

Thivanka Muthumalage

Assistant professor
Toxicology Program
School of Health Sciences
Purdue University
915 Mitch Daniels Blvd
Lilly Hall of Life Sciences #2121

tmuthuma@purdue.edu

Office: (765) 494-5065

Cell: (775) 338-7217

EDUCATION AND TRAINING

Postdoctoral Associate (2019- 2023)

Concentration: Pulmonary toxicity of tobacco products, lung injury, shelterin complex disruption, and lung cellular senescence

Toxicology Training Program

Department of Environmental Medicine

University of Rochester Medical Center, Rochester, NY

Mentor: Irfan Rahman, PhD

T32 Postdoctoral Trainee (2017-2019)

Concentration: Pulmonary toxicity of tobacco products, lung injury, shelterin complex disruption, and lung cellular senescence

Toxicology Training Program

Department of Environmental Medicine

University of Rochester Medical Center, Rochester, NY

Mentor: Irfan Rahman, PhD

Co-mentor: Alison Elder, PhD

Ph.D., Environmental Sciences (Environmental Toxicology) (2016)

Dissertation: Effects of commonly used air filters on secondhand tobacco smoke and the induction of oxidative stress and inflammation in mice

Concentration: Inhalation toxicology and Immunotoxicology

Environmental Sciences Program

Department of Agriculture, Nutrition and Veterinary Sciences, University of Nevada, Reno, NV.

Mentor: Chris Pritsos, PhD

Co-Mentors: Glenn Miller, Kenneth Hunter, Douglas Redelman, and John Sagebiel

BS, Biology (2008)

Department of Biology

University of Nevada, Reno, NV.

GRANTS

Pending Research Support

R00 NIEHS

Title: Pulmonary toxicological evaluation and chemical interactions of menthol, mint, and tobacco-flavored e-cigarette products.

Awarding agency: NIEHS; K99/R00 Total Cost \$1,030,819

PI: Thivanka Muthumalage, PhD

Completed Research Support

K99ES033835 K99/R00 pathway to independence (09/2021-Present)

Title: Pulmonary toxicological evaluation and chemical interactions of menthol, mint, and tobacco-flavored e-cigarette products.

Awarding agency: NIEHS; K99/R00 Total Cost \$1,030,819; K99 Cost Awarded \$ 281,862

PI: Thivanka Muthumalage, PhD

Mentor (K99 phase): Irfan Rahman, PhD, University of Rochester

Co-Mentor (K99 phase): Alison Elder, PhD, University of Rochester

Co-Mentor (K99 phase): Maciej, Goniewicz, Roswell Park Cancer Institute, Buffalo

Collaborators: Ilona Jaspers, PhD, University of North Carolina, Chapel Hill

Sven-Eric Jordt, PhD, Duke University

Prue Talbot, PhD, University of California, Riverside

Robert Strongin, PhD, Portland State University

Mentored pilot research project in tobacco regulatory toxicology (06/2019-08/2020)

Title: Pulmonary and immuno-toxicological effects of exposure to metals released by e-cigarettes and other emerging ultra-portable electronic nicotine delivery.

Awarding agency: NCI; Center for Research on Flavored Tobacco (CRoFT), Total Cost \$13,600

PI: Thivanka Muthumalage, PhD

Mentor: Irfan Rahman, PhD

PUBLICATIONS

Manuscripts in Preparation

- Challenges in Current Inhalable Tobacco Toxicity Assessment Models (ready to submit to Tobacco induced diseases)
- Club cell-specific telomere protection protein 1 (TPP1) protects against tobacco smoke-induced lung inflammation, xenobiotic metabolic dysregulation, and injurious responses. (ready to submit to FASEB)
- Mucosal immune response in normal, COPD, and asthma EpiAirway 3D tissues by ENDS humectant, menthol, and tobacco flavors and sex-dependent differences. (in preparation)
- Role of TPP1 in shelterin complex disruption by sub-chronic side stream smoke exposure in lung disease processes.(in preparation)
- Role of p16 in cellular senescence and lung disease pathogenesis by subchronic smoke exposure (in preparation).

