Anandh Babu Pon Velayutham, Ph.D.

Associate Professor (Tenured)
Department of Nutrition and Integrative Physiology
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CURRICULUM VITAE

I. EDUCATION

Ph.D.	Biochemistry. Emphasis: Nutrition. University of Madras, India. 2006
M.Phil.	Biochemistry. Emphasis: Nutrition. University of Madras, India. 1993
M.Sc.	Biochemistry. University of Madras, Chennai, India. 1992
B.Sc.	Biochemistry. University of Madras, Chennai, India. 1990

II. EMPLOYMENT

Associate Professor (Tenured), Dept. of Nutrition & Int. Physiology, University of Utah.	2019 - Present
Assistant Professor, Dept. of Nutrition & Integrative Physiology, University of Utah, UT.	2012-2019
Postdoctoral Research Associate, Department of Human Nutrition, Virginia Tech, VA.	2007-2012
Lecturer, PG Department of Biochemistry, Islamiah College, Vaniyambadi, India.	1997-2007
Lecturer, Department of Biochemistry, Sengunthar College, Tiruchengode, India	1995-1997
Lecturer, Department of Biochemistry, Kanchi Krishna College, Kilambi, India.	1994-1995
Lecturer, Department of Biochemistry, Islamiah College, Vaniyambadi, India.	1993-1994

III. HONORS AND AWARDS

Teaching Awards: 4 Consecutive Years	2021-2024
University of Utah Distinguished Teaching Award 2024	
College of Health Distinguished Teaching Award 2023	
Department of Nutrition & Integrative Physiology: Teacher of the Year Award 2022	
Department of Nutrition & Integrative Physiology: Teacher of the Year Award 2021	
Fellow of the Academy: University of Utah Academy of Health Science Educators	2024-
Three articles featured on the cover of the journal *(Wiley Publishers)*	2022-2023
Panel member: NSF grant, NIH-Director's New Innovator Award & NHLBI grant-SEP	2021-2023
Celebrate U! Researcher Honoree: Recognition for Excellence in Research	2020
Associate Editor for *Frontiers in Nutrition*	2022-Present
Academic Editor for *PLOS One*	2020-Present
VPCAT Research Scholar success story featured @ the University of Utah News Room	2019
J Nutr Biochem (*Elsevier*) Article: One of the 5 most highly cited papers	2016
Selected for Vice President Clinical and Translational (VPCAT) Research Program	2015-2016
Guest Editor: *Oxidative Medicine and Cellular Longevity* Special Issues	2015 & 2017
American Heart Association Postdoctoral Fellowship Award	2010-2012
Four journal articles listed as Top25 hottest articles (*Elsevier-Science Direct*)	2006-2008

IV. PUBLICATIONS

Total citation: 2429 and H-index: 26 (Scopus)
*Corresponding author; The underlined author represents the underlined student mentee; ¶Undergraduate students
‡ Journal impact factor (published/submitted year)

Peer-reviewed articles

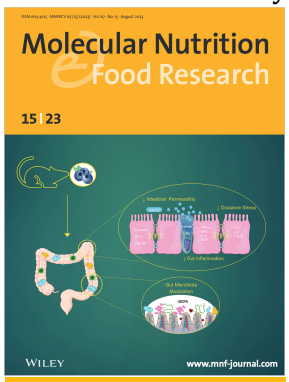
1. A.K. Satheesh Babu, C. Petersen, L. Iglesias-Carres, H. Paz, U. Wankhade, A.P. Neilson, P.V. Anandh Babu*. Blueberry intervention mitigates detrimental microbial metabolite trimethylamine N-oxide by modulating gut microbes. *Biofactors [Official Journal of the International Union of Biochemistry and Molecular Biology (IUBMB)]*, In Press (2024). [Impact factor: 6.4‡]

2. A.K. Satheesh Babu, C. Petersen, Y. Li, Y. Zhong, H. Paz, L. Iglesias-Carres, A.P. Neilson, U. Wankhade, P.V. Anandh Babu*. Gut microbiota depletion using antibiotics to investigate diet-derived microbial metabolites: An efficient strategy. *Molecular Nutrition & Food Research*, 68: 2300386, (2024). [Impact factor: 6.575‡]

3. P. Mokhtari, P. Jambal, J.M. Metos, K. Shankar, P.V. Anandh Babu*. Microbial taxonomic and functional shifts in adolescents with type 1 diabetes are associated with clinical and dietary factors. *eBioMedicine – Part of THE LANCET discovery science*, 93: 104641 (2023). [Impact factor: 11.2‡]

4. Y. Li, B. Chaurasia, M. Rahman, V. Kaddai, J.A. Maschek, J. Berg, J.L. Wilkerson, Z. Mahmassani, J. Cox, P. Wei, P.J. Meikle, D. Atkinson, L. Wang, A.M. Pose, M.C. Playdon, T.S. Tippetts, P.V. Anandh Babu, M. Drummond, H. Clevers, J.A. Shayman, Y. Hirobayashi, W.L. Holland, J. Rutter, B. Edgar, S.A. Summers. Ceramides increase fatty acid utilization in intestinal progenitors to enhance stemness and increase tumor risk. *Gastroenterology*, 165: 1136-1150 (2023). PMC10592225 [Impact factor: 29.4‡]

5. A.K. Satheesh Babu, C. Petersen, H. Paz, K. Benedict, M. Nguyen, M. Putich¶, M. Saldivar-Gonzalez¶, Y. Zhong, S. Larsen¶, U. Wankhade, P.V. Anandh Babu*. Dose- and time-dependent effect of dietary blueberries on diabetic vasculature is correlated with gut microbial signature. *Antioxidants*, 12, 1527 (2023). [Impact factor: 7‡]

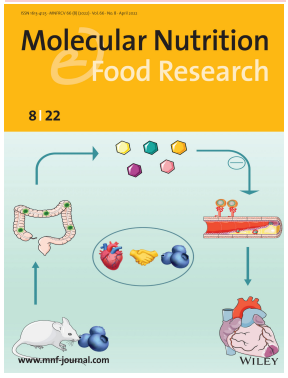


6. J.M. Cho, S.K. Park, D.T.L. Salle, J.Cerbie, D. Morgan, A. Nelson, A. Bledsoe, O.S. Kwon, L.P. Bharat, M. Tandar, S.P. Kunapuli, R.S. Richardson, P.V. Anandh Babu, S. Mookherjee, B.K. Kishore, F. Wang, T. Yang, S. Boudina, J.D. Trinity, J.D. Symons. Activating P2Y1 receptors improves function in arteries with repressed autophagy. *Cardiovascular Research*, 119, 252-257 (2023). [Impact factor: 14.239‡]

7. A.K. Satheesh Babu, H. Srinivasan¶, P.V. Anandh Babu*. Breaking Bugs: Gut microbes metabolize dietary components and modulate vascular health. *Critical Reviews in Food Science and Nutrition*, In Press (2023). [Impact factor: 11.2‡]

8. C.M.D. Lucia, L.A. Oliveria, K.A. Dias, S.M.S. Pereira, A.R. da Conceicao, P.V. Anandh Babu*. Scientific evidence for the beneficial effects of dietary blueberries on gut health: A systematic review. *Molecular Nutrition & Food Research*, 67, e2300096 (2023). [Impact Factor: 6.575‡] *Featured as Cover Article*

