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Faculty Appointments

Faculty Appointments at Wayne State

2023 - Present	Associate Professor - Research Educator, Tenured, Division of Research, Institute of Environmental Health Sciences (Primary)
2023 - Present	Associate Professor - Research Educator, Tenured, School of Medicine, Department of Family Medicine and Public Health Sciences (Joint) (Tenure Retreat)
2015 - Present	Associate Member of the Graduate Faculty, School of Medicine, Department of Pharmacology (Secondary)
2014 - 2023	Assistant Professor (Research Educator), Tenure Track, Division of Research, Institute of Environmental Health Sciences (Primary)
2014 - 2023	Assistant Professor (Research Educator), Tenure Track, School of Medicine, Department of Family Medicine and Public Health Sciences (Joint) (Tenure Retreat)

Hospital or Other Professional Appointments

2013 - 2014	Senior Research Associate, Dept. of Otolaryngology, Head and Neck Surgery, Case Western Reserve University, Cleveland, OH
2010 - 2013	Principal Research Scientist, Center for Hearing and Deafness, State University of New York, Buffalo, NY
2009 - 2013	Research Assistant Professor, Dept. of Communicative Disorders and Sciences, State University of New York, Buffalo, NY

Education

Education

2006	Ph.D., Physiology University of Madras, Chennai, India
2001	M.D., Alternative Medicine Tamil Nadu Dr. MGR Medical University, Chennai, India
1994	B.S., Alternative Medicine Tamil Nadu Dr. MGR Medical University, Chennai, India

Postgraduate Training

2007 - 2009	Other (Postdoctoral Associate) Center for Hearing and Deafness, State University of New York , Buffalo, NY
2006 - 2007	Postdoctoral Fellowship Nofer Institute of Occupational Medicine, Lodz, Poland

2002 - 2006	Other (Senior Research Fellowship) Dr. ALM PG Institute of Basic Medical Sciences, University of Madras , Chennai, India

Professional Society Memberships

2019 - 2022	Society for Redox Biology and Medicine (invited member)
2017 - 2022	Society of Toxicology
2014 - 2016	American College of Occupational and Environmental Medicine
2011 - 2022	Society for Neuroscience
2008 - Present	Association for Research in Otolaryngology

Honors / Awards

2023	Research Excellence Award, School of Medicine, Wayne State University *Recognition of contributions in basic science research*
2019	College Teaching Award, Wayne State University School of Medicine *Recognition of dedication to excellence in teaching*
2019	SfRBM Top 100 Initiative, Society for Redox Biology and Medicine *Recognition of key researchers in redox biology field who are not current members*
2007	ARO Travel Award, Association for Research in Otolaryngology *Travel award to attend 30th mid-winter meeting*
2006	Marie Curie Fellowship, European commission's NOISEHEAR *Transfer Of Knowledge project*
2006	Sri Nageswara Rao Pantulu Award, University of Madras *Annual endowment award for the best research work in Physiology*
2005	GRC Travel Award, Gordon Research Conference *Travel award to attend GRC on Neuroethology: Behavior, Evolution and Neurobiology*
2005	Professor N. Padmanaban Memorial Award, Indian Association of Biomedical Scientists *Best paper in Physiology at 26th annual conference*
2003	Best Paper Presentation Award, Indian Association of Biomedical Scientists *Best paper presentation at 24th annual conference*

Teaching

Teaching at Wayne State University

Graduate (Masters, Ph.D., Pharm.D., etc.)

2022 - Present	Dyelle Frederick, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2022 - Present	Prabnoor Dhillon, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2022 - Present	Sarah Elalem, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2021 - 2023	Saniya Khan, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2020 - Present	Keri Martin, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2020 - Present	Asma Shakir, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2020 - Present	Mohammad Sharara, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2020 - Present	Brittney Bach, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2020 - Present	Fatemah Moosavi, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2019 - 2022	Richa Kaushik, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2019 - 2022	Arslan Fahim, MPH student, Mentoring / Advising, Academic Advisor / Mentor

2019 - 2022	Felicia Frabis, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2019 - 2021	Samuel Seidel, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2019 - 2020	Rouba Ali-Fehmi, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2018 - 2021	Taylor Trott, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2018 - 2021	Natasha Jaffar, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2018 - 2020	Opal Bacon, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2017 - 2019	Abhinav Krishnan, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2017 - 2019	Kurt Wendland, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2017 - 2018	PHA 5270 Principles of Pharmacotherapy VII: Oncology, Toxicology, Dermatology, Drug-Induced Diseases, Delivered one lecture on pulmonary toxicology, Lecturer
2017 - 2018	Salman Mahboob, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2016 - Present	FPH 7420, Principles of Environmental Health, Course Direction, Lectures, Associate / Co-Program Director, Lecturer
2016 - 2019	Daryl Datu-On, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2016 - 2018	Sara Dadashzadeh, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2019	Daniel McIntyre, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2018	Teena Palathanam, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2017	Stephanie Krajnik, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2017	Sarah Dubaisi, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2016	Megan Gordon, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2015 - 2016	Allison McCoin, MPH student, Mentoring / Advising, Academic Advisor / Mentor
2014 - Present	PHC 7410 and BIO 7011, Principles of Toxicology, Delivered lectures on the toxic responses of the respiratory, nervous system, and food toxicology, Lecturer

Medical Student

2023	M1-HBF1 Pharmacovigilance session, Small Group Instruction, Facilitator
2022 - Present	M2 HDF1 - Toxicology Synergy Session, Small Group Instruction, Facilitator

Postdoctoral

2023 - Present	Dr. Shomaila Mehmood, Laboratory Precepting / Instruction, Mentoring / Advising, Mentor
2022 - Present	Dr. Pankaj Bhatia, Laboratory Precepting / Instruction, Mentoring / Advising, Mentor
2014 - 2017	Dr. Rajamani Rathinam, Laboratory Precepting / Instruction, Mentoring / Advising, Mentor

Undergraduate

2019 - 2022	PH 4300/3500 Environmental Health, Delivered one/two lectures on air pollution, noise pollution, and one health,Lecturer

Teaching at Other Institutions

Graduate (Masters, Ph.D., Pharm.D., etc.)