Published Journal Articles

1. Kaur G, **Muthumalage T**, Rahman I. Clearance of senescent cells reverts the cigarette smoke-induced lung senescence and airspace enlargement in p16-3MR mice. *Aging Cell*. 2023 Jul;22(7):e13850. doi: 10.1111/accel.13850. Epub 2023 Apr 20. PMID: 37078230; PMCID: PMC10352560.
2. **Muthumalage T**, Rahman I. Pulmonary immune response regulation, genotoxicity, and metabolic reprogramming by menthol- and tobacco-flavored e-cigarette exposures in mice. *Toxicol Sci*. 2023 May 31;193(2):146-165. doi: 10.1093/toxsci/kfad033. PMID: 37052522; PMCID: PMC10230290.
3. Lamb T, **Muthumalage T**, Meehan-Atrash J, Rahman I. Nose-Only Exposure to Cherry- and Tobacco-Flavored E-Cigarettes Induced Lung Inflammation in Mice in a Sex-Dependent Manner. *Toxics*. 2022 Aug 13;10(8):471. doi: 10.3390/toxics10080471. PMID: 36006150; PMCID: PMC9413458.
4. Podguski S, Kaur G, **Muthumalage T**, McGraw MD, Rahman I. Noninvasive systemic biomarkers of e-cigarette or vaping use-associated lung injury: a pilot study. *ERJ Open Res*. 2022;8(2). Epub 2022/04/08. doi: 10.1183/23120541.00639-2021. PubMed PMID: 35386827; PMCID: PMC8977595
5. Yogeswaran S, **Muthumalage T**, Rahman I. Comparative Reactive Oxygen Species (ROS) Content among Various Flavored Disposable Vape Bars, including Cool (Iced) Flavored Bars. *Toxics*.

2021;9(10). Epub 2021/10/23. doi: 10.3390/toxics9100235. PubMed PMID: 34678931; PMCID: PMC8538728.