9. J.M. Miller, A.K. Satheesh Babu, C. Petersen, U.D. Wankhade, M.S. Robeson II, M.N. Putich¶, J.E. Mueller¶, A.S. O'Farrell¶, J.M. Cho, S.V. Chintapalli, T. Jalili, J.D. Symons, P.V. Anandh Babu*. Gut microbes are associated with the vascular beneficial effects of dietary strawberry on metabolic syndrome-induced vascular inflammation. *Molecular Nutrition & Food Research*, 66, e202200112 (2022). [Impact factor: 6.575‡] *Featured as Cover Article*



10. C. Petersen, D. Bharat, U.D. Wankhade, J.S. Kim, B.R. Cutler¶, C. Denetso¶, S. Gholami¶, S. Nelson¶, J. Bigley¶, A. Johnson¶, S.V. Chintapalli, B.D. Piccolo, A.K. Satheesh Babu, H.A. Paz, K. Shankar, J.D. Symons, P.V. Anandh Babu*. Dietary blueberry ameliorates vascular complications in diabetic mice possibly through NOX4 and modulates composition and functional diversity of gut microbes. *Molecular Nutrition & Food Research*, 66, e2100784 (2022). [Impact factor: 6.575‡] *Featured as Cover Article*

11. Y. Li, C.L. Talbot, B. Chandravanshi, K.H. Chowdhury, J.A. Maschek, J. Cox, A.K. Satheesh Babu, H.A. Paz, P.V. Anandh Babu, D.K. Meyerholz, U.D. Wankhade, W. Holland, S.A. Summers, B. Chaurasia. Cordyceps inhibits ceramide biosynthesis and improves insulin resistance and hepatic steatosis. *Scientific Reports*, 12, 7273 (2022). [Impact factor: 4.996‡]

12. P. Mokhtari, J. Metos, P.V. Anandh Babu*. Impact of Type 1 Diabetes on the Composition and Functional Potential of Gut Microbiome in Children and Adolescents: Possible Mechanisms, Current Knowledge and Challenges. *Gut Microbes*, 13, 1-18 (2021). [Impact factor: 10.245‡]

13. P. Nallasamy, Z.Y.Kang, X.Sun, P.V. Anandh Babu, D. Liu, Z. Jia. Natural compound resveratrol attenuates TNF-a induced vascular dysfunction in mice and human endothelial cells: The involvement of the NFKB signaling pathway, *International Journal of Molecular Sciences*, 22, 12486 (2021). [Impact factor: 5.923‡]

14. M. Kalita, J.S. Chua, R.S. Boothello, A. Joice, O. Antelope, A. Roy, P.V. Anandh Babu, Y. Saijoh, U.R. Desai, B. Kuberan. Visualizing antithrombin-binding 3-O-sulfated heparan sulfate motifs on cell surfaces. *Chemical Communications*, 59, 14423-14426 (2020). [Impact factor: 5.9‡]

15. C. Petersen, U.D. Wankhade, D. Bharat, K. Wong¶, J.E. Mueller¶, S.V. Chintapalli, B.D. Piccolo, T. Jalili, Z. Jia, J.D. Symons, K. Shankar, P.V. Anandh Babu*. Dietary supplementation of strawberry induces marked changes in the composition and functional potential of the gut microbiome in diabetic mice. *Journal of Nutritional Biochemistry*, 66, 63-69 (2019). PMC6490960 [Impact factor: 4.4‡]

16. C. Petersen, D. Bharat, B.R. Cutler¶, S. Gholami¶, C. Denetso¶, J.E. Mueller¶, J.M. Cho, J.S. Kim, J.D. Symons, P.V. Anandh Babu*. Circulating metabolites of strawberry mediate reductions in vascular inflammation and endothelial dysfunction in *db/db* mice. *International Journal of Cardiology,* 263, 111-117 (2018). PMC5951765 [Impact factor: 4.18‡]

17. B.R. Cutler¶, S. Gholami¶, J.S. Chua, K. Balagurunthan, P.V. Anandh Babu*. Blueberry metabolites restore cell surface glycosaminoglycans and improve endothelial dysfunction in diabetic human aortic endothelial cells. PMC5902641 *International Journal of Cardiology,* 261, 155-158 (2018). PMC5902641 [Impact factor: 4.18‡]

18. D. Bharat, R.R.M. Cavalcanti¶, N. Begaye¶, C. Petersen, B.R. Cutler¶, M.M.A. Costa¶, R.K.L.G. Ramos¶, M.R. Ferreira¶, Y.Y. Li, L.P. Bharath, E. Toolson, P. Sebahar, R.E. Looper, T. Jalili, N.S. Rajasekaran, Z. Jia, J.D. Symons, P.V. Anandh Babu*. Blueberry metabolites attenuate lipotoxicity-induced endothelial dysfunction. *Molecular Nutrition & Food Research*, 62, 1700601 (2018). [Impact factor: 4.32‡]

19. L. Bharath, J. Cho, S. Park, T. Ruan, Y. Li, R. Mueller, T. Bean, V. Reese, R. Richardson, J. Cai, A. Sargsyan, K. Pires, P.V. Anandh Babu, S. Boudina, T. Graham, and J.D. Symons. Endothelial cell autophagy maintains shear-stress-induced nitric oxide generation via glycolysis-dependent purinergic signaling to eNOS. *Arteriosclerosis, Thrombosis, and Vascular Biology,* 37: 1646-1656 (2017). PMC5693355 [Impact factor: 6.6‡]

20. B.R. Cutler¶, C.P. Mower, P.V.A. Babu*. Mechanistic insights in the vascular effects of blueberries: Evidence from recent studies (Review). *Molecular Nutrition & Food Research*, 61: 1600271 (2017). [Impact factor: 4.3‡]

21. Y. Qian, P.V.A. Babu, J.D. Symons, T. Jalili. Metabolites of flavonoid compounds preserve indices of endothelial cell nitric oxide bioavailability under glucotoxic conditions. *Nutrition and Diabetes*, 7: e286 (2017). PMC5637105 [Impact factor: 3.5‡]

22. Y. Li, L.P. Bharath, Y. Qian, T. Ruan, P.V. Anandh Babu, R.S. Bruno, J.D. Symons, T. Jalili. Carboxyethyl hydroxychroman, a metabolite of –tocopherol, preserves nitric oxide bioavailability in endothelial cells challenged with high glucose. *Experimental Biology and Medicine*, 241: 2056-62 (2016). PMC5102138 [Impact factor: 2.2‡]

23. L. P. Bharath, T. Ruan, Y. Li, A. Ravindran, X. Wan, J. Nhan, M. Walker, L. Deeter, R. Goodrich, E. Johnson, D. Munday, R. Mueller, D. Kunz, D. Jones, V. Reese, S. Summers, P.V.A. Babu, W. Holland, AQ.J. Zhang, E. Abel, J.D. Symons. Ceramide initiated protein phosphatase 2A activation contributes to arterial dysfunction in vivo. *Diabetes,* 64: 3914-26 (2015). PMC4613970 [Impact factor: 8.3‡]

24. L. Panneerseelan-Bharath, R. Mueller, Y. Li, D. Kunz, R. Goodrich, T. Mills, L. Deeter, A. Sargsyan, P.V.A. Babu, T. E. Graham, J.D. Symons. Impairment of autophagy in endothelial cells prevents shear stress

induced increases in nitric oxide bioavailability. *Canadian Journal of Pharmacology and Physiology*, 92: 605-612 (2014). [Impact factor: 1.8‡]

