyst Symposium at the NC Research Campus. March 23, 2018.

20. Li, Y.Y., Stewart, D.A., **Pathmasiri, W.**, McRitchie, S., Urbina E.M., Mayer-Davis E.J., Dabelea D., and Sumner, S.J. 2018. The impact of obesity on metabotype of type 1 and type 2 diabetes in youth. Selected for and received award for oral presentation at Metabolomics Society Annual Meeting, Seattle, WA.

21. Reza Ghanbari, **Wimal Pathmasiri**, Arash Etemadi, Christin Abnet, Reza Malekzadeh, Susan Sumner. Metabolomics Investigation of Opiate Addiction: Golestan Cohort Study. Poster at NIDA Genetics and Epigenetics Cross-cutting Research Meeting, January 8-9, 2018.

22. Ghanbari R, **Pathmasiri WW**, McRitchie SL, Etemadi A, Pollock, Malekzadeh R, Sumner SJ. Metabolomics of Opiate Abusers Urine Specimens from the Golestan Cohort Study: A NIDA Invest Fellowship Project. Poster at the NIH C-F Metabolomics Program Annual Meeting, Sept. 27-28, 2017, Davis, CA.

23. Delisha Stewart, Yuan-Yuan Li, **Wimal Pathmasiri**, Zachery Acuff, Susan McRitchie and Susan Sumner. 2017. Expansion of STS capability in cytokine array platform development: application in natural products research. Poster presented at RTI International's Internal Research & Development Annual Innovation Showcase, Research Triangle Park, NC.

24. **Wimal Pathmasiri**, Yuan-Yuan Li, Delisha Stewart, Susan McRitchie and Susan Sumner. 2017. Establishment of a Platform to Evaluate Interactions Between Natural Products and

Pharmaceutical Drugs. Poster presented at RTI International's Internal Research & Development Annual Innovation Showcase, Research Triangle Park, NC.

25. Chou H, **Pathmasiri W**, Deese-Spruill J, Sumner S, Jima D, Funk DH, Jackson JK, Sweeney BW, Buchwalter DB (2017). Gene expression and metabolomics reveal physiological mechanisms underlying chronic thermal effects in mayfly larvae (Neocloeon triangulifer). Oral presentation at the Society of Freshwater Science (SFS) Annual Meeting, June 4-8, 2017, Raleigh, NC.

26. Li Y. Y., Stewart D. A., McRitchie S. L., Acuff Z. J., **Pathmasiri W. W.**, Ye X. M., Cheung H. Y., Sumner, S. J. 2016. Kukoamine B is a potent antidiabetic dietary natural product: A system pharmacology approach. Selected as oral presentation at the 51st Annual Southeastern Regional Lipid Conference. Cashiers, NC.

27. BP Vickery, M Kulis, D Hamilton, D Stewart, **W Pathmasiri**, S McRitchie, J Burgess, S Sumner, AW Burks. 2016. NMR-Based Metabolomics Analysis Reproducibly Identifies Unique Subject-Specific Profiles That Change during Peanut Oral Immunotherapy. Poster presented at American Academy of Allergy Asthma & Immunology, Annual Meeting, Los Angeles, CA.

28. Bruce M. McClenathan, Delisha A. Stewart, Christina E. Spooner, **Wimal W. Pathmasiri**, Jason P. Burgess, Susan L. McRitchie, Y. Sammy Choi, Susan C.J. Sumner. 2016. Metabotypes of Subjects with Adverse Reactions Following Vaccination: A Pilot Study using NMR Metabolomics and Multivariate Analysis. Poster presented at the Military Health System Research Symposium, Kissimmee, FL.
29. Sumner, S. J., Richardson, A. S., McRitchie, S. L., **Pathmasiri, W. W.**, & Perera, F. (Invited speaker). (2015, August). *Relating Exposure to health outcomes via the metabotype of cord blood. A problem for structural equation modeling*. Poster presented at Advancing Analysis of Xenobiotics in Environmental and Biological Media, U.S. Environmental Protection Agency, Research Triangle Park, NC.

30. Deese-Spruill, J. Y., Carlson, J. E., Mercier, K. A., Monero, M., Devlin, R., Ward, T., … **Pathmasiri, W. W.**, et al. (Invited speaker). (2015, August). *Particulate matter exposure and perturbations in the metabolome*. Poster presented at Advancing Analysis of Xenobiotics in Environmental and Biological Media, U.S. Environmental Protection Agency, Research Triangle Park, NC.