6. Wang Q, Sundar IK, Lucas JH, **Muthumalage T**, Rahman I. Molecular clock REV-ERB α regulates cigarette smoke-induced pulmonary inflammation and epithelial-mesenchymal transition. *JCI Insight*. 2021;6(12). Epub 2021/05/21. doi: 10.1172/jci.insight.145200. PubMed PMID: 34014841; PMCID: PMC8262497.
7. Sharma S, Wang Q, **Muthumalage T**, Rahman I. Epithelial Ablation of Miro1/Rhot1 GTPase Augments Lung Inflammation by Cigarette Smoke. *Pathophysiology*. 2021;28(4):501-12. Epub 2022/04/03. doi: 10.3390/pathophysiology28040033. PubMed PMID: 35366248; PMCID: PMC8830451.
8. Lucas JH, Wang Q, **Muthumalage T**, Rahman I. Multi-Walled Carbon Nanotubes (MWCNTs) Cause Cellular Senescence in TGF- β Stimulated Lung Epithelial Cells. *Toxics*. 2021;9(6). Epub 2021/07/03. doi: 10.3390/toxics9060144. PubMed PMID: 34205339; PMCID: PMC8234672.
9. Kaur G, Yogeswaran S, **Muthumalage T**, Rahman I. Persistently Increased Systemic ACE2 Activity Is Associated With an Increased Inflammatory Response in Smokers With COVID-19. *Front Physiol*. 2021;12:653045. Epub 2021/06/15. doi: 10.3389/fphys.2021.653045. PubMed PMID: 34122129; PMCID: PMC8194708.
10. Bhat TA, Kalathil SG, Leigh N, **Muthumalage T**, Rahman I, Goniewicz ML, Thanavala YM. Acute Effects of Heated Tobacco Product (IQOS) Aerosol Inhalation on Lung Tissue Damage and Inflammatory Changes in the Lungs. *Nicotine Tob Res*. 2021;23(7):1160-7. Epub 2020/12/22. doi: 10.1093/ntr/ntaa267. PubMed PMID: 33346355; PMCID: PMC8186425.
11. Wang Q, Sundar IK, Li D, Lucas JH, **Muthumalage T**, McDonough SR, Rahman I. E-cigarette-induced pulmonary inflammation and dysregulated repair are mediated by nAChR α 7 receptor: role of nAChR α 7 in SARS-CoV-2 Covid-19 ACE2 receptor regulation. *Respir Res*. 2020;21(1):154. Epub 2020/06/20. doi: 10.1186/s12931-020-01396-y. PubMed PMID: 32552811; PMCID: PMC7301079.
12. Wang Q, Sundar I, Li D, Lucas J, **Muthumalage T**, McDonough S, Rahman I. E-cigarette-Induced Pulmonary Inflammation and Dysregulated Repair are Mediated by nAChR α 7 Receptor: Role of nAChR α 7 in ACE2 Covid-19 receptor regulation. *Res Sq*. 2020. Epub 2020/07/24. doi: 10.21203/rs.2.23829/v2. PubMed PMID: 32702718; PMCID: PMC7336696.
13. **Muthumalage T**, Lucas JH, Wang Q, Lamb T, McGraw MD, Rahman I. Pulmonary toxicity and inflammatory response of e-cigarettes containing medium-chain triglyceride oil and vitamin E acetate: Implications in the pathogenesis of EVALI but independent of SARS-COV-2 COVID-19 related proteins. *bioRxiv*. 2020. Epub 2020/06/27. doi: 10.1101/2020.06.14.151381. PubMed PMID: 32587960; PMCID: PMC7310615.
14. **Muthumalage T**, Lucas JH, Wang Q, Lamb T, McGraw MD, Rahman I. Pulmonary Toxicity and Inflammatory Response of E-Cigarette Vape Cartridges Containing Medium-Chain Triglycerides Oil and Vitamin E Acetate: Implications in the Pathogenesis of EVALI. *Toxics*. 2020;8(3). Epub 2020/07/02. doi: 10.3390/toxics8030046. PubMed PMID: 32605182; PMCID: PMC7560420.
15. **Muthumalage T**, Friedman MR, McGraw MD, Ginsberg G, Friedman AE, Rahman I. Chemical Constituents Involved in E-Cigarette, or Vaping Product Use-Associated Lung Injury (EVALI). *Toxics*. 2020;8(2). Epub 2020/04/09. doi: 10.3390/toxics8020025. PubMed PMID: 32260052; PMCID: PMC7355865.
16. Manevski M, **Muthumalage T**, Devadoss D, Sundar IK, Wang Q, Singh KP, Unwalla HJ, Chand HS, Rahman I. Cellular stress responses and dysfunctional Mitochondrial-cellular senescence, and therapeutics in chronic respiratory diseases. *Redox Biol*. 2020;33:101443. Epub 2020/02/11. doi: 10.1016/j.redox.2020.101443. PubMed PMID: 32037306; PMCID: PMC7251248.