25. P. Nallasamy, H. Si, P.V.A. Babu, D. Pan, Y. Fu, E.A.S. Brooke, H. Shah, W. Zhen, H. Zhu, D. Liu, Y. Li, Z. Jia. Sulforaphane reduces vascular inflammation in mice and prevents TNF-α-induced monocyte adhesion to primary endothelial cells through interfering with the NF-κB pathway. *Journal of Nutritional Biochemistry*, 25: 824-833 (2014). PMC4087147 *Listed in Top25 Hottest Articles within the Journal, Jul–Sep 2014.* [Impact factor: 4.5‡]
26. X. Li, J. Luo, P.V.A. Babu, W. Zhang, E. Gilbert, M. Clline, R. McMillan, M. Hulver, H. Alkhalidy, W. Zhen, H. Zhang, D. Liu. Dietary supplementation of Chinese Ginseng prevents obesity and metabolic syndrome in high-fat diet-fed mice. *Journal of Medicinal Food*, 17:1287-97 (2014). PMC4259183 [Impact factor: 1.7‡]
27. Z. Jia, P.V.A. Babu, H. Si, P. Nallasamy, H. Zhu, W. Zhen, H.P. Misra, Y. Li, D. Liu. Genistein inhibits TNF-α-induced endothelial inflammation through the protein kinase pathway A and improves vascular inflammation in C57BL/6 mice. *International Journal of Cardiology*, 168: 2637-2645 (2013). PMC3758913 [Impact factor: 5.5‡]
28. P.V.A. Babu, D. Liu, E.R. Gilbert. Recent advances in understanding the antidiabetic actions of dietary flavonoids (Review). *Journal of Nutritional Biochemistry*, 24: 1777-1789 (2013). PMC3821977 *Listed in Top25 Hottest Articles within the Journal, Jan 2013 - Dec 2016. <u>One of the 5 most highly cited papers</u> in between Jan 2014 - Jun 2016.* [Impact factor: 4.5‡]
29. Z. Jia, W. Zhen, P.V.A. Babu, D. Liu. Phytoestrogen genistein protects against endothelial barrier dysfunction in vascular endothelial cells through PKA-mediated suppression of RhoA signaling. *Endocrinology*, 154: 727-737 (2013). PMC3548180 [Impact factor: 4.8‡]
30. P.V.A. Babu, H. Si, D. Liu. Epigallocatechin gallate reduces vascular inflammation and improves vascular function in db/db mice possibly through NFκB-mediated mechanism. *Molecular Nutrition & Food Research* 56: 1424-1432 (2012). PMC3816509 [Impact factor: 4.31‡]
31. P.V.A. Babu, H. Si, Z. Fu, W. Zhen, D. Liu. Genistein prevents hyperglycemia-induced monocytes adhesion to endothelial cells partially through preservation of cAMP signaling pathway. *Journal of Nutrition* 142: 724–730 (2012). PMC3301991 [Impact factor: 4.19‡]
32. H. Si, Z. Fu, P.V.A. Babu, W. Zhen, T. LeRoith, M.P. Meaney, K.A. Voelker, Z. Jia, R.W. Grange, D. Liu. Dietary epicatechin promotes survival of obese diabetic mice and Drosophila melanogaster. *Journal of Nutrition*, 141:1095-100 (2011). PMC3095141 [Impact factor: 3.91‡]
33. R. Sivakumar, P.V.A. Babu, C.S. Shyamaladevi. Aspartate and glutamate prevent isoproterenol-induced cardiac toxicity by alleviating oxidative stress in rats. *Experimental Toxicology & Pathology,* 63: 137-142 (2011). PMID: 19962869
34. P.V.A. Babu, D. Liu. Green tea catechins and cardiovascular health: An update (Review). *Current Medicinal Chemistry,* 15: 1840-1850 (2008). PMC2748751 [Impact factor: 4.8‡]
35. P.V.A. Babu, K.E. Sabitha, C.S. Shyamaladevi. Effect of Green tea extract on advanced glycation and cross-linking of tail tendon collagen in streptozotocin induced diabetic rats. *Food and Chemical Toxicology,* 46: 280-285 (2008). PMID: 17884275
36. P. Srinivasan, S. Suchalatha, P.V.A. Babu, R.S. Devi, S. Narayan, K.E. Sabitha, C.S. Shyamaladevi. Chemopreventive and therapeutic modulation of green tea polyphenols on drug metabolizing enzymes in 4-Nitroquinoline 1-oxide induced oral cancer. *Chemico Biological Interactions,* 172: 224-234 (2008). PMID: 18336807. *Listed in Top25 Hottest Articles within the Journal, Apr–Jun 2008.*
37. R. Sivakumar, P.V.A. Babu, C.S. Shyamaladevi. Protective effect of aspartate and glutamate on cardiac mitochondrial function during myocardial infarction in experimental rats. *Chemico Biological Interactions,* 176: 227–233 (2008). PMID: 18786522

38. # P.V.A. Babu, K.E. Sabitha, P. Srinivasan, C.S. Shyamaladevi. Modulatory effect of green tea extract on myocardial collagen characteristics in streptozotocin diabetic rats. *Pharmacological Research*, 55: 433-440 (2007). PMID: 17329138. *Listed in Top25 Hottest Articles within the Journal, Apr–Jun 2007.*

39. P.V.A. Babu*, A. Gokulakrishnan, R. Dhandayuthapani, D.A. Khan, C.V.P.Kumar, M.I.N.Ahamed. Protective effect of Withania somnifera (Solanaceae) on collagen glycation and cross-linking. *Comparative Biochemistry and Physiology - Part B*, 147: 308-313 (2007). PMID: 17329138. *Listed in Top25 Hottest Articles within the Journal, Apr–Jun 2007.*

40. # P.V.A. Babu, K.E. Sabitha, C.S. Shyamaladevi. Therapeutic effect of green tea extract on oxidative stress in aorta and heart of streptozotocin diabetic rats. *Chemico Biological Interactions,* 162:114-20 (2006). PMID: 16860299. *Listed in Top25 Hottest Articles within the Journal, Jul–Dec 2006 (Two quarters*

41. # P.V. Anandh Babu, K.E. Sabitha, C.S. Shyamaladevi. Green tea extract impedes dyslipidemia and development of cardiac dysfunction in streptozotocin-diabetic rats. *Clinical & Experimental Pharmacology and Physiology,* 33: 1184-9 (2006). PMID: 17184499

42. P.V.A. Babu, K.E. Sabitha, C.S. Shyamaladevi. Therapeutic effect of green tea extract on advanced glycation and cross-linking of collagen in the aorta of streptozotocin-diabetic rats. *Clinical & Experimental Pharmacology and Physiology,* 33: 351-7 (2006). PMID: 16620300

43. P.V.A. Babu, K.E. Sabitha, C.S. Shyamaladevi. Green tea impedes dyslipidemia, lipid peroxidation, protein glycation and ameliorates Ca2+-ATPase and Na+/K+-ATPase activity in the heart of streptozotocin-diabetic rats. *Chemico Biological Interactions,* 162: 157-64 (2006). PMID: 16846594

Editorial

44. Z. Jia, P.V. Anandh Babu, W. Chen, X. Sun. Editorial: Natural Products Targeting on Oxidative Stress and Inflammation: Mechanisms, Therapies, and Safety Assessment. *Oxidative Medicine and Cellular Longevity,* Article ID: 6576093 (2018). [Impact factor: 4.59‡]

45. W. Chen, Z. Jia, M.H. Pan, P.V. Anandh Babu. Editorial: Natural Products for the Prevention of Oxidative Stress-Related Diseases: Mechanisms and Strategies. *Oxidative Medicine and Cellular Longevity,* 2016: Article ID: 4628502 (2016). [Impact factor: 4.59‡]

Book Chapter

46. P.V. Anandh Babu* and D. Klimis-Zacas. Chapter 6: Mechanisms of Action of Berry Bioactive on the Vascular System. In: Berry Bioactive Compounds and their Health Benefits: Food Chemistry, Function and Analysis Series. The Royal Society of Chemistry (2022).