2013 - 2015	Tamil Nadu Dr. MGR Medical University, Chennai, India, Member of the Board of Examiners (for PhD thesis evaluation), 2 theses
2012 - Present	University of Madras, Chennai, India, Member of the Board of Examiners (for PhD thesis evaluation), 6 theses

2010 - 2012	Center for Hearing and Deafness at the State University of New York in Buffalo, Ms. Sneha Hinduja, a graduate student, Mentored on how to conduct experimental research on animal models of cisplatin-induced ototoxicity, Laboratory Supervisor / Instruction
2009 - 2013	Center for Hearing and Deafness at the State University of New York in Buffalo, Cell and Molecular Biology Lab, Protein extraction, assay, immunoblotting, immunolabeling, handling & treatment of animals, Laboratory Supervisor / Instruction

Postdoctoral

2009 - 2010	Center for Hearing and Deafness at the State University of New York in Buffalo, Cell and Molecular Biology Lab, Antibody microarray analysis, Laboratory Supervisor / Instruction

Essays / Theses / Dissertations

2023	Youna Lee, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2022	Jesse Kato, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2020	Rachel Steffes, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2020	Christine Chien, Masters, WSU SOM BMS student, Jamesdaniel S (Advisor / Mentor)
2019	Kareem Elhage, Undergraduate, HON 4998 University Honors Thesis, Jamesdaniel S (Advisor / Mentor)
2018 - 2023	Monazza Shahab, Doctoral, WSU SOM Pharmacology Ph.D. student, Jamesdaniel S (Advisor / Mentor) 2023
2018	Alexis Lim & Joshua Hammond, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2017	Rewaa Yas, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2016	Michael Tsong Chien, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)
2015	Dalia Hasso, Masters, WSU SOM BMS student, Jamesdaniel S (Committee Member)

Course or Curriculum Development

2020 - 2021	Contributed to the planning/designing of the curriculum, identifying topics for didactic lectures, and course assignments for developing an Environmental Medicine track for medical school students., Medical Student, Wayne State University, CURES *These contributions were part of the groundwork for setting up the scholarly concentration pilot program in Urban and Environmental Health.*
2016	Fully modified and developed “FPH 7420 Principles of Environmental Health”, Graduate (Masters, Ph.D., Pharm.D., etc.), Wayne State University, School of Medicine *One of the core courses in the MPH program, to meet the new requirements of the Council for Public Health Education (CEPH)*
2014 - 2015	2 credit course entitled “Perspectives in Urban Environmental Health”, Graduate (Masters, Ph.D., Pharm.D., etc.), Wayne State University, School of Medicine *As a faculty member of the team for developing an elective course for the MPH program I played an important role in designing the curriculum*

Research

Funded Research

Completed

Role: Co-Investigator, Percent Effort: 5 % R01 DC016835-01A1
Ramkuar V (Principal Investigator)
Title: Oral Epigallocatechin Gallate (EGCG) for treatment of cisplatin ototoxicity , *This study evaluated the efficacy of the compound Epigallocatechin Gallate (EGCG) in treating cisplatin-induced ototoxicity.*
Sponsor Name: NIH/NIDCD
06/01/2018 - 05/31/2023
Total Award: $ 61,742 (sub-recipient) , Federal

Role: Principal Investigator, Percent Effort: 75 % K01 ES028750-01
Title: Heavy metal exposure, genetic predisposition, and auditory dysfunction: A cross- sectional study in a high-risk urban cohort, *This study investigates the independent and interactive effects of environmental exposure to lead and cadmium and genetic risks on hearing impairment in firefighters. The Transition to Independent Environmental Health Research (TIEHR) Career Transition Award is for newly independent faculty who are within the first 3years of their first independent faculty appointment.*
Sponsor Name: NIH/NIEHS – TIEHR grant
01/01/2017 - 11/30/2021
Total Award: $ 393,522 , Federal

Role: Principal Investigator, Percent Effort: 60 % R03 DC010225-03
Title: Role of protein nitration in cisplatin mediated ototoxicity , *The primary objective of this study was to identify cochlear proteins nitrated by cisplatin treatment and investigate their role in ototoxicity.*
Sponsor Name: NIH/NIDCD
07/01/2009 - 06/30/2013
Total Award: $ 467,906 , Federal

Role: Principal Investigator, Percent Effort: 100 %
Title: Effect of Ocimum sanctum on noise-induced alterations of free radical scavenging enzymes and neurotransmitters in rat brain, *This study evaluated the efficacy of an herbal extract in attenuating noise-induced oxidative stress in discrete regions of the brain.*
Sponsor Name: Indian Council of Medical Research (ICMR)
03/01/2004 - 04/24/2006
Total Award: $ 300,000 (₹ INR) , Federal

Role: Principal Investigator, Percent Effort: 0 % BRIDGE FUNDING
Title: Targeting nitration for mitigating cisplatin-mediated ototoxicity , *The major goal of this project is to evaluate the efficacy of MnTBAP, a metalloporphyrin, in mitigating cisplatin-induced apoptosis.*
Sponsor Name: WSU - OVPR
08/11/2021 - 08/10/2022
Total Award: $ 18,000 , Institutional (Wayne State University)

Role: Principal Investigator, Percent Effort: 0 % GRANTS BOOST
Title: Synergism between noise and lead in inducing hearing loss , *This study evaluated the functional role of LMO4 nitration in cisplatin-induced ototoxicity.*
Sponsor Name: WSU - OVPR
08/01/2020 - 07/31/2021
Total Award: $ 35,000 , Institutional (Wayne State University)