17. Lucas JH, **Muthumalage T**, Wang Q, Friedman MR, Friedman AE, Rahman I. E-Liquid Containing a Mixture of Coconut, Vanilla, and Cookie Flavors Causes Cellular Senescence and Dysregulated Repair in Pulmonary Fibroblasts: Implications on Premature Aging. *Front Physiol.* 2020;11:924. Epub 2020/10/06. doi: 10.3389/fphys.2020.00924. PubMed PMID: 33013432; PMCID: PMC7500211.
18. Lamb T, **Muthumalage T**, Rahman I. Pod-based menthol and tobacco flavored e-cigarettes cause mitochondrial dysfunction in lung epithelial cells. *Toxicol Lett.* 2020;333:303-11. Epub 2020/08/14. doi: 10.1016/j.toxlet.2020.08.003. PubMed PMID: 32783911; PMCID: PMC7578111.
19. Kaur G, Gaurav A, Lamb T, Perkins M, **Muthumalage T**, Rahman I. Current Perspectives on Characteristics, Compositions, and Toxicological Effects of E-Cigarettes Containing Tobacco and Menthol/Mint Flavors. *Front Physiol.* 2020;11:613948. Epub 2020/12/18. doi: 10.3389/fphys.2020.613948. PubMed PMID: 33329065; PMCID: PMC7710937.
20. Wang Q, Khan NA, **Muthumalage T**, Lawyer GR, McDonough SR, Chuang TD, Gong M, Sundar IK, Rehan VK, Rahman I. Dysregulated repair and inflammatory responses by e-cigarette-derived inhaled nicotine and humectant propylene glycol in a sex-dependent manner in mouse lung. *FASEB Bioadv.* 2019;1(10):609-23. Epub 2019/12/12. doi: 10.1096/fba.2019-00048. PubMed PMID: 31825014; PMCID: PMC6902908.
21. Singh KP, Lawyer G, **Muthumalage T**, Maremanda KP, Khan NA, McDonough SR, Ye D, McIntosh S, Rahman I. Systemic biomarkers in electronic cigarette users: implications for noninvasive assessment of vaping-associated pulmonary injuries. *ERJ Open Res.* 2019;5(4). Epub 2019/12/31. doi: 10.1183/23120541.00182-2019. PubMed PMID: 31886159; PMCID: PMC6926365 G.
22. **Muthumalage T**, Rahman I. Cannabidiol differentially regulates basal and LPS-induced inflammatory responses in macrophages, lung epithelial cells, and fibroblasts. *Toxicol Appl Pharmacol.* 2019;382:114713. Epub 2019/08/23. doi: 10.1016/j.taap.2019.114713. PubMed PMID: 31437494; PMCID: PMC6917034.
23. **Muthumalage T**, Lamb T, Friedman MR, Rahman I. E-cigarette flavored pods induce inflammation, epithelial barrier dysfunction, and DNA damage in lung epithelial cells and monocytes. *Sci Rep.* 2019;9(1):19035. Epub 2019/12/15. doi: 10.1038/s41598-019-51643-6. PubMed PMID: 31836726; PMCID: PMC6910911.
24. Lawyer GR, Jackson M, Prinz M, Lamb T, Wang Q, **Muthumalage T**, Rahman I. Classification of flavors in cigarillos and little cigars and their variable cellular and acellular oxidative and cytotoxic responses. *PLoS One.* 2019;14(12):e0226066. Epub 2019/12/12. doi: 10.1371/journal.pone.0226066. PubMed PMID: 31825984; PMCID: PMC6905550.
25. Khan NA, Yogeswaran S, Wang Q, **Muthumalage T**, Sundar IK, Rahman I. Waterpipe smoke and e-cigarette vapor differentially affect circadian molecular clock gene expression in mouse lungs. *PLoS One.* 2019;14(2):e0211645. Epub 2019/02/28. doi: 10.1371/journal.pone.0211645. PubMed PMID: 30811401; PMCID: PMC6392409.
26. Chand HS, **Muthumalage T**, Maziak W, Rahman I. Pulmonary Toxicity and the Pathophysiology of Electronic Cigarette, or Vaping Product, Use Associated Lung Injury. *Front Pharmacol.* 2019;10:1619. Epub 2020/01/30. doi: 10.3389/fphar.2019.01619. PubMed PMID: 31992985; PMCID: PMC6971159.
27. Kaur G, **Muthumalage T**, Rahman I. Mechanisms of toxicity and biomarkers of flavoring and flavor enhancing chemicals in emerging tobacco and non-tobacco products. *Toxicol Lett.* 2018;288:143-55. Epub 2018/02/27. doi: 10.1016/j.toxlet.2018.02.025. PubMed PMID: 29481849; PMCID: PMC6549714.
28. Pritsos KL, Perez CR, **Muthumalage T**, Dean KM, Cacula D, Hanson-Dorr K, Cunningham F, Bursian SJ, Link JE, Shriner S, Horak K, Pritsos CA. Dietary intake of Deepwater Horizon oil-injected live food

fish by double-crested cormorants resulted in oxidative stress. *Ecotoxicol Environ Saf.* 2017;146:62-7. Epub 2017/07/10. doi: 10.1016/j.ecoenv.2017.06.067. PubMed PMID: 28688517.