47. B. Cutler, J.S. Chua, B. Kuberan, P.V. Anandh Babu*. Chapter 37: Methods to Analyze the Effect of Diet-Derived Metabolites on Endothelial Inflammation and Cell Surface Glycosaminoglycans. In: Methods in Molecular Biology 2303, Glycosaminoglycans – Chemistry and Biology. Springer Publications (2021).

48. J.M. Cho, K. Ly, S. Ly, S.K. Park, P.V. Anandh Babu, B. Kuberan, J.D. Symons. Chapter 40: Procedures to Evaluate the Role of Heparan Sulfate in the Reactivity of Resistance and Conductance Arteries Ex Vivo. In: Methods in Molecular Biology 2303, Glycosaminoglycans – Chemistry and Biology. Springer Publications (2021).

49. P.V.A. Babu*, C.P. Mower, Z. Jia. Chapter 11: Sulforaphane and atherosclerosis. In: Reference series in Phytochemistry: Glucosinolates. Springer Publications, (2017).

50. P.V.A. Babu, D. Liu. Chapter 18: Flavonoids and cardiovascular health. In: Complementary and Alternative Therapies and the Aging Population. An Evidence-Based Approach. Academic Press (2009).

Published Peer-Reviewed Conference Abstracts (selected from 30 abstracts)

C. Petersen, A.K. Satheesh Babu, C.M. Lucia, H.A. Paz, L. Iglesias-Carre, U. Wankhade, A.P. Neilson, A.B.P. Velayutham*. Strawberry-derived microbial metabolites and gut microbes mediate the beneficial vascular effects of dietary strawberries. *Current Developments in Nutrition,* 7:100506 (2023). *(Selected for an oral presentation)*

A.K. Satheesh Babu, C. Petersen, L. Iglesias-Carre, R. Compton¶, H.A. Paz, A.P. Neilson, U. Wankhade, A.B.P. Velayutham*. Gut microbes and dietary composition modulate the production of blueberry-derived metabolites. *Current Developments in Nutrition,* 7: 101505 (2023). *(Selected for an oral presentation)*

A.K. Satheesh Babu, C. Petersen, U. Wankhade, H. Paz, K. Benedict, M. Nguyen, M. Putich¶, M. Saldivar-Gonzalez¶, S. Larsen¶, A.B.P. Velayutham*. Dose and time dependent effect of dietary blueberries on diabetic vasculature is associated with gut microbes. *The FASEB Journal*, 36: S1, R5721 (2022). *(Selected for an oral presentation)*

P. Mokhtari, J.M. Metos, P. Jambal, K. Shankar, A.B.P. Velayutham*. Gut microbial and metabolic signatures are altered in adolescents with type 1 diabetes. *The FASEB Journal*, 36: S1, R3170 (2022).

C. Petersen, A.K. Satheesh Babu, U. Wankhade, M. Putich¶, G. Wilson¶, M. Saldivar-Gonzalez¶, J.D. Symons, A.B.P. Velayutham*. Dietary Blueberries Improve Vascular Inflammation and Alter the Composition of the Gut Microbiome in Aged Mice. *The FASEB Journal*, 36: S1, R5941 (2022).

C.M. Della Lucia, C. Petersen, A.K. Satheesh Babu, A.B.P. Velayutham*. Antibiotics and high-fat-diet induced gut inflammation and impaired gut permeability are improved by dietary blueberries possibly through NFκB signaling. *The FASEB Journal*, 36: S1, L7845 (2022).

J.C. Miller, M.N. Putich¶, J.E. Mueller, A.S. O'Farrell¶, S. Gholami¶, J.D. Symons, A.B.P. Velayutham*. Dietary supplementation of strawberry improves vascular inflammation without altering metabolic milieu in high-fat diet fed C57BL/6J mice. *Current Developments in Nutrition*, 031.P06-086-19 (2019).

A.B.P. Velayutham*, U.D. Wankhade, C. Petersen, K. Wong¶, D. Bharat, S. Gholami¶, S.V. Chintapalli, B.D. Piccolo, J.D. Symons, K. Shankar. Influence of blueberry supplementation on gut microbiome in diabetic *db/db* mice. *Current Developments in Nutrition*, 2: OR03-08 (2018). *(Selected for an oral presentation)*

C. Petersen, U.D. Wankhade, K. Wong¶, S.V. Chintapalli, B.D. Piccolo, T. Jalili, J.D. Symons, K. Shankar, A.B.P. Velayutham*. Strawberry supplementation modifies gut microbiota in obese diabetic *db/db* mice. *Current Developments in Nutrition,* 2: P23-083 (2018).

D. Bharat, C. Petersen, C. Denestso¶, S. Gholami¶, B. Cutler¶, J.S. Kim, J.D. Symons, A.B.P. Velayutham*. Dietary Blueberries Attenuate Vascular Inflammation and Dysfunction in Diabetic *db/db* Mice. *The FASEB Journal*, 31:166.2 (2017). *(Student Mentee Divya was a finalist in the American Society for Nutrition's Emerging Leaders in Nutrition Sciences; Abstract selected for an oral presentation)*

C. Petersen, D. Bharat, B. Cutler¶, S. Gholami¶, C. Denestso¶, J.E. Mueller¶, J. Cho, J.S. Kim, J.D. Symons, A.B.P. Velayutham*. Strawberry Supplementation Lessens Vascular Inflammation and Dysfunction Displayed by Diabetic Mice. *The FASEB Journal*, 31:431.5 (2017). (*Selected for an oral presentation)*

B. Cutler¶, J.S. Chua, B. Kuberan, A.B.P. Velayutham*. Blueberry Metabolites Restore Composition of Glycosaminoglycan Structures in Diabetic Human Vascular Endothelial Cells. *The FASEB Journal*, 31:646.61 (2017).

D. Bharat, N. Begaye¶, R. Ramos¶, M. Ferreira¶, Y. Li, B. Cutler¶, L.P. Bharath, J.D. Symons, T. Jalili, A.B.P. Velayutham*. Lipotoxicity-Evoked Reductions in Nitric Oxide Bioavailability and Exaggerated Oxidant Stress Are Blunted by Blueberry Metabolites. *The FASEB Journal*, 30:1175.3 (2016).

R. Cavalcanti¶, N. Begaye¶, M. Costa¶, L.P. Bharath, J.D. Symons, T. Jalili, N.S. Rajasekaran, Z. Jia, P.V.A. Babu*. Metabolites of Blueberry Anthocyanins Suppress Lipotoxicity Induced Endothelial

Inflammation. *The FASEB Journal*, 29:118.6 (2015). *(Rafaela Cavalcanti was a finalist in the American Society for Nutrition's Emerging Leaders in Nutrition Sciences; Abstract selected for an oral presentation)*

VI. INVITED TALK AND ORAL PRESENTATIONS (Selected)

Invited Speaker. Division of Gastroenterology and Hepatology Seminar Series, University of Illinois Chicago. Mar 27. Gut Microbes Metabolize Dietary Components and Mediate Their Biological Activities: Insight from Blueberry Story (2024).

Invited Speaker. 12th Probiotics, Prebiotics, New Foods, Nutraceuticals & Phytochemicals for Nutrition & Human and Microbiota Health Conference, Rome, Italy. Sep 16-19. Prebiotic Effects of Dietary Blueberries Mediate the Cardiovascular Benefits (2023).