Role: Principal Investigator, Percent Effort: 10 %
Title: Synergism between noise and lead in inducing hearing loss , The objective of this study was to delineate the interaction between multiple environmental risk factors that cause hearing loss, in order to facilitate the design of effective preventive measures.
Sponsor Name: CURES Pilot Project Award
05/01/2016 - 07/31/2017
Total Award: $ 70,000, Institutional (Wayne State University)

Role: Principal Investigator, Percent Effort: 15 %
Title: Characterization of LMO4 nitration in ototoxicity , *he major goal of this study was to establish a cell culture model and characterize the role of nitration of LMO4 in cisplatin-induced ototoxicity by using a selective inhibitor of protein nitration (SRI110).*
Sponsor Name: National Organization for Hearing Research (NOHR)
07/01/2013 - 06/30/2015
Total Award: $ 20,000 , Not for Profit

Funded

Role: Principal Investigator, Percent Effort: 35 % R01 DC020299-01A1
Title: Targeting nitrative stress for treatment of cisplatin ototoxicity , *The goal of this study is to delineate the mechanism by which cisplatin-induced nitration of cochlear LMO4 facilitates ototoxicity and test the otoprotective efficacy of inhibitors of nitrative stress.*
Sponsor Name: NIH/NIDCD
12/01/2022 - 11/30/2027
Total Award: $ 1,737,450 , Federal

Role: Principal Investigator, Percent Effort: 15 % W81XWH2210827
Title: Targeting nitrative stress for mitigating hearing loss induced by concurrent ototraumatic exposures , *The goals of this project are to define the nitrative stress mechanism underlying hearing loss induced by concurrent exposure to noise and lead and evaluate the otoprotective efficacy of targeting nitrative stress.*
Sponsor Name: Department of Defense
08/01/2022 - 07/31/2024
Total Award: $ 385,000 , Federal

Role: Faculty Sponsor/Mentor, Percent Effort: 0 %
Title: OVPR - Faculty Competition for Postdoctoral Fellows
Sponsor Name: Wayne State University
10/17/2022 - 10/16/2024
Total Award: $ 60,000 , Institutional (Wayne State University)

Publications

Peer Reviewed

Key: CV Holder, Corresponding Author^, Equal Contributor~, *Junior Faculty*, Student*, Trainee

Original Observations

1. Rosati R, Birbeck JA, Westrick J, **Jamesdaniel S**. Lead exposure induces nitrative stress and disrupts ribbon synapses in the cochlea. Frontiers in Molecular Neuroscience. 07/27/2022;15:934630. PubMed PMID: 35966014.
   Journal Impact Factor:6.26
2. Rosati R, Shahab M*, Ramkumar V, **Jamesdaniel S**. Lmo4 Deficiency Enhances Susceptibility to Cisplatin-Induced Cochlear Apoptosis and Hearing Loss. Molecular neurobiology. 05/01/2021;58(5):2019-2029. PubMed PMID: 33411315.
   Shahab M is a Graduate Student. Journal Impact Factor:4.10
3. Shahab M*, Rosati R, Meyer DN, Shields JN, Crofts E, Baker TR, **Jamesdaniel S**. Cisplatin-induced hair cell loss in zebrafish neuromasts is accompanied by protein nitration and Lmo4 degradation. Toxicology and applied pharmacology. 01/01/2021;410:115342. PubMed PMID: 33245977.
   Shahab M is a Graduate Student. Journal Impact Factor:3.71
4. **Jamesdaniel S**, Elhage KG*, Rosati R, Ghosh S, Arnetz B, Blessman J. Tinnitus and Self-Perceived Hearing Handicap in Firefighters: A Cross-Sectional Study. International journal of environmental research and public health. 10/17/2019;16(20). PubMed PMID: 31627382.
   Elhage KG is an Undergraduate Student. Journal Impact Factor:2.47
5. Rosati R, Shahab M*, Neumann WL, **Jamesdaniel S**. Inhibition of protein nitration prevents cisplatin-induced inactivation of STAT3 and promotes anti-apoptotic signaling in organ of Corti cells. Experimental cell research. 08/01/2019;381(1):105-111. PubMed PMID: 31078568.
   Shahab M is a Graduate Student. Journal Impact Factor:3.25
6. **Jamesdaniel S**, Rosati R, Westrick J, Ruden DM. Chronic lead exposure induces cochlear oxidative stress and potentiates noise-induced hearing loss. Toxicology letters. 08/01/2018;292:175-180. PubMed PMID: 29746905.
   Journal Impact Factor:3.86
7. Rathinam R, Rosati R, **Jamesdaniel S**. CRISPR/Cas9-mediated knockout of Lim-domain only four retards organ of Corti cell growth. Journal of cellular biochemistry. 04/01/2018;119(4):3545-3553. PubMed PMID: 29143984.
   Rathinam R was a postdoctoral fellow, Journal Impact Factor:3.45
8. **Jamesdaniel S**, Rathinam R, Neumann WL. Targeting nitrative stress for attenuating cisplatin-induced downregulation of cochlear LIM domain only 4 and ototoxicity. Redox biology. 12/01/2016;10:257-265. PubMed PMID: 27821327.
   Rathinam R was a postdoctoral fellow, Journal Impact Factor:7.13
9. Manohar S, **Jamesdaniel S**, Ding D, Salvi R, Seigel GM, Roth JA. Quantitative PCR analysis and protein distribution of drug transporter genes in the rat cochlea. Hearing research. 02/01/2016;332:46-54. PubMed PMID: 26626361.
   As a co-author, my role was to perform the PCR assays included in this manuscript. Journal Impact Factor:2.97
10. Rathinam R, Ghosh S, Neumann WL, **Jamesdaniel S**. Cisplatin-induced apoptosis in auditory, renal, and neuronal cells is associated with nitration and downregulation of LMO4. Cell death discovery. 01/01/2015;1. PubMed PMID: 26925255.
    Rathinam R was a postdoctoral fellow, Journal Impact Factor:4.6
11. **Jamesdaniel S**. Downstream targets of Lmo4 are modulated by cisplatin in the inner ear of Wistar rats. PloS one. 12/12/2014;9(12):e115263. PubMed PMID: 25501662.
    Journal Impact Factor:2.77
12. Alagramam KN, Stepanyan R, **Jamesdaniel S**, Chen DH, Davis RR. Noise exposure immediately activates cochlear mitogen-activated protein kinase signaling. Noise & health. 11/01/2014;16(73):400-9. PubMed PMID: 25387536.
    As a co-author, I was responsible for revising and redrafting the manuscript to address the concerns that were raised during a previous review. Journal Impact Factor:1.80
13. Manohar S, **Jamesdaniel S**, Salvi R. Cisplatin inhibits hippocampal cell proliferation and alters the expression of apoptotic genes. Neurotoxicity research. 05/01/2014;25(4):369-80. PubMed PMID: 24277158.
    As a co-author, my role was to discuss the changes in apoptotic genes in the manuscript, and editing and proofing the entire paper. Journal Impact Factor:3.54
14. **Jamesdaniel S**, Manohar S, Hinduja S*. Is S-nitrosylation of cochlear proteins a critical factor in cisplatin-induced ototoxicity?. Antioxidants & redox signaling. 10/01/2012;17(7):929-33. PubMed PMID: 22524268.
    Hinduja S was a Graduate Research Student. Journal Impact Factor:7.41
15. **Jamesdaniel S**, Coling D, Hinduja S*, Ding D, Li J, Cassidy L, Seigel GM, Qu J, Salvi R. Cisplatin-induced ototoxicity is mediated by nitroxidative modification of cochlear proteins characterized by nitration of Lmo4. The Journal of biological chemistry. 05/25/2012;287(22):18674-86. PubMed PMID: 22493493.
    Hinduja S was a Graduate Research Student. Journal Impact Factor:4.13