29. **Muthumalage T**, Pritsos K, Hunter K, Pritsos C. Commonly used air filters fail to eliminate secondhand smoke induced oxidative stress and inflammatory responses. *Toxicol Mech Methods.* 2017;27(6):458-66. Epub 2017/04/18. doi: 10.1080/15376516.2017.1320694. PubMed PMID: 28413934.
30. **Muthumalage T**, Prinz M, Ansah KO, Gerloff J, Sundar IK, Rahman I. Inflammatory and Oxidative Responses Induced by Exposure to Commonly Used e-Cigarette Flavoring Chemicals and Flavored e-Liquids without Nicotine. *Front Physiol.* 2017;8:1130. Epub 2018/01/30. doi: 10.3389/fphys.2017.01130. PubMed PMID: 29375399; PMCID: PMC5768608.
31. Harr KE, Cunningham FL, Pritsos CA, Pritsos KL, **Muthumalage T**, Dorr BS, Horak KE, Hanson-Dorr KC, Dean KM, Cacela D, McFadden AK, Link JE, Healy KA, Tuttle P, Bursian SJ. Weathered MC252 crude oil-induced anemia and abnormal erythroid morphology in double-crested cormorants (*Phalacrocorax auritus*) with light microscopic and ultrastructural description of Heinz bodies. *Ecotoxicol Environ Saf.* 2017;146:29-39. Epub 2017/07/25. doi: 10.1016/j.ecoenv.2017.07.030. PubMed PMID: 28734789.
32. Dean KM, Cacela D, Carney MW, Cunningham FL, Ellis C, Gerson AR, Guglielmo CG, Hanson-Dorr KC, Harr KE, Healy KA, Horak KE, Isanhart JP, Kennedy LV, Link JE, Lipton I, McFadden AK, Moyer JK, Perez CR, Pritsos CA, Pritsos KL, **Muthumalage T**, Shriner SA, Bursian SJ. Testing of an oral dosing technique for double-crested cormorants, *Phalacrocorax auritus*, laughing gulls, *Leucophaeus atricilla*, homing pigeons, *Columba livia*, and western sandpipers, *Calidris mauri*, with artificially weather MC252 oil. *Ecotoxicol Environ Saf.* 2017;146:11-8. Epub 2017/08/07. doi: 10.1016/j.ecoenv.2017.07.003. PubMed PMID: 28781207.
33. Pritsos CA, **Muthumalage T**. The impact of commonly used air filters in eliminating the exposure to secondhand smoke constituents. *Environ Sci Process Impacts.* 2015;17(3):543-51. Epub 2015/01/15. doi: 10.1039/c4em00479e. PubMed PMID: 25586051.

CONFERENCE AND SEMINAR PRESENTATIONS

1. **T. Muthumalage** and I. Rahman. p16INK4a Deletion Exacerbates Lung Disease Progression Induced by Low-dose Exposure to Environmental Tobacco Smoke. T. Muthumalage, I. Rahman. Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. American Thoracic Society, Washington, DC, USA, 2023.
2. **T. Muthumalage** and I. Rahman. Acute Toxicity of Tobacco and Menthol Flavored E-cigarette Aerosols in Normal and Diseased Differentiated 3D Mucociliary Lung tissues. Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Society of Toxicology, Nashville, TN, 2023.
3. **T. Muthumalage** and I. Rahman. Genotoxicity and Metabolic Reprogramming of Immune Response by Menthol and Tobacco Flavored E-cigarette exposure associated with immunosuppression and PI3K/Akt-p70S6k-mTOR axis in mouse lungs. Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Society of Toxicology, Nashville, TN, 2023.
4. **Thivanka Muthumalage** and Irfan Rahman. Comparative hazard characterization of e-cigarette aerosol exposure under pre-existing respiratory diseases in vitro. Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Society for Research On Nicotine and Tobacco meeting, San Antonio, TX, United States. 2023
5. **Thivanka Muthumalage** and Irfan Rahman. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Conditional knockout of telomere protection

protein 1 (TPP1) in lung epithelium triggers senescence-associated lung diseases and cancer risk upon cigarette smoke exposure. American Thoracic Society, San Diego, CA, United States. 2022.