Invited Speaker. Native American Research Internship NIH Summer Speaker Series, Salt Lake City, UT, Jun 29. Blueberries, Gut Microbiome and Diabetic Vasculature (2023).

Invited Speaker. 9th Biennial Conference | Berry Health Benefits Symposium, Tampa Bay, FL, Jan 31-Feb 2. Metabolites Mediate the Vascular Effects of Blueberries (2023).

Invited Speaker. Microbiome & Probiotic R&D & Business Collaboration Forum: USA Chapter, Miami, FL, Oct 27-28. Microbial Taxonomic and Functional Shifts in Adolescents with Type 1 Diabetes are Associated with Clinical and Dietary Factors (2022).

Invited Speaker. Distinguished Seminar Series, University of Arkansas for Medical Sciences, Little Rock, AR, May 20. Gut microbes improve vascular health through microbial metabolites (2022).

Invited Speaker. International Seminar on Gut Microbiota in Health and Disease, Islamiah College, Vaniyambadi, India, Aug 11. Dietary Anthocyanins, Gut Microbes and Vascular Health (2022).

Invited speaker. Federal University of Viçosa, Vicosa, Minas Gerais, Brazil, Sep 8 (Virtual). Gut microbes metabolize dietary compounds and mediate vascular health (2021).

Invited speaker. 6th Annual Translational Microbiome Conference, Boston, MA, Apr 21-24. Gut microbe mediates the vascular effects of dietary anthocyanins (2020). Converted to virtual due to COVID.

American Society for Nutrition Meeting (Nutrition 2018), Boston, MA, Jun 9-12. Influence of blueberry supplementation on gut microbiome in diabetic *db/db* mice.

School of Medicine, University of Utah - Metabolism Interest Group Seminars, Feb 8. Vascular effects of blueberry anthocyanins (2018).

Experimental Biology Meeting 2017, Chicago, IL, Apr 22-26. Dietary Blueberries Attenuate Vascular Inflammation and Dysfunction in Diabetic *db/db* Mice (2017).

School of Medicine, University of Utah - Metabolism Interest Group, Jan 9. Title: Dietary flavonoids for the prevention of vascular disease (2014).

Experimental Biology Meeting 2015, Boston, MA, Mar 28 – Apr 1. Metabolites of Blueberry Anthocyanins Suppress Lipotoxicity Induced Endothelial Inflammation (2015).

Arteriosclerosis, Thrombosis, and Vascular Biology (ATVB) Scientific sessions 2010, San Francisco, CA, Apr 8-10. Genistein prevents vascular inflammation in obese diabetic mice (2010).

Invited speaker. GTC Bio's 3rd Modern Drug Discovery & Development Summit – Translational Medicine, San Francisco, CA, Nov 28-30. AGE attenuators and breakers to target diabetic heart (2007).

IV. TEACHING AND MENTORING

Instructional Summary (1993-2007 & 2012-Present; 25 Years)

Dept. of Nutrition and Integrative Physiology, University of Utah, Salt Lake City, UT (2012 – Present)
NUIP 6440: Macronutrient Metabolism (Team taught), Fall 2012 – Present

NUIP 6450: Nutritional Biochemistry (Online), Spring 2017 - Present
NUTR 1020: Scientific Foundations of Human Nutrition and Health, Fall 2014 - 2018
NUTR 6980: Faculty Consultation, 2012 – Present
NUTR 6910: Field Experience, 2012 – Present
NUTR 6970: Thesis Research – Masters, 2012 – Present
NUIP 7970: Dissertation – Doctoral, Fall 2019 - Present
NUIP 6900: Directed Nutrition Research, Fall 2019 – Present

Dept. of Biochemistry, Colleges Affiliated to the University of Madras (1993 -2007)
Islamiah College, Vaniyambadi (1997-2007 & 1993-94); Sengunthar College, Tiruchengode (1995-97); Kanchi Krishna College, Kilambi, India (1994-95)
Graduate/ Undergrad courses: Physiology and Nutrition, Allied Biochemistry, Bio-organic Chemistry, Molecular Biology, Analytical Methods in Biochemistry, Biochemistry labs.

Trainee Supervision (Total: 42)

Postdoctoral Fellows
Satheesh Babu Adhini Kuppuswamy, May 2019 – Present
Ceres Lucia, 2021–22 (*Current: Associate Professor at University of Federal de Viçosa, Brazil*)

Graduate Students (8 students)
PhD students
Chrissa Petersen, 2019–22 (*Current: Tenure-track faculty at Idaho State University*)
Pari Mokhtari, 2017–21 (*Current: Postdoc & Part-Time Lecturer at Univ. of Southern California*)
MS students
Jose Torres, 2023- Present
Molly Buccola, 2022 – Present
Kai Benedict, 2019 – 21 (*Current: Clinical Dietitian at U.S. Department of Veterans Affairs*)
Miley Nguyen, 2019 – 21 (*Current: Clinical Dietitian at Huntsman Cancer Institute*)
James Miller, 2018 – 20 (*Current: Clinical Dietitian at University of Utah Health*)
Chrissa Petersen, 2014 – 17 (*Current: Tenure Track Faculty at Idaho State University*)

Undergraduate Students (23 students with one or more awards)
Undergraduate Research Opportunity Program (UROP) Awardees (20 Awards x $1,200)
Noah Bondi (2022-), Keaton Rosquist (2022-2023), Nizhoni Porter (2022-3023), Rachel Compton (2021-), Caitlin McCartney (2020), Sydney Larsen (2019-22), Miguel Saldivar-Gonzalez (2019–20), Aubrey O'Farrell (2018-19), Madison Putich (2018–20), Kiana Wong (2016-18), Samira Gholami (2016–19), Jennifer Mueller (2015–17), Brett Cutler (2014–16).
Summer Program for Undergraduate Research (SPUR) Awardees (5 Awards x $4,500)
Keaton Rosquist (2022), Rachel Compton (2021), Madison Putich (2019), Samantha Nelson (McPherson College, 2018), Jessica Bigley (Washington University, 2018).
Native American Research Internship Program (NARI) Awardees (7 Awards x $5,500)
Nizhoni Porter (Two Terms, 2022 & 2023), Gem Wilson (New Mexico State University, 2019), Aspen Johnson (University of New Mexico, 2018), Christopher Denetso (University of New Mexico, 2016), Nathan Begaye (Two Terms, 2014 & 2015).
Francis Family Foundation Undergraduate Research Scholarship Awardee ($1,200)
Rachel Compton (2024)
Brazil Scientific Mobility Program Awardees (Federal University of Pernambuco)
Renata Kelly Luna Ramos (2015), Marina Ramos Ferreira (2015), Marcella Melo Assis Costa (2014), Rafaela Ramos Cavalcanti (2014).

Lab Volunteers (Undergrads/ MS; 9 students)
MS Students: Michael Gjenvick (2017), Jennifer Mueller (2017–19), Divya Bharat (2014–17), Eui Kim (2013-14), Youyou Li (2015).
Undergraduate Students: Harini Srinivasan (2020 & 2023), Nancy Atieno (2014), Lucie Bertuleit (2013).