16. **Jamesdaniel S**, Hu B, Kermany MH, Jiang H, Ding D, Coling D, Salvi R. Noise induced changes in the expression of p38/MAPK signaling proteins in the sensory epithelium of the inner ear. Journal of proteomics. 12/21/2011;75(2):410-24. PubMed PMID: 21871588.
Journal Impact Factor:3.87

17. Coling D, Chen S, Chi LH, **Jamesdaniel S**, Henderson D. Age-related changes in antioxidant enzymes related to hydrogen peroxide metabolism in rat inner ear. Neuroscience letters. 10/16/2009;464(1):22-5. PubMed PMID: 19679169.
As a co-author, my role was to perform the enzyme assays included in this manuscript. Journal Impact Factor:2.18

18. **Jamesdaniel S**, Ding D, Kermany MH, Jiang H, Salvi R, Coling D. Analysis of cochlear protein profiles of Wistar, Sprague-Dawley, and Fischer 344 rats with normal hearing function. Journal of proteome research. 07/01/2009;8(7):3520-8. PubMed PMID: 19432484.
Journal Impact Factor:4.27

19. Tanaka C*, Chen GD, Hu BH, Chi LH, Li M, Zheng G, Bielefeld EC, **Jamesdaniel S**, Coling D, Henderson D. The effects of acoustic environment after traumatic noise exposure on hearing and outer hair cells. Hearing research. 04/01/2009;250(1-2):10-8. PubMed PMID: 19450428.
Tanaka C was a graduate student, to whom I taught how to perform a protein assay. Journal Impact Factor:2.97

20. **Jamesdaniel S**, Ding D, Kermany MH, Davidson BA, Knight PR 3rd, Salvi R, Coling DE. Proteomic analysis of the balance between survival and cell death responses in cisplatin-mediated ototoxicity. Journal of proteome research. 08/01/2008;7(8):3516-24. PubMed PMID: 18578524.
Journal Impact Factor:4.27

21. **Samson J**, Wiktorek-Smagur A, Politanski P, Rajkowska E, Pawlaczyk-Luszczynska M, Dudarewicz A, Sha SH, Schacht J, Sliwinska-Kowalska M. Noise-induced time-dependent changes in oxidative stress in the mouse cochlea and attenuation by D-methionine. Neuroscience. 03/03/2008;152(1):146-50. PubMed PMID: 18234425.
Journal Impact Factor:3.28

22. **Samson J**, Sheeladevi R, Ravindran R. Oxidative stress in brain and antioxidant activity of Ocimum sanctum in noise exposure. Neurotoxicology. 05/01/2007;28(3):679-85. PubMed PMID: 17379314.
Journal Impact Factor:3.38

23. **Samson J**, Sheeladevi R, Ravindran R, Senthilvelan M. Stress response in rat brain after different durations of noise exposure. Neuroscience research. 01/01/2007;57(1):143-7. PubMed PMID: 17092591.
Journal Impact Factor:2.69

24. Senthilvelan M, Ravindran R, **Samson J**, Devi RS. Serotonin turnover in different duration of sleep recovery in discrete regions of young rat brain after 24 h REM sleep deprivation. Brain & development. 09/01/2006;28(8):526-8. PubMed PMID: 16697543.
As a co-author, my role was to perform some of the assays included in this manuscript and editing the paper. Journal Impact Factor:1.54

25. **Samson J**, Sheela Devi R, Ravindran R, Senthilvelan M. Biogenic amine changes in brain regions and attenuating action of Ocimum sanctumin noise exposure. Pharmacology, biochemistry, and behavior. 01/01/2006;83(1):67-75. PubMed PMID: 16427690.
Journal Impact Factor:2.78