6. **Thivanka Muthumalage**, Irfan Rahman. Comparative toxicological risk-assessment of menthol and tobacco flavors for e-cigarette regulatory standardization. Society For Research On Nicotine and Tobacco meeting, Baltimore, MD, United States. 2022
7. **T. Muthumalage** and I. Rahman. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Inhalation toxicological assessment of menthol and tobacco flavored e-cigarettes. TOX 558 EHSC Seminar Series. Rochester, NY. December 2021.
8. **T. Muthumalage** and I. Rahman. Toxicological Risk Assessment of Menthol and Tobacco Flavored Electronic Cigarettes and Their Harmful Chemicals. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Tobacco Regulatory Science Meeting. NIH/FDA, Virtual, Fall 2021.
9. **T. Muthumalage**, I. Rahman; Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. Selective Ablation of Telomere Protection Protein 1 (TPP1) in Lung Epithelium Induce an Age-Dependent Augmentation of the Inflammatory Response by Tobacco Smoke Exposure. American Thoracic Society, Virtual, 2021
10. **Thivanka Muthumalage**, Joseph Lucas, Qixin Wang, Matthew D. McGraw, and Irfan Rahman Environmental Medicine, University of Rochester Medical Center, Rochester, NY. Toxicological assessment of e-cigarette or vaping product use associated lung injury (EVALI) cartridges and constituents. Experimental Biology Annual conference, Virtual, 2021.
11. **T. Muthumalage** and I. Rahman. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United State. Inflammatory response elicited by propylene glycol (PG/VG), menthol, and tobacco-flavored e-cigarette aerosols in C57BL/6J and BALB/cJ mice. Society of Toxicology, Virtual, 2021.
12. **T. Muthumalage**, I. Sundar, I. Rahman .Telomere Protection Protein 1 (TPP1) Deletion in Lung Epithelial Cells Augments Cigarette Smoke-Induced Lung Inflammation. Department of Environmental Medicine, University of Rochester Medical Center, Rochester, NY, United States. American Thoracic Society, Philadelphia, PA. 2020.
13. Thomas R. Lamb, **Thivanka Muthumalage**, Irfan Rahman. Exposure to JUUL flavors generates reactive oxygen species, potentially eliciting differential cytotoxic and inflammatory responses. Society Research on Nicotine and Tobacco, 2019, San Francisco, CA.
14. T. Lamb, **T. Muthumalage**, and I. Rahman. JUUL and Vape Pen Flavors Produce Reactive Oxygen Species, Potentially Eliciting Differential Cellular Oxidative Stress and Inflammatory Responses Rahman. University of Rochester, Rochester, NY. Society of Toxicology, Baltimore, MD. 2019.
15. **T. Muthumalage**, T. Lamb, I. Rahman. JUUL and Vape Pen Flavors Produce Reactive Oxygen Species, Potentially Eliciting Differential Oxidative Stress, Cytotoxic, and Inflammatory Responses. Lung Day 2019. University of Rochester, Rochester, NY.
16. **T. Muthumalage** and I. Rahman. Toxicity Related To E-cigarette Flavor Chemicals And E-liquids. Lung Day Seminar. November 2018. University of Rochester, Rochester, NY.
17. **Thivanka Muthumalage***, Melanie Prinz, Isaac Sundar, Deborah Ossip, Scott McIntosh, Maciej Goniewicz, Richard O'Connor, Irfan Rahman. Cellular toxicity and reactive oxygen species production by commonly used flavoring agents in e-cigarette liquids. Society Research on Nicotine and Tobacco, 2018, Baltimore, MD.