High School Students
Rahul Satheesh (2023), Erica Deo (2023)

Graduate Student Committees (<u>Total: 31</u>)

PhD Committee
Chair
Graduated: Chrissa Petersen (2022) (*Current: Tenure-track faculty at Idaho State University*)
Pari Mokhtari (2021) [Co-Chair] (*Current: Postdoc at University of Southern California*)
Member
Graduated: Ashley Lauren Pyne (2022) (*Current: Postdoc at University of Utah*)

MS Committee
Chair (12 students)
Jose Torres, Molly Buccola, Rachel Brenneman, Ashley Park (2022-Present)
Graduated: Kai Benedict (2021), Miley Nguyen (2021), James Miller (2020), Madeleine Louise French (2020), Emily Rose Preib (2020), Chrissa Petersen (2017), Emily Tieu (2014)
Member (16 students)
Graduated: Kristen Moffatt (2021), Michele Hansen (2021), Chelsea Norman (2020), Jennifer Ellen Mueller (2020), Ashley Williams (2019), Kristen Pitcher (2018), Christine Mcgarry (2018), Micah Turney (2017), Juyeon Lee (2016), Emma Toolson (2016), Cynthia Wilson (2016), Daniel Burgess (2016), Maria Rolph (2014), Alice Ma (2014), Nicole Williams (2014), Ying Qian (2013).

External (International) Examiner for Ph.D. Dissertation

External Examiner for Ph.D. Dissertation/ Member of Board of Examiners (International Examiner)
Evaluated **<u>21 Ph.D. Theses</u>** from the following Universities: 2013 – Present. The University of Madras, Vellore Institute of Technology, Mother Teresa Women's University, Bharathiyar University, Periyar University, Tiruvalluvar University, and Vinayaka Mission University.

Mentees' awards/accomplishments (2015 – Present)

Tenure Track Faculty
Chrissa Petersen, Dept. of Nutrition and Dietetics, Idaho State University, 2023

Accepted to the School of Medicine
Jessica Bigley, Washington University School of Medicine, 2022
Christopher Denetso, University of Arizona College of Medicine, 2019
Brett Cutler, University of Utah School of Medicine, 2017 (Current: Resident at Washington University School of Medicine)

USDA/ National Institute of Foods and Agriculture Predoctoral Fellowship Award
Chrissa Petersen, Total Award Amount: $ 180,000 ($60K/Year), 2021-2014.

Doctoral Scholarship Award (Academy of Nutrition and Dietetics Foundation)
Chrissa Petersen, Total Award Amount: $ 15,000, 2020 & 2021.

Exemplary Ph.D. Student in Research Award
Chrissa Petersen, Wayne Askew Award 2022

Outstanding Undergraduate Researcher Awards
Sydney Larsen, Outstanding Undergraduate Researcher Award from Dept. of Nutrition, 2021
Samira Gholami, College of Health Outstanding Undergraduate Researcher Award, 2019
Bret Cutler, College of Health Outstanding Undergraduate Researcher Award, 2015

Emerging Leaders in Nutrition Science Awards
Divya Bharat, Finalist, Experimental Biology Meeting, Chicago, IL, 2017.
Rafaela Cavalcanti, Finalist, Experimental Biology Meeting, Boston, MA, 2015.

Travel Awards (6 Awards)

Nizhoni Porter, Travel Award, SACNAS Conference, San Juan, Puerto Rico, 2022
Sydney Larsen, Travel Grant, Utah Conference on Undergrad Research, St. George, 2022
Rachel Compton, Travel Grant, Utah Conference on Undergrad Research, St. George, 2022
Samira Gholami, Travel Award, Utah Conference on Undergrad Research, Cedar City, 2018
Brett Cutler, Travel Grant, Experimental Biology Meeting, Chicago, 2017
Brett Cutler, Utah Conference on Undergrad Research funding, 2016

Undergraduate Research Opportunities Program (UROP) Awards (21 Awards)

Noah Bondi (Summer 2023), Keaton Rosquist (Spring 2023 & Fall 2022), Nizhoni Porter (Spring 2023 & Fall 2022), Rachel Compton (Fall 2021, Spring 2022 & Spring 2024), Sydney Larson (Spring 2020 & Spring 2021), Madison Putich (Summer 2018 & Spring 2020), Miguel Gonzalez (Fall 2019), Aubrey O'Farrell (Spring 2019), Kiana Wong (Summer 2017), Samira Gholami (Fall 2016 & Summer 2017), Jennifer Mueller (Summer 2016 & Spring 2017), Brett Cutler (Spring 2015 & 2016).

Mentees' Oral Presentations at State/National Conferences (8 Oral Presentations)

Satheesh Kuppuswamy, American Society for Nutrition Meeting (Nutrition2023), Boston, 2023
Chrissa Petersen, American Society for Nutrition Meeting (Nutrition 2023), Boston, 2023
Nizhoni Porter, Utah Conference on Undergrad Research, 2023
Keaton Rosquist, Utah Conference on Undergrad Research, 2023
Satheesh Kuppuswamy, Experimental Biology Meeting, Philadelphia, 2022
Madison Putich, Utah Conference on Undergraduate Research, Logan, 2020
Samira Gholami, Utah Conference on Undergraduate Research, Cedar City, 2018
Chrissa Petersen, Experimental Biology Meeting, Chicago, 2017

Student Evaluation of Teaching & Mentoring

Instructor Course Feedback (2021-2023; Students' response to 'Yes - I would recommend the instructor')

NUIP6450: Nutrition Biochemistry, 2021-2023: 100%, 100%, 100% (3-Year Average: 100%)
NUIP6440: Macronutrient Metabolism (Team Taught), 2021-2023: 100%, 90%, 100% (3-Year Average: 97%)
NUIP 7990: Dissertation - Doctoral, 2021-2022: 100%, 100%. (2-Year Average: 100%)
NUIP 6970: Thesis Research - Masters, 2021: 100%

SmartEvals! Instructor Rating (2013-2020; 1-6 Rating Scale; 6 being the highest)

NUIP6450: Nutrition Biochemistry, 2017-2020: 6, 6, and 5.93 (3-Year Average: 5.98)
NUIP6440: Macronutrient Metabolism (Team Taught), 2013-2020: 5.06, 5.65, 5.74, 5.73, 5.71, 5.12, 5.87, and 5.29 (8-Year Average: 5.52)
NUTR 1020: Scientific Foundations of Human Nutrition and Health, 2014-2018: 5.51, 5.72, 5.68, and 5.3. (4-Year Average: 5.54)
NUIP 6970: Thesis Research-Masters, 2014: *6*; 2018: *6*; 2019: 5.86; 2020: *5.5*. (4-Year Average: 5.84)
NUTR 6980: Faculty Consultation, 2014: *6*; 2015: *6*. (2-Year Average: 6)
NUTR 6910: Field Experience, 2014: 6.
NUTR 6900: Directed Nutrition Research, 2020: 6.
NUIP7990: Dissertation Doctoral, 2019: 6.

VII. RESEARCH SUPPORT

Active

NIH/NCCIH – R01AT010247 (*Role: PI*) 09/21/18 – 05/30/24
Award amount: $1,520,879
Title: Biological signatures of blueberry derived microbial metabolites NCE

USDA/National Institute of Foods and Agriculture (NIFA) Award (*Role: PD*) 03/01/19 – 02/30/25
Award amount: $500,000
Title: Strawberry-derived microbial metabolites mediate the vascular effects of strawberries NCE

USDA/NIFA Predoctoral Fellowship Award (*Role: Mentor*) 06/15/21 - 05/14/24

Award: $180,000 PD: Chrissa Petersen (Graduated and grant transferred to Idaho State University)
Title: Strawberry and Cardiovascular Health

Completed

Undergraduate support: Summer Program for Undergraduate Research (SPUR), *5 awards* x $4000; Undergraduate Research Opportunities Program (UROP), *20 awards* x $1200; Native American Research Internship, *7 awards* x $5500; Brazil Scientific Mobility Program. Total award >$75,000.