26. Senthilvelan M, Ravindran R, **Samson J**, Devi RS. Serotonin turnover in discrete regions of young rat brain after 24 h REM sleep deprivation. Neurochemical research. 01/01/2006;31(1):81-4. PubMed PMID: 16475000.
As a co-author, my role was limited to performing some of the assays included in this manuscript and editing the paper. Journal Impact Factor:2.77

27. Ravindran R, Rathinasamy SD, **Samson J**, Senthilvelan M. Noise-stress-induced brain neurotransmitter changes and the effect of Ocimum sanctum (Linn) treatment in albino rats. Journal of pharmacological sciences. 08/01/2005;98(4):354-60. PubMed PMID: 16113498.
As a co-author, my role was limited to performing some of the assays included in this manuscript and editing the paper. Journal Impact Factor:2.58

28. **Samson J**, Sheela Devi R, Ravindran R, Senthilvelan M. Effect of noise stress on free radical scavenging enzymes in brain. Environmental toxicology and pharmacology. 07/01/2005;20(1):142-8. PubMed PMID: 21783581.
Journal Impact Factor:2.75

Review Articles

1. Shahab M*, **Jamesdaniel S**. Nitrative stress and auditory dysfunction. Pharmaceuticals. 05/24/2022;15(649). PubMed PMID: 35745568.
   Shahab M is a graduate student, Journal Impact factor: 4.94
2. Rosati R, **Jamesdaniel S**. Environmental Exposures and Hearing Loss. International journal of environmental research and public health. 07/07/2020;17(13). PubMed PMID: 32645823.
   Journal Impact Factor:2.47
3. **Jamesdaniel S**, Salvi R, Coling D. Auditory proteomics: methods, accomplishments and challenges. Brain research. 06/24/2009;1277:24-36. PubMed PMID: 19245797.
   Journal Impact Factor:2.83

Key: CV Holder, Corresponding Author^, Equal Contributor~, *Junior Faculty*, Student*, Trainee

Book Chapters

1. **Jamesdaniel S**. Oxidative Stress and Hearing Loss. In: Ramkumar V, Rybak L, editor(s). Inflammatory Mechanism in Mediating Hearing Loss. Springer; 2018. p. 15-30.
2. **Jamesdaniel S**, Samson A. Herbal Antioxidants as Rejuvenators in Alternative Medicine. In: Rasooli I, editor(s). Phytochemicals – Bioactivities and Impact on Health. Springer; 2011. p. 297-312.
   ISBN 979-953-307-609-5

Key: CV Holder, Corresponding Author^, Equal Contributor~, *Junior Faculty*, Student*, Trainee

Other

1. Rathinam R, Rosati R, **Jamesdaniel S**. Cover Image. J Cell Biochem. 04/2018;119(4):119.

Published Abstracts

1. Rosati R, **Jamesdaniel S**. Chronic Lead Exposure Induces Cochlear Oxidative Stress and Impairs Hearing. SfRBM's 24th Annual Meeting Abstracts; 2017. p. 92; 112:73
2. Manohar S, Salvi R, **Jamesdaniel S**, Coling D. Protein Profiles in Auditory Cortex and Hippocampus-Similarities and Differences. ARO Abstracts; 2012. p. 83; 35:30
3. Manohar S, **Jamesdaniel S**, Shillitoe C, Lobarinas E, Sun W, Salvi R, Coling D. Salicylate-Induced Modulation Of Gene And Protein Expression In Rat Auditory Cortex: Molecular Correlates Of Neural Hyperactivity And Tinnitus. 5th International TRI Tinnitus Conference Abstracts; 2011. p. 38
4. Coling D, **Jamesdaniel S**, Salvi R. Role of P53 Signaling in Cisplatin Ototoxicity. ARO Abstracts; 2010. p. 1017; 33:349
5. Manohar S, **Jamesdaniel S**, Shillitoe C, Lobarinas E, Salvi R, Coling D. Salicylate-Induced Modulation of Gene and Protein Expression in Rat Auditory Cortex Correlates with Behavioral Phenotype of Central Tinnitus. ARO Abstracts; 2010 p. 824; 33:282
6. Tanaka C*, Henderson D, Bielefeld E, Chen G, Coling D, **Jamesdaniel S**, Li M. The Effect of a Src Inhibitor (KX1-004) on Cisplatin Toxicity and Antineoplastic Activity. ARO Abstracts; 2010. p. 726; 33:248
7. Ding D, Jiang H, He J, **Jamesdaniel S**, Manohar S, Salvi R, Coling D. Proteomic Analysis of Mefloquine Ototoxicity. ARO Abstracts; 2009. p. 600; 32:203