18. **T.M. Muthumalage**, M. Prinz, K.O. Ansah, and I. Rahman. Immuno-Toxicological Response in Monocytes to E-Cigarette Flavor Chemicals and E-Liquids. University of Rochester, Rochester, NY. Society of Toxicology, 2018, San Antonio, TX.
19. **T.M. Muthumalage**, I.K. Sundar, J. Gerloff¹, R. Freter¹, E.R. Sekera, A.E. Friedman², T. Pagano³, R. Robinson, I. Rahman. Inflammatory response by different e-cigarette flavoring chemicals in e-liquids on human lung epithelial cells and fibroblasts. Lung Day 2018. University of Rochester, Rochester, NY.
20. **T. Muthumalage**. Toxicological Effects of E-cigarette Flavoring Chemicals, Cannabidiol, and Flavors. Toxicology Retreat 2018. University of Rochester, Rochester, NY.
21. **T. Muthumalage**, K. Hunter, D. Redelman, K. Pritsos, and C.A. Pritsos. Exposure to environmental tobacco smoke causes endotoxin tolerance. Society of Toxicology Annual Meeting, San Antonio, TX. (2013).
22. **T. Muthumalage**, K. Pritsos, and C.A. Pritsos. Effect of commercially used air filters on environmental tobacco smoke constituents and oxidative stress. Society of Toxicology Annual Meeting, San Francisco, CA. (2012).
23. **T. Muthumalage**, K. Hunter, K. Pritsos and C.A. Pritsos. Effect of commercially used air filters on environmental tobacco smoke constituents and cytokine-mediated inflammatory response. Society of Toxicology Annual Meeting, San Francisco, CA. (2012).
24. **T. Muthumalage**, K. Pritsos, and C.A. Pritsos. Commonly used air filters do not substantially reduce exposure to secondhand smoke constituents. Society of Toxicology Annual Meeting, Washington, DC. (2011).
25. **T. Muthumalage**, K. Hunter, D. Redelman, K. Pritsos, and C.A. Pritsos. Secondhand smoke-induced pro-inflammatory cytokine production and oxidative stress. Society of Toxicology Annual Meeting, Washington, DC. (2011).

TEACHING

2014-2015 Human Nutrition, Teaching Assistant, Department of Nutrition, University of Nevada, Reno
 2017-2022 Mentoring TOX graduate and undergraduate students, University of Rochester.
 Fall 2022 Asthma and Lung injury for TOX 522 class, Toxicology Training Program, University of Rochester.
 Fall 2022 Pulmonary Toxicology lecture, Toxicology, New York University, New York, NY.

POSITIONS, SCIENTIFIC APPOINTMENTS, AND HONORS

Positions and Employment

2023 – Present	Assistant Professor, School of Health Sciences, Purdue University, West Lafayette, IN
2019 – 2023	Postdoctoral Associate, University of Rochester, Rochester, NY
2017 – 2019	T32 Postdoctoral Fellow, Toxicology Program, University of Rochester, Rochester, NY
2009 – 2016	Research Assistant, Environmental Science Program, University of Nevada, Reno

Other Experience and Professional Memberships

2023- Present Nominations and Awards Committee, School of Health Sciences, Purdue University, IN
2023- Present Diversity, Equity and Inclusion Taskforce, School of Health Sciences, Purdue University, IN
2023- Present Ad hoc Committee on Promotion Guidelines, School of Health Sciences, Purdue University, IN
2020 – 2023 Postdoctoral Representative, Diversity and Inclusion Group
Department of Environmental Medicine, University of Rochester, Rochester, NY
2020 – 2021 Postdoctoral Representative, Inhalation and Respiratory Specialty Section,
Society of Toxicology
2020 – 2021 Postdoctoral Member, Exposure Specialty Section, Society of Toxicology
2020 – 2021 Postdoctoral Member, Mechanisms Specialty Section, Society of Toxicology
2020 – 2023 Postdoctoral Member, American Thoracic Society
2020 – 2023 Postdoctoral Member, Out Toxicologist and Allies, Society of Toxicology
2018 – 2020 Postdoctoral Representative, Lake Ontario Regional Chapter, Society of Toxicology
2018 – 2023 Postdoctoral Member, Society of Toxicology
2018 – 2023 Member, Lake Ontario Regional Chapter, Society of Toxicology
2018 – 2023 Postdoctoral Member, Immunotoxicology Specialty Section, Society of Toxicology
2017 – 2023 Member, Postdoctoral Association, University of Rochester, Rochester, NY
2015 – 2023 Member, Phi Kappa Phi Honor Society
2018 – 2019 Volunteered in D. Shintani Lab, Department of Biochemistry, University of Nevada, Reno
2019 – 2022 Review Board, International Journal of Environmental Research and Public Health

Honors

2022 Best Abstract scholarship, American Thoracic Society
2021 Best Abstract Scholarship, American Thoracic Society
2020 Weiss Toxicology Scholar Award
in Recognition of Scientific Talent, Strong Leadership, and Willingness to Help Others,
Toxicology Program, University of Rochester,
2020 Best Abstract Scholarship, American Thoracic Society
2018 Robert N. Infurna Award for the Best Research Publication,
Toxicology Program, University of Rochester, Rochester, NY