NIH/NCCIH – 3R01AT010247-03S1 Supplementary NCE (*Role: PI*) 09/01/20 – 08/30/22
Award amount: $381,250
Title: Biological signatures of blueberry-derived microbial metabolites (Alzheimer-focused)

NIH/NHLBI: 1R01HL141540-01 (*Role: Co-Investigator*, 4% Effort: Year 2-4) 07/01/18 – 06/30/22
PI: J David Symons, College of Health, University of Utah.
Title: Autophagy Maintains vascular function through a glycolysis-linked pathway regulating eNOS.

USDA/National Institute of Foods and Agriculture (NIFA) Award (*Role: PI*) 03/01/18 – 02/31/21
Award amount: $150,000.
Title: Dietary Strawberry Prevents Vascular Inflammation

Wild Blueberry Association of North America Research Grant (*Role: PI*) 01/01/18 – 12/30/19
Award amount: $75,000.
Title: Blueberry and Healthy Vascular Aging

NIH/NIA - R03 (*Role: Collaborator*) 01/01/17 – 12/31/19
Award amount: $149,000 Title: Vascular phenotyping of young and old mice with disrupted autophagy signaling in endothelial cells. PI: Dr. J David Symons, College of Health, University of Utah.

NIH/5P01HL107152 (*Role: Co-investigator*) 09/23/15 – 07/31/18
Title: Defining vascular functions of proteoglycans through chemical biology approaches
PL: Kuberan Balagurunathan, Department of Medicinal Chemistry, University of Utah

American Heart Association Grant in Aid (*Role: Collaborator*) 07/01/16 – 06/03/18
Award amount: $144,000. Title: Aging limits vascular autophagic flux and impairs endothelial cell nitric oxide generation. PI: Dr. J David Symons, College of Health, University of Utah

University of Utah – Funding Incentive Seed Grant Program (*Role: PI*) 01/01/16 – 12/31/17
Award amount: $35,000 Title: Modulation of endothelial heparan sulfate proteoglycans in diabetics

College of Health Research Pilot Grant Program (*Role: PI*) 01/01/16 – 12/31/17
Award amount: $10,000 Title: Endothelial and vascular effects of strawberry metabolites

NIH/NIDDK sponsored Pilot Program Award (*Role: Collaborator*) 12/01/15 – 11/30/16
Award amount: $40,000 PI: J David Symons. Title: Pathophysiological and genetic disruption of EC autophagy lowers EC NO production

Diabetes and Metabolism Center Pilot Grant (*Role: Collaborator*) 12/01/14 – 11/30/16
Award: $25,000 (PI: Symons). Title: Characterizing a novel mouse model to study vascular autophagy

Center on Aging Pilot and Feasibility Grant (*Role: Collaborator*) 01/01/15 - 12/31/15
Award amount: $20,000 PI: Dr. J David Symons, College of Health, University of Utah.
Title: Links among autophagy, mitophagy, and nitric oxide bioavailability in aging vasculature

College of Health Seed Grant, University of Utah (*Role: PI*) 05/01/13 – 04/30/15
Award amount: $5,000 Title: Dietary anthocyanins for the prevention of vascular disease in diabetes.

American Heart Association Postdoctoral Fellowship Award (*Role: PI*) 07/01/10 - 06/30/12
Award amount: $82,000. Title: Epigallocatechin gallate for the prevention of Vascular Inflammation

NIH/NCCAM – R21 (*Role: Co-Investigator*) 09/15/08 - 08/31/10

Award: $250,000; PI: Dongmin Liu. Genistein for the prevention of diabetic vascular inflammation

VIII. EDITORIAL/REVIEWER EXPERIENCE

Academic/Associate Editor (2020- Present)

Academic Editor, *PLOS One (2020 – Present)*
Associate Editor, *Frontiers in Nutrition (Section: Nutrition & Metabolism) (2022 – Present)*

Guest Editor (2015 & 2017)

Oxidative Medicine and Cellular Longevity – Special Issues: Natural Products Targeting on Oxidative Stress and Inflammation: Mechanisms, Therapies, and Safety Assessment (2017) & Natural Products for the Prevention of Oxidative Stress – Related Diseases: Mechanisms and Strategies (2015).

Editorial Board Member (2017 – 2022)

Elsevier: *Nutrition Research (2023 – Present)*
Frontiers in Nutrition (2017-2022)

Journal Reviewer (2007 – Present)

Reviewer for the following **60 journals** (Reviewed ~150 manuscripts)

Nature Publishing Group: *European Journal of Clinical Nutrition*; *Scientific Reports; International Journal of Obesity*; *Cell Communications and signaling.*
American Society for Nutrition Publications: *Journal of Nutrition*.
American Chemical Society: *Journal of Agricultural and Food Chemistry*.
Cambridge Publications: *British Journal of Nutrition*.
Royal Society of Chemistry: *Food & Function.*
Elsevier: *Diabetes Research and Clinical Practice, Toxicology Letters, Food and Chemical Toxicology, Process Biochemistry, Injury, Journal of Cardiovascular Disease Research, Spectrochimica Acta - Part A, Journal of Nutritional Biochemistry, Nutrition, Nutrition Research, International journal of Biological Macromolecules, Toxicology and Applied Pharmacology*; *Pharmacological Reports; Life Sciences*; *Journal of Functional Foods; Experimental Cell Research; Biochimica Biophysica Acta, Journal of Chromatography B; Phytomedicine, Foods & Function*; *Experimental Eye Research*; *Journal of Chinese Integrative Medicine (*Currently *Journal of Integrative Medicine), International Immunopharmacology*.
Taylor & Francis Publication: *Achieves of Physiology and Biochemistry, Critical Reviews in Toxicology*.
PLOS*: PLOS One*
Springer: *Applied Biochemistry & Biotechnology, Investigational New Drugs, Molecular and Cellular Biochemistry; Journal of Molecular Neuroscience*, *European Journal of Nutrition*, *Inflammation Research, Springer Plus*.
Wiley-Blackwell: *Basic & Clinical Pharmacology & Toxicology; Trends in Food Science and Technology.*
Wiley: *The FASEB Journal; Diabetes/Metabolism Research and Reviews; Nutrition & Dietetics*; *Molecular Nutrition Food Research*.
BioMed Central: *BMC Complementary and Alternative Medicine*.
Karger: *Cell Physiology and Biochemistry*.
Sage: *Journal of Parenteral and Enteral Nutrition, Experimental Biology Medicine; Human and Experimental Toxicology*.
Spandido Publications*: International Journal of Molecular Medicine, Molecular Medicine Reports, Experimental and Therapeutic Medicine*.
Benthem Science: *Current Drug Targets.* Hindawi: *Evidence-Based Complementary and Alternative Medicine.* Chinese Physiological Society Publication*: The Chinese Journal of Physiology.*
Other Publishers: *International Journal of Biological Sciences; Chemical Biology Letters.*

Abstract Reviewer (2012 – Present)

American Society for Nutrition Meeting Abstracts: Nutrition-2014; Nutrition-2022 (Virtual, Jan 2022); Nutrition-2020 (Seattle, Jan 2020); Nutrition-2019 (Baltimore, Jan 2019); Nutrition-2018 (Boston, Jan 2018).

Experimental Biology (EB) Annual Meeting Abstracts: EB-2017 (Chicago); EB-2016 (San Diego); EB-2015 (Boston).

American Heart Association Scientific Session 2016 (New Orleans) Abstracts, Jul 2016.

Great Wall International Congress of Cardiology (GW-ICC), Asia Pacific Heart Congress, Beijing, China - meeting abstracts, 10-13 Oct 2013 & 11-14 Oct 2012.