Presentations

Podium

International / National

1. **Jamesdaniel S**, Rathinam R. Overexpression of LMO4 mitigates cisplatin-induced cytotoxicity in UBOC1 cells. Association of Research in Otolaryngology's 39th mid-winter meeting; 2016; San Diego, CA, United States of America
   ARO Abstracts, PD 64; 39:293
2. **Jamesdaniel S**. Prevalence of tinnitus and hearing handicap in firefighters. Occupational Health and Safety Conference; 2015; Toronto, ON, Canada
3. **Jamesdaniel S**. Cochlear protein nitration in acquired hearing loss. International Conference on proteomics and Bioinformatics; 2014; Chicago, IL, United States of America
4. **Jamesdaniel S**, Hinduja S*. Lmo4 signaling in cisplatin mediated ototoxicity. Association of Research in Otolaryngology's 36th mid-winter meeting; 2013; Baltimore, MD, United States of America
   ARO Abstracts, 305; 36:234
5. **Jamesdaniel S**, Hinduja S*. S-nitrosylation of cochlear proteins and their biological significance in cisplatin mediated ototoxicity. Association of Research in Otolaryngology's 35th mid-winter meeting; 2012; San Diego, CA, United States of America
   ARO Abstracts, 817; 35:286
6. **Jamesdaniel S**. Identification and localization of nitrated cochlear proteins in cisplatin mediated ototoxicity. International Conference on Proteomics and Bioinformatics; 2011; Hyderabad, India
7. **Jamesdaniel S**, Coling D, Hinduja S*, Ding D, Salvi R. Nitroxidative stress in cisplatin mediated ototoxicity. Association of Research in Otolaryngology's 34th mid-winter meeting; 2011; Baltimore, MD, United States of America
   ARO Abstracts, 784; 34:263
8. **Jamesdaniel S**, Ding D, Kermany MH, Jian H, Salvi R, Coling D. Commonality and diversity in cochlear protein profiles of Wistar, Sprague-Dawley and Fischer 344 rats with normal hearing. Association of Research in Otolaryngology's 32nd mid-winter meeting; 2009; Baltimore, MD, United States of America
   ARO Abstracts, 982; 32:333
9. **Samson J**. Ocimum sanctum activity in attenuating brain dopamine and serotonin changes induced by different durations of noise exposure. International conference on Biotechnology and Neuroscience at Cochin University of Science and Technology; 2004; Cochin, India
10. **Samson J**. Antioxidant activity of Ocimum sanctum in noise stress. International conference on Natural Products, Free Radicals and Radioprotectors in Health at Annamalai University; 2004; Chidambaram, India
11. **Samson J**. Effect of noise stress on free radical scavenging enzymes. Annual conference of Indian Association of Biomedical Scientists; 2003; New Delhi, India
12. **Samson J**. Effect of Ocimum sanctum on noise stress induced lipid peroxidation changes in rat brain. International Conference on Indian System of Medicine; 2003; Chennai, India

Regional / Local

1. **Jamesdaniel S**. Noise induced changes in the expression of p38/MAPK signaling proteins in the sensory epithelium of the inner ear. Lake Ontario Auditory Neuroscience Meeting, The State University of New York; 2010; Buffalo, NY, United States of America
2. **Jamesdaniel S**. Proteomic analysis of cisplatin mediated ototoxicity. University at Buffalo Neuroscience Research Day at State University of New York; 2008; Buffalo, NY, United States of America

Posters

International / National

1. Shahab M*, **Jamesdaniel S**. Differential Effect of Peroxynitrite Decomposition Catalyst on Cisplatin- induced Cytotoxicity in Organ of Corti Versus Tumor Cells. Association of Research in Otolaryngology's 46th mid-winter meeting; 2023
   ARO Abstracts TU141, 707

2. Rosati R, **Jamesdaniel S**. Cochlear Synaptopathy and Nitrative Stress in Lead-Induced Auditory Dysfunction. Association of Research in Otolaryngology's 45th mid-winter meeting; 2022
ARO Abstracts, PS 518; 521
3. Shahab M*, Rosati R, **Jamesdaniel S**. MnTBAP, a Peroxynitrite Scavenger, Attenuates Cisplatin-Induced Apoptosis and Cytotoxicity. Association of Research in Otolaryngology's 44th mid-winter meeting; 2021
ARO Abstracts, M 70
4. Rosati R, Shahab M*, **Jamesdaniel S**. Deletion of Lmo4 in mouse inner ear enhances susceptibility to cisplatin-induced ototoxicity. Association of Research in Otolaryngology's 43rd mid-winter meeting; 2020; San Jose, CA, United States of America
ARO Abstracts, PS 987; 43:631
5. Shahab M*, Rosati R, **Jamesdaniel S**. Cisplatin-induced loss of hair cells in zebrafish neuromasts is accompanied by nitration and degradation of LMO4. Association of Research in Otolaryngology's 43rd mid-winter meeting; 2020; San Jose, CA, United States of America
ARO Abstracts, PS 981; 43:628
6. Rosati R, Shahab M*, Neumann W, **Jamesdaniel S**. Inhibition of protein nitration mitigates cisplatin-induced inactivation of STAT3 mediated anti-apoptotic signaling in organ of Corti cells. Association of Research in Otolaryngology's 42nd mid-winter meeting; 2019; Baltimore, MD, United States of America
ARO Abstracts, PS 1016; 42:645
7. Rosati R, **Jamesdaniel S**. Lead-Induced Auditory Dysfunction and Potentiation of Noise-Induced Hearing Loss. 57th Annual Meeting of Society of Toxicology; 2018; San Antonio, TX, United States of America
The Toxicologist, 1469; 162:113
8. Rosati R, Rathinam R, **Jamesdaniel S**. CRISPR/Cas9-mediated knockout of Lim-domain only 4 retards organ of Corti Cell growth. Association of Research in Otolaryngology's 41st mid-winter meeting; 2018; San Diego, CA, United States of America
ARO Abstracts, PS 646; 41:419
9. **Jamesdaniel S**, Rathinam R, Rosati R, Neumann W. Targeting nitrative stress to mitigate cisplatin-induced ototoxicity. Association of Research in Otolaryngology's 40th mid-winter meeting; 2017; Baltimore, MD, United States of America
ARO Abstracts, PS801; 40:540
10. **Jamesdaniel S**, Rathinam R, Neumann W. LMO4 downregulation is a critical factor in cisplatin-mediated ototoxicity. Annual meeting of the Society for Neuroscience; 2016; San Diego, CA, United States of America
SFN Abstracts, 710.04/FF15; 38
11. **Jamesdaniel S**, Rathinam R, Neumann W. Inhibition of protein nitration attenuates cisplatin-induced modulation of LMO4 and mitigates the ototoxic effects. Annual meeting of the Society for Neuroscience; 2015; Chicago, IL, United States of America
SFN Abstracts, 328.04 /O28; 48
12. Rathinam R, **Jamesdaniel S**. Cisplatin-induced Cytotoxicity is Associated with Down-regulation of LMO4 in Organ of Corti Cell Cultures. Association of Research in Otolaryngology's 38th mid-winter meeting; 2015; Baltimore, MD, United States of America
ARO Abstracts, PS 815; 38:496
13. **Jamesdaniel S**. Cisplatin treatment modulates the cochlear expression of LMO4 downstream targets. Annual meeting of the Society for Neuroscience; 2014; Washington DC, United States of America
SFN Abstracts, 722.05/GG8
14. **Jamesdaniel S**, Coling D, Hinduja S*, Ding D, Salvi R. Trolox prevents cisplatin-induced hearing loss by attenuating cochlear nitroxidative stress. Annual meeting of the Society for Neuroscience; 2011; Washington DC, United States of America
SFN Abstracts, 477.08/JJ23
15. Coling D, Roberston NG, **Jamesdaniel S**, Giersch ABS, Morton CC, Salvi R. Antibody microarray analysis of the CochG88E/G88E mouse model for DFNA9. Association of Research in Otolaryngology's 34th mid-winter meeting; 2011; Baltimore, MD, United States of America
ARO Abstracts, 130; 34:43

