

CURRICULUM VITAE

Chithra Kattukandathil Pushpan, PhD

CAMPUS ADDRESS: Department of Surgery-Cardiothoracic Surgery
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EDUCATION

2008 - 2010 MSc, Medical Biochemistry, Institute of Basic Medical Sciences, University of Madras
2011 - 2017 PhD, Biochemistry, University of Kerala, India

POST DEGREE TRAINING

1/2018 - 1/2020 Post Doctoral fellow, Biochemistry, Department of Biotechnology, Cochin University of Science and Technology, India
3/2020 - 8/2023 Post Doctoral Fellow, Department of Pharmacology and Neuroscience, Creighton University, Omaha, NE

CONTINUING EDUCATION AND TRAINING

2011 - 2014 UGC Project Fellow, UGC major research project, University of Kerala, Trivandrum, India

ACADEMIC APPOINTMENTS

2023 - Present Instructor, Department of Surgery, University of Nebraska Medical Center, Omaha, NE
2016 - 2017 Assistant Professor, Department of Fisheries and Aquaculture, St. Alberts College, Mahatma Gandhi University, Ernakulam, Kerala

GRANTS AND CONTRACT SUPPORT

PENDING

Title: Identifying the Functional Impact of Biomechanical Forces on HLHS Cardiomyocytes
ID Number:
Funding Agency: University of Southern California
Project Period: 2024 - 2027
Total Dollars: \$165,000
Direct Cost: \$150,000
Role: Other (Subramanyan)

CONSULTING POSITIONS

EDITORIAL

2023 - Present Peer Reviewer, Kidney 360
2023 - Present Peer Reviewer, Natural Resources for Human Health

HONORS AND AWARDS

INTERNATIONAL

2023 Fellow in Training Registration and Travel Grantfor, AKI & CRRT 2023 Conference

LOCAL

2017 KSCSTE Postdoctoral Fellowship, Kerala State Council for Science, Technology and Environment, Kerala, India

NATIONAL

2011 National Eligibility Test (NET), UGC-Lectureship, Joint Council of Scientific and Industrial Research (CSIR), India

REGIONAL

2016 Best Oral Presentation, Society of Scientific and Educational Research, Bengaluru, Karnataka, India

MEMBERSHIPS AND OFFICES IN PROFESSIONAL SOCIETIES

2015 - Present Life Member, The Society of Biological Chemists
2021 - 2022 Member, Association for Research in Otolaryngology

PRESENTATIONS

1. Kattukandathil Pushp C ; Helen A. Comparison of Njavara rice bran oil with atorvastatin in their effects on preventing progression of atherosclerosis by regulating inflammation in hypercholesterolemic rabbits. Recent Biochemical Approaches in Therapeutics; 2001 Dec. University of Kerala, India
2. Kattukandathil Pushp C ; Helen A. Njavara rice bran oil attenuates the high fat diet induced hypercholesterolemia in rats. 26th Annual Symposium of Indian Society for Atherosclerosis Research; 2013 Nov. Amala Cancer Center, Thrissur, Kerala, India
3. Shalini V; Kattukandathil Pushp C. Protective effect of tricetin against LPS induced TLR-4 signaling in silico and in vitro studies. Recent Approaches in Biochemical Research; 2014 Oct. University of Kerala, India
4. Kattukandathil Pushp C ; Helen A. Supplementation of NjRBO diminishes cell adhesion molecule and proinflammatory cytokine expression in rats induced experimental atherosclerosis. Recent Approaches in Biochemical Research; 2014 Oct. University of Kerala, India
5. Kattukandathil Pushp C ; Helen A. Anti-atherogenic effect of Njavara rice bran oil on inflammation induced by high cholesterol diet in rats. International Symposium on Phytochemistry and Prof Dr. A. Hisham Endowment Award Ceremony; 2015 Apr. Kerala Academy of Sciences, Thiruvananthapuram, India
6. Kattukandathil Pushp C ; Helen A. Dietary Njavara rice bran oil: a valuable strategy to accelerate the regression of atherosclerotic plaques. Annual Meeting of Society for Biotechnologists India 2015 & National Conference on Recent Advances in Biomedical Sciences and Biotechnology; 2015 Dec. Lakeshore Hospital, Kochi, India