31. Fennell, T. R., Snyder, R. W., **Pathmasiri, W. W.**, McRitchie, S. L., Burgess, J. P., & Sumner, S. J. (Invited speaker). (2015, August). *Metabolomics in the assessment of prior in utero exposure*. Poster presented at Advancing Analysis of Xenobiotics in Environmental and Biological Media, U.S. Environmental Protection Agency,, Research Triangle Park, NC.

32. **Pathmasiri, W. W.**, Laine, J. E., Bailey, K. A., Olshan, A. F., Smeester, L., Drobna, Z., et al. (Invited speaker). (2015, August). *A metabolomic signature of in utero inorganic arsenic exposure in fetal cord serum*. Poster presented at Advancing Analysis of Xenobiotics in Environmental and Biological Media, U.S. Environmental Protection Agency, Research Triangle Park, NC.

33. **Pathmasiri, W. W.**, Loeser, R., Sumner, S. J., McRitchie, S. L., Beavers, D., Saxena, P., et al. (2015, June). *Correlation of urinary metabolites with radiographic progression of knee osteoarthritis in overweight and obese adults*. Poster presented at the Annual Meeting of the Metabolomics Society, San Francisco, CA.

34. Wiernek, S., Mercier, K. A., **Pathmasiri, W. W.**, McRitchie, S. L., Sumner, S. J., & Dai, X. (2015, June). *Global metabolomic profiling of endothelial cell response to inorganic phosphate*. Poster presented at the Annual Meeting of the Metabolomics Society, San Francisco, CA.

35. Brophy, P., Mercier, K. A., McRitchie, S. L., **Pathmasiri, W. W.**, Sumner, S. J., Koralkar, R., et al. (2015, June). *Metabolomics profiling of renal development and acute kidney injury in premature infants*. Presented at the Annual Meeting of the Metabolomics Society, San Francisco, CA.

36. Petrovic, S., McRitchie, S. L., DuBose, Jr., T., **Pathmasiri, W. W.**, Burgess, J. P., Xu, J., et al. (2015, June). *Urine Metabolomics Profile in Early CKD*. Presented at the Annual Meeting of the Metabolomics Society, San Francisco, CA.

37. Cox, L., **Pathmasiri, W. W.**, McRitchie, S. L., Sohn, J., Robine, N., Sumner, S. J., et al. (2015, June). *Systemic metabolic impact of early-life microbiota disruption*. Presented at the Annual Meeting of the Metabolomics Society, San Francisco, CA.

38. Brophy, P., Mercier, K. A., Novokhatny, A., McRitchie, S. L., **Pathmasiri, W. W.**, Burgess, J. P., et al. (2015, June). *Metabolomics profiling of renal development and acute kidney injury in premature infants*. Presented at Metabolomics 2015, San Francisco, CA.

39. Stewart, D. A., Winnike, J., McRitchie, S. L., **Pathmasiri, W. W.**, & Sumner, S. J. (2015, April). *Triple negative breast cancer: Metabolomics and flux analysis to identify targets for drug development*. Poster presented at American Association for Cancer Research Annual Meeting, Philadelphia, PA.

40. Burgess, J. P., Cavallo, T., **Pathmasiri, W. W.**, Mercier, K. A., McRitchie, S. L., Novokhatny, A., et al. (2014, October). *Metabotyping of ABO blood groups*. Poster presented at NIH Common Fund Metabolomics Consortium Meeting, Research Triangle Park, NC.

41. Mortensen, N. P., Stewart, D. A., **Pathmasiri, W. W.**, Mercier, K. A., McRitchie, S. L., Cavallo, T., et al. (2014, October). *Metabolomics and darkfield microscopy of mammalian cells from microfluidic and transwell systems*. Poster presented at the National Institutes of Health's Common Fund Metabolomics Consortium Meeting, Research Triangle Park, NC.

42. Raymer, J. H., Michael, L. C., Cho, S., Ward, A., Devlin, R., Deese-Spruill, J. Y., … **Pathmasiri, W. W.**, et al. (2014, October). *Environmental exposures to PM and resultant metabolomic perturbations in humans*. Poster presented at the Annual Conference of the International Society of Exposure Science (ISES 2014), Cincinnati, OH.

43. Novokhatny, A., Sumner, S. J., Snyder, R. W., Lewin, A. H., **Pathmasiri, W. W.**, Brown, J. M., et al. (2013, November). *A distribution and metabolomics investigation of the impact of fullerene C60 exposure in mice fed high fat diets and mice fed diets normal in fat*. Poster presented to the North Carolina Section at the American Chemical Society Sectional Conference, North Carolina State University, Raleigh, NC.