16. **Jamesdaniel S**, Hu B, Kermany MH, Jiang H, Ding D, Salvi R, Coling D. High throughput analysis of noise-induced protein responses in sensory, vascular and neural components of chinchilla cochlea. Association of Research in Otolaryngology's 33rd mid-winter meeting; 2010; Anaheim, CA, United States of America
ARO Abstracts, 675; 33:230
17. **Jamesdaniel S**, Ding D, Salvi R, Coling D. Cochlear protein expression at an early stage of cisplatin ototoxicity. Association of Research in Otolaryngology's 31st mid-winter meeting; 2008; Phoenix, AZ, United States of America
ARO Abstracts, 698; 31:237
18. **Samson J**, Sheeladevi R, Ravindran R, Senthilvelan S. Stress response in rat brain after different durations of noise exposure. Association of Research in Otolaryngology's 30th mid-winter meeting; 2007; Denver, CO, United States of America
ARO Abstracts, 842; 30:290
19. **Samson J**. Noise induced biogenic amine alterations in discrete brain regions and attenuating activity of Ocimum sanctum. Elsevier's 15th Neuropharmacology conference on new perspectives in neurotransmitter transporter biology; 2005; Washington DC, United States of America
20. **Samson J**. Noise induced alterations of neurotransmitter levels and serotonin turnover in discrete regions of brain. Gordon Research Conference on Neuroethology: Behavior, Evolution and Neurobiology held at Magdalen College; 2005; Oxford, United Kingdom
21. **Samson J**. Antioxidant potential of Ocimum sanctum encourages its supplementation in oxidative disease treatment. Indo-Australian conference on biotechnology in infectious diseases; 2005; Manipal, India

Regional / Local

1. Shahab M*, Rosati R, Stemmer P, **Jamesdaniel S**. Quantitative profiling of cochlear synaptosomal proteins in cisplatin-induced synaptic dysfunction. Midwest Auditory Research Conference (MARC); 2022; Ann Arbor, MI, United States of America
2. Rathinam R, **Jamesdaniel S**. LMO4 downregulation is a critical factor in cisplatin-mediated ototoxicity. Brain@Wayne Research Symposium; 2016; Detroit, MI, United States of America

Invited Lectures

International / National

1. Approaches in Interdisciplinary Research. International Conference on Significance of Medicinal Plants in Siddha System of Medicine; 2023
2. Nitrative stress and signaling in cisplatin-mediated ototoxicity. ANXIECON, National Conference of Physiologists, University of Madras; 2019; Chennai, India
3. Biomedical research in alternative medicine. National Institute of Siddha; 2019; Chennai, India
4. Targeting nitrative stress in cisplatin-induced ototoxicity - Pharmacology Seminar Series. Southern Illinois University School of Medicine; 2018; Springfield, IL, United States of America
5. Regulation of cochlear apoptosis by nitration of Lmo4. Richard King Mellon Foundation Institute for Pediatric Research, University of Pittsburgh; 2013; Pittsburgh, PA, United States of America
6. Nitrosative modification of cochlear proteins in cisplatin-induced ototoxicity – Biochemistry Seminar Series. West Virginia University; 2012; Morgantown, WV, United States of America
7. Evaluation of antioxidant properties of Kayakarpam herbs - CME program. TN Dr. MGR Medical University; 2011; Chennai, India
8. Research methods employed in the evaluation of antioxidants in Siddha Medicine – CME program. Govt siddha Medical College; 2011; Palayamkottai, India
9. Proteomic analysis of cisplatin- and noise-induced hearing loss using antibody microarrays – Audiology Speaker Series. University of North Texas; 2009; Denton, TX, United States of America

10. Antibody Microarray – a tool to study cochlear protein expression at an early stage of cisplatin ototoxicity – Prof. A. Namasivayam endowment lecture. ALM PG Institute of Basic Medical Sciences, University of Madras; 2008; Chennai, India