7. Kattukandathil Pushp C ; Helen A. Anti-atherogenic effects of dietary Njavara rice bran oil on atherosclerotic plaque regression. 2015 National Symposium on Changing Perspective in Life Sciences, Multidisciplinary Annual Research Conference; 2015 Dec. University of Kerala, India
8. Kattukandathil Pushp C ; Helen A. Njavara rice bran oil promotes the regression of atherosclerosis via inhibition of proinflammatory signaling pathways in hypercholesterolemic rabbits. Annual Conference of Indian Society for Atherosclerosis Research; 2016 Oct. Aster Medcity, Kochi, India
9. Kattukandathil Pushp C ; Helen A. Comparative Study of Njavara rice bran oil and atorvastatin on preventing atherosclerotic progression in hypercholesterolemic rabbits. Society for Educational & Scientific Research Meeting; 2016 Dec. Yelahanka, Bangalore, India
10. Kattukandathil Pushp C ; Helen A. Inhibitory effect of Njavara rice bran oil on carrageenan induced acute inflammation in rats. Albertian International Educational Expo 2017; 2017 Jan. St. Albert's College, Ernakulam, Kerala, India
11. Kattukandathil Pushp C ; Helen A. Impact of dietary modifications on chronic inflammation. National Seminar on Science & Technology for Sustainable Future; 2018 Feb. St. Albert's College, Ernakulam, Kerala, India
12. Kattukandathil Pushp C ; Helen A. Effect of Njavara rice bran oil in downregulating endothelial inflammation in hypercholesterolemic rabbits. 8th Annual Conference of Indian Academy of Biomedical Sciences; 2019 Feb. CSIR - National Institute For Interdisciplinary Science and Technology, Thiruvananthapuram, Kerala, India
13. Keirns DL; Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Hunter WJ; Bashir K; Teitz T. Dual Effect: BRAF Inhibitor Dabrafenib Protects Against Cisplatin-Induced Kidney Injury and Hearing Loss. Neuroscience Symposium; 2021. Creighton University School of Medicine, Omaha, NE
14. Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Keirns DL; Hunter WJ; Bashir K; Teitz T. CDK2 Inhibitor AZD5438 Alleviates Both Cisplatin-Induced Acute Kidney Injury and Hearing Loss. Neuroscience Symposium; 2021. Creighton University School of Medicine, Omaha, NE
15. Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Keirns DL; Hunter WJ; Bashir K; Teitz T. CDK2 Inhibitor AZD5438, A Dual Candidate Therapeutic for Cisplatin-Induced Kidney Injury and Hearing Loss. 3rd Annual Bellucci Symposia on Hearing Research; 2021 Jun. Creighton University School of Medicine, Omaha, NE
16. Kattukandathil Pushp C. Recent advances in managing Inflammation and atherosclerosis (Invited Lecturer). Department of Fisheries and Aquaculture; 2021 Jul. St. Albert's College, Ernakulam, Kerala, India
17. Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Keirns DL; Hunter WJ; Bashir K; Teitz T. CDK2 Inhibitor AZD5438 Protects from Cisplatin-induced Acute Kidney Injury and Hearing Loss. 45th Annual MidWinter Meeting, Association for Research in Otolaryngology; 2022 Feb. San Jose, CA
18. Keirns DL; Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Hunter WJ; Bashir K; Teitz T. Dual Effect: BRAF Inhibitor Dabrafenib Protects Against Cisplatin-Induced Kidney Injury and Hearing Loss. 45th Annual MidWinter Meeting, Association for Research in Otolaryngology; 2022 Feb. San Jose, CA
19. Kattukandathil Pushp C ; Keirns DL; Kresock DF; Ingersoll MA; Hunter WJ; Bashir K; Teitz T. Dabrafenib, a BRAF Inhibitor, Protects Against Cisplatin-Induced Kidney Injury and Hearing Loss. 4th Annual Bellucci Symposia on Hearing Research; 2022 Jun. Creighton University School of Medicine, Omaha, NE
20. Kattukandathil Pushp C ; Kresock D; Ingersoll M; Lutze R; Keirns D; Hunter W; Bashir K; Teitz T. Dabrafenib, a BRAF Inhibitor, Protects Against Cisplatin-Induced Kidney Injury and Hearing Loss. 1st Annual Regional ARO Meeting; 2022 Oct. Creighton University, Omaha, NE
21. Kattukandathil Pushp C ; Kresock DF; Ingersoll MA; Lutze R; Keirns DL; Hunter WJ; Bashir K; Teitz T. Kinase Inhibitors AZD5438 and Dabrafenib Alleviate Cisplatin-Induced Acute Kidney Injury and Hearing Loss. AKI & CRRT 2023, The 28th International Conference on Advances in Critical Care Nephrology; 2023 Mar. San Diego, CA