44. Novokhatny, A., Sumner, S. J., Snyder, R. W., Lewin, A. H., **Pathmasiri, W. W.**, Brown, J. M., et al. (2013, March). *A distribution and metabolomics investigation of the impact of fullerene C60 exposure in mice fed high fat diets and mice fed diets normal in fat*. Poster presented at the 52nd Annual Conference of the Society of Toxicology, San Antonio, TX.

45. Novokhatny, A., Sumner, S. J., Snyder, R. W., Lewin, A. H., **Pathmasiri, W. W.**, Brown, J. M., et al. (2012, August). *A distribution and metabolomics investigation of the impact of fullerene C60 exposure in mice fed high fat diets and mice fed diets normal in fat*. Poster presented at 4th Annual RTI International Internship Showcase, Dreyfus Auditorium, RTI International, Research Triangle Park, NC.

46. Szabo, D.T., **W. Pathmasiri**, J.J. Diliberto, S. Sumner, and L.S. Birnbaum. 2011. *Metabolomic Analysis of Serum After Treatment with the Emerging POP Flame Retardant Hexabromocyclododecane (HBCD): Commercial Mixture, Alpha and Gamma Stereoisomers Elicit Differential Effects in Infantile Mice*. Poster presented at the 50th Anniversary Annual Meeting and ToxExpo, Society of Toxicology, Washington, DC, March 6–10.

47. Collier, D.N., **W. Pathmasiri**, K.J. Pratt, Y. Crawford, S. Henes, A. Gross-McMillan, L. Lutes, and S. Sumner. 2011. *Obesity Treatment and the Biology of Behavior: Metabolomic Analysis of Response to a Behavioral Intervention*. Poster presented at the Pediatric Academic Societies & Asian Society for Pediatric Research Joint Meeting, Denver, CO, April 30–May 3.

48. Banerjee, R., **W. Pathmasiri**, R. Snyder, and S. Sumner. 2011. *A Metabolomics Investigation of the Impact of Gestational Exposure to a Phthalate on the Brain and Reproductive Organs of the Dam and Prepubertal Pups*. Poster presented at the 50th Anniversary Annual Meeting and Toxexpo, Society of Toxicology, Washington, DC, March 6–10.

49. **Pathmasiri, W.**, S. Chatterjee, O. Plashkevych, O.P. Varghese, D. Honcheronko, and M. Maiti. 2007. *pKa Studies of 2¨-Modified nucleotides*. Poster presented at the 15th European Symposium on Organic Chemistry, Dublin, Ireland, July 8–13.

50. **Pathmasiri, W.W.**, U. Huss, L. Bohlin, and P. Perera-Ivarsson. 2002. *Dereplication of Ubiquitous COX-2 Inhibitors of Natural Origin*. Poster presented at the 50th Annual Congress of the Society of the Medicinal Plant Research, Barcelona, Spain, September 9–12.

Invited Speaker Presentations

Invited Speaker, GTCbio's Genomics and Big Data Summit, San Diego, CA, September 26-27, 2017.

Invited Lecturer, 5th Annual Workshop on Metabolomics, University of Alabama at Birmingham, Birmingham, AL, July 16–21, 2017.

Invited Lecturer, 4th Annual Workshop on Metabolomics, University of Alabama at Birmingham, Birmingham, AL, July 17–21, 2016.

Invited Speaker, "Untargeted Metabolomics Using GC-TOF-MS", Leco Metabolomics Symposium, North Eastern University, Boston, May 10, 2016.

Invited Speaker, "Metabolomics in studies of microbiome", First Friday Microbiome RIP seminar, Microbiome Core Facility, Department of Cell Biology and Physiology, UNC Chapel Hill, NC, April 01, 2016.

Invited Lecturer, 3rd Annual Workshop on Metabolomics, University of Alabama at Birmingham, Birmingham, AL, June 14–18, 2015.

Invited Lecturer, 2nd Annual Workshop on Metabolomics, University of Alabama at Birmingham, Birmingham, AL, June 2–5, 2014.

Invited Speaker, "Environmental Metabolomics Using GC-TOF Mass Spectrometry", Indo-U.S. Symposium titled Mass Spectrometry–Based Metabolomics in Disease Biology, Rajiv Gandhi Center for Biotechnology, Thiruvananthapuram, Kerala, India, January 23–24, 2014.