Regional / Local

1. Nitrative stress in cisplatin-induced ototoxicity. Molecular Therapeutics Program Meeting, Karmanos Cancer Institute; 2023; Detroit, MI, United States of America
2. Redox Signaling in Acquired hearing Loss. Pharmacology Retreat; 2023
3. Environmental exposures and auditory dysfunction. Division of Behavioral Sciences Meeting, DFMPHS, Wayne State University; 2022; Detroit, MI, United States of America
4. Pollution and hearing loss. Clean Air Council meeting of Michigan Environmental Justice Coalition; 2020
5. Environmental exposures, Oxidative stress, and auditory dysfunction. Good Morning Detroit seminar series; 2019; Detroit, MI, United States of America
6. Environmental exposures and hearing loss. CURES Community Advisory Board Meeting; 2018; Detroit, MI, United States of America
7. Nitrative stress in cisplatin-induced ototoxicity – Chemistry Seminar Series. Oakland University; 2018; Rochester, MI, United States of America
8. Role of LMO4 and its nitration in cisplatin-mediated ototoxicity – Otolaryngology Seminar Series. Wayne State University; 2016; Detroit, MI, United States of America
9. LMO4 signaling in cisplatin-mediated ototoxicity – Pharmacology Seminar Series. Wayne State University; 2015; Detroit, MI, United States of America
10. Nitroxidative modification of cochlear proteins in cisplatin mediated ototoxicity - Otolaryngology Research Seminar Series. Case Western Reserve University; 2011; Cleveland, OH, United States of America

Service

Wayne State University Service

Department / Division

2019 - Present	Member, Admissions Committee, Department of Family Medicine and Public Health Sciences, Division of Population Health
2019 - 2020	Member, Faculty Merit Advisory Committee, Institute of Environmental Health Sciences
2017 - 2018	Member, Research Day Committee, Department of Family Medicine and Public Health Sciences
2016 - 2017	Member, Faculty Search Committee (Environmental Health), Department of Family Medicine and Public Health Sciences
2015 - 2018	Member, Curriculum Committee, Department of Family Medicine and Public Health Sciences, Division of Population Health
2015 - 2016	Member, Faculty Merit Advisory Committee, Institute of Environmental Health Sciences
2014 - 2016	Member, Occupational and Environmental Health Committee, Institute of Environmental Health Sciences *Developing a new MPH elective in Urban Environmental Health*

Other Professionally Related Service

Professional

2020 - Present	Member, Accommodations Committee, Association for Research in Otolaryngology
2020	Reviewer / Evaluator, Abstract Reviewer, Society for Redox Biology and Medicine's annual meeting

2017	Reviewer / Evaluator, Abstract Reviewer, Society for Redox Biology and Medicine's annual meeting

Grant Review Committees

International / National

2023	Full Member, Special Emphasis Panel/Scientific Review Group 2024/01 ZGM1 RCB-4 (SU), NIH/NIGMS
2022	Full Member, Special Emphasis Panel for 2022/05 council round, NIH/NIDCD
2022	Full Member, Special Emphasis Panel for 2023/01 council round, NIH/NIDCD
2021	Ad Hoc, Study section, NIH AUD
2018 - 2019	Ad Hoc, P30 Pilot Projects, University of Cincinnati
2012 - 2019	Ad Hoc, Grant Reviewer, Action on Hearing Loss, UK
2010	Ad Hoc, Grant Reviewer, Royal National Institute of Deafness, UK

Peer-Reviewed Journals

Editorship

2019 - 2020	International Journal of Environmental Research and Public Health, Special issue on "Environmental Exposures and Hearing Loss" *Published 11 articles*

Manuscript Review

2022	BioMed Research International *1 review(s)*
2022	Cell and Molecular Life Sciences *1 review(s)*
2022	Frontiers in Molecular Neuroscience *1 review(s)*
2022	Journal of Exposure Science and Environmental Epidemiology *1 review(s)*
2022	Neuroscience *1 review(s)*
2021 - 2023	Neurotoxicology *3 review(s)*
2021	Noise and Health *1 review(s)*
2021	Safety Science *1 review(s)*
2020 - 2021	Precision Oncology *2 review(s)*
2020	Brain and Behavior *1 review(s)*
2020	Expert Opinion on Drug Metabolism and Toxicology *1 review(s)*
2020	Frontiers in Pharmacology *1 review(s)*
2020	International Journal of Molecular Sciences *1 review(s)*

2020	Journal of Clinical Medicine *1 review(s)*
2020	Journal of Neurochemistry *1 review(s)*
2020	Molecular Medicine *1 review(s)*
2020	Risk Management and Healthcare Policy Review *1 review(s)*
2020	Toxin Reviews *1 review(s)*
2019	Journal of the Acoustical Society of America *1 review(s)*
2019	PLOS ONE *1 review(s)*
2018	International Journal of Nanomedicine *2 review(s)*
2018	Journal of Toxicology *1 review(s)*
2018	Journal of Toxicology and Environmental Health *1 review(s)*
2018	Occupational and Environmental Medicine *1 review(s)*
2017	Journal of Visualized Experiments (JoVE) *1 review(s)*
2017	Neuroscience Letters *2 review(s)*
2016	Cell Death and Disease *1 review(s)*
2016	Free Radicals and Antioxidants *1 review(s)*
2015 - 2021	Toxicology Letters *1-2 review(s)/year*
2015 - 2018	Toxicology and Applied Pharmacology *1 review(s)/year*
2015 - 2017	Indian Journal of Pharmacology *1-2 review(s)/year*
2015	Oriental Pharmacy and Experimental Medicine *1 review(s)*
2015	Health and Stress *1 review(s)*
2014 - 2018	Brain Research *2 review(s)*
2014	Audiology and Neurotology *1 review(s)*
2014	Physiology and Behavior *1 review(s)*
2013 - 2023	Antioxidants and Redox Signaling *4 review(s)*
2013	Evidence Based Complementary and Alternative Medicine *1 review(s)*

2013	Journal of Proteomics *1 review(s)*
2013	Polish Journal of Environmental Studies *1 review(s)*
2012	EuPA Open Proteomics *1 review(s)*
2012	Journal of Proteome Research *1 review(s)*
2012	Stress and Health *1 review(s)*
2011	Pharmacology, Biochemistry and Behavior *1 review(s)*