PUBLICATIONS

A. ARTICLES PUBLISHED IN SCHOLARLY JOURNALS

1. Mathew LE; Rajagopal V; Kattukandathil Pushp C ; Helen A. Fluvastatin Alleviates Inflammation and Oxidative Stress in Adjuvant Induced Arthritic Rats by the Downregulation of TNF-a and IL-6. *Pharmacologia*. 2013; *Science Alert*. Vol. 4 (8): p. 498-506
2. Parvathy R; Mohanlal S; Kattukandathil Pushp C ; Helen A; Jayalekshmy A. Antioxidant Properties, Anti-inflammatory Effects, and Bioactive Constituents of the Indian Medicinal Rice Njavara Yellow Compared with Staple Varieties. *Food science and biotechnology*. 2014; Springer. Vol. 23 (5): p. 1379-1388. 1226-7708
3. Chithra PK, Sindhu G, Shalini V, Parvathy R, Jayalekshmy A, Helen A. Dietary Njavara rice bran oil reduces experimentally induced hypercholesterolaemia by regulating genes involved in lipid metabolism. *The British journal of nutrition*. 113 : 1207-19. 2015
4. Shalini V, Pushpan CK, G S, A J, A H. Tricin, flavonoid from Njavara reduces inflammatory responses in hPBMCs by modulating the p38MAPK and PI3K/Akt pathways and prevents inflammation associated endothelial dysfunction in HUVECs. *Immunobiology*. 221 : 137-44. 2015
5. Pushpan CK, V S, G S, Rathnam P, A J, A H. Attenuation of atherosclerotic complications by modulating inflammatory responses in hypercholesterolemic rats with dietary Njavara rice bran oil. *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie*. 83 : 1387-1397. 2016
6. Rajagopal V, Pushpan CK, Antony H. Comparative effect of horse gram and black gram on inflammatory mediators and antioxidant status. *Journal of food and drug analysis*. 25 : 845-853. 2016
7. Chithra PK, Jayalekshmy A, Helen A. Petroleum ether extract of Njavara rice (*Oryza sativa*) bran upregulates the JAK2-STAT3-mediated anti-inflammatory profile in macrophages and aortic endothelial cells promoting regression of atherosclerosis. *Biochemistry and cell biology = Biochimie et biologie cellulaire*. 95 : 652-662. 2017
8. G S, G L S, Pushpan CK, Nambisan B, A H. Evaluation of anti-arthritis potential of *Trigonella foenum graecum* L. (Fenugreek) mucilage against rheumatoid arthritis. *Prostaglandins & other lipid mediators*. 138 : 48-53. 2018
9. Sindhu G; Kattukandathil Pushp C ; Parvathy S; Bala N; Helen A. *Trigonella foenum graecum* derived mucilage supplementation in diet alleviates the progression of atherosclerosis in high cholesterol diet-fed rabbit model by regulating inflammation. *Bioactive Carbohydrates and Dietary Fibre*. 2020 Oct; Elsevier. Vol. 24 (100246) 2212-6198
10. Pushpan CK, Kresock DF, Ingersoll MA, Lutze RD, Keirns DL, Hunter WJ, Bashir K, Teitz T. Repurposing AZD5438 and Dabrafenib for Cisplatin-Induced AKI. *Journal of the American Society of Nephrology : JASN*. 35 : 22-40. 2023
11. Ingersoll MA, Lutze RD, Pushpan CK, Kelmann RG, Liu H, May MT, Hunter WJ, He DZ, Teitz T. Dabrafenib protects from cisplatin-induced hearing loss in a clinically relevant mouse model. *JCI insight*. 8 : 2023

B. ARTICLES ACCEPTED FOR PUBLICATION IN SCHOLARLY JOURNALS

Not Applicable

C. ARTICLES SUBMITTED FOR PUBLICATION IN SCHOLARLY JOURNALS

Not Applicable

D. BOOKS PUBLISHED, IN PREPARATION, SUBMITTED OR IN PRESS

Not Applicable

E. CHAPTERS IN BOOKS

1. Sindhu G; Kattukandathil Pushp C ; Helen A. Fenugreek: Traditional and Modern Medicinal Uses. 1st. Boca Raton, FL: Taylor & Francis Group; 2022. Chapter 13, Trigonella foenum-graecum L.: Therapeutic and Pharmacological PotentialsâSpecial Emphasis on Efficacy against Inflammation and Pain

F. BOOKS OR JOURNALS EDITED

Not Applicable

G. ABSTRACTS AND PRELIMINARY COMMUNICATIONS

Not Applicable

H. PUBLISHED AUDIOVISUAL OR COMPUTER-BASED EDUCATIONAL MATERIALS AND COMPUTER SOFTWARE

Not Applicable

I. PUBLISHED CONTINUING EDUCATION MATERIALS

Not Applicable

J. EDITORIALS

Not Applicable

K. CONFERENCE PROCEEDING

Not Applicable

EDUCATION/TEACHING ACTIVITY

A. ADDITIONAL INSTRUCTION

Other: Laboratory Instruction (Teitz Laboratory), Creighton University, Undergraduate and MD students, 2020 - 2023