Book Chapter Reviewer (2013-2016)

Book: Anti-Obesity Discovery and Development. Editor: Prof. Atta-ur-Rahman, FRS and Dr. M. Iqbal Choudhary, Bentham Science Publishers, 2016.

Book: Systems Biology of Free Radicals & Anti-Oxidants. Editor: Dr. Issy Laher. Publisher: Springer-Verlag (Germany), 2013.

Book Proposal Reviewer (2015)

Book proposal entitled "Obesity: Oxidative stress and dietary antioxidants" (Elsevier).

IX. GRANT REVIEW COMMITTEE/ PANEL MEMBER

NIH/NHLBI: Clinical Trial Special Emphasis Panel ZHL1 CSR-Z (J1), Panel Member, 2022.

National Science Foundation (NSF): Physiological Mechanisms & Biomechanics, Grant Reviewer, 2022.

NIH SEP: Director New Innovator Award Program (DP2): ZRG1 CVRS-B, Panel Member, 2021.

University of Nebraska Collaboration Initiative Team Grants, Grant Reviewer, 2021.

Utah Center for Clinical and Translational Science Grants, Grant Reviewer, 2020.

Grant Reviewer for a research proposal submitted to the executive government agency of the National Science Center (Narodowe Centrum Nauki, Poland), 2018.

Vice President for Research Funding Incentive Seed Grant Reviewer, 2017.

X. SYMPOSIUM COORDINATOR/ MODERATOR/ COMPETITION JUDGE/ PANELIST

Moderator, Utah Conference on Undergraduate Research, University of Utah, UT, Feb 17, 2023.

Panelist and break-out room leader, 'Exploring careers in Nutritional Microbiology' event organized by Nutritional Microbiology Group Engaging Members for American Society for Nutrition: Nov 4, 2022.

Judge for Bench 2 Bedside competition, Capitol Hill, Salt Lake City: 2017, 2019, 2020 & 2021.

Poster Judge at the University of Utah Undergraduate Research Symposium, Apr 9, 2019.

Poster Judge at the Diabetes Metabolism Research Center Fall Retreat, Oct 2, 2018.

Judge for American Society for Nutrition's (ASN) Emerging Leaders in Nutrition Science Poster Competition: ASN Annual Meeting (Nutrition-2018, Boston, Jun 2018); Experimental Biology (EB) Annual Meeting 2017 (Chicago, Apr 2017); and EB Annual Meeting 2016 (San Diego, Apr 2016).

Judge for the poster competition, Diabetes Metabolism Center Retreat, University of Utah, Mar 2016.

Judge for the poster competition, Medical Student Scholarly Activity Symposium, School of Medicine, University of Utah, Mar 11, 2015.

Judge for the Annual Award competition, Experimental Biology Annual Meeting, Boston, April 20-24, 2013.

Member and co-chair of the organizing committee in University Grants Commission (Govt. of India) supported State Level Seminar on Biosciences, Islamiah College, Vaniyambadi, India, 18-19 Feb 2004.

XI. PROFESSIONAL AFFILIATIONS

Member, American Physiological Society, 2021 - Present
Member, European Society of Neurogastroenterology & Motility, 2020 - Present
Member, Canadian Nutrition Society, 2018 - Present
Member, American Society for Nutrition, 2012-Present
Member, American Heart Association, 2009 – Present

XII. SERVICE

University Community Activities

University Level
Member, University of Utah Institutional Review Board (IRB), 2021 - Present
Safety Committee Representative for College of Health, 2021 - Present
Summer Program for Undergraduate Research (SPUR) Mentor, 2018 – Present
Undergraduate Research Opportunities Program (UROP) Mentor, 2015 – Present
Native American Research Internship (NARI) Program Mentor, 2014 - Present
Biology Honors Research Advisor, 2016 – Present
Research Mentor for Leap student, 2016 - 2017

College Level
Chair, College of Health Advisory (RPT) Committee, 2023 - Present
Chair, College of Health Safety Committee, 2021 - Present
Member, College of Health Advisory (RPT) Committee, 2019 – 2022
Member, College of Health Computer Committee, 2012 - 2016
Member, College of Health Diversity and Inclusion Committee, 2012 - 2016

Department Level
Faculty Search Committee [Co-ordinated Master Program], 2023 – Present
Faculty Mentor, Access and Engagement Workgroup, 2024-Present
Faculty Mentor, Equity, Diversity & Inclusion Committee, 2023
Faculty Advisor, Graduate Student Advisory Committee, 2022 – Present
Member, Diversity and Inclusion Committee, 2018 - Present
Member, Chair Advisory Committee, 2019
Member, Graduate selection committee: Co-ordinated Master's Degree Program, 2013 - 2016
Member, Graduate selection committee: Nutrition Sciences Master's Degree Program, 2013 – 2016

Global Impact

Invited Speaker (International)
12th Probiotics, Prebiotics, New Foods, Nutraceuticals & Phytochemicals for Nutrition & Human and Microbiota Health Conference, Rome, Italy. Sep 16-19 (2023).
International Seminar on Gut Microbiota, Islamiah College, Vaniyambadi, India, Aug 11 (2022).
Federal University of Viçosa, Vicosa, Minas Gerais, Brazil, Sep 8 (Virtual) (2021).

International Grant Reviewer
Grants from Executive government agency of the National Science Center (Poland), Mar 2018.

Research Mentor for Brazil Scientific Mobility Program
Research mentor for the four visiting undergrads from the Federal University of Pernambuco supported by Brazil Scientific Mobility Program (Science without borders), 2014-15.

International Examiner for Ph.D. Theses

Evaluated 21 Ph.D. Theses submitted at the University of Madras, Vellore Institute of Technology (VIT) University, Periyar University, Thiruvalluvar University, Mother Teresa Women's University, Vinayaka Mission University (India); 2013 – Present

Abstract Reviewer
Great Wall International Congress of Cardiology (GW-ICC), Beijing, China - meeting abstracts, 2012-13.

Service at Previous Institutions

Member, MS Board of Examiners (Biochemistry), Tiruvalluvar University, India, 2003-2007
Member, BS Board of Examiners (Biochemistry), University of Madras, India, 1997-2005
Member, MS Board of Examiners (Biochemistry), Periyar University, India, 2006
Member, Career Guidance Counseling Center, Islamiah College, Vaniyambadi, 2005-2007

Media/ Public Service

University Distinguished Teaching Award featured in the *University of Utah News*, Feb 2024. https://health.utah.edu/news/2024/02/anandh-babu-pon-velayutham-phd-receives-universitys-distinguished-teaching-award

Interview featured in *American Heart Association News*: 'It's the flavor of the season, but be wary of peppermint platitudes' By Michael Merschel, American Heart Association News, Dec 2022. https://www.heart.org/en/news/2022/12/14/its-the-flavor-of-the-season-but-be-wary-of-peppermint-platitudes

Research on berries/interview featured in University of Utah Health Care Blog (*Health Feed Blog*): "Research suggests eating blueberries, strawberries can lower heart disease risk", Aug 2022. https://healthcare.utah.edu/healthfeed/2022/08/research-suggests-eating-blueberries-strawberries-can-lower-heart-disease-risk

VPCAT success story featured in the *University of Utah News Room* (Cultivating Scientific Success), Aug 2019. https://uofuhealth.utah.edu/newsroom/news/2019/08/vpcat

Research on berries featured in the Department Newsletter (Dept. of Nutrition and Integrative Physiology, University of Utah), 2019.
https://myemail.constantcontact.com/NUIP-Department-Newsletter.html?soid=1126949685739&aid=L90OSeEmpyk

Comment on health benefits of green tea featured in University of Utah Health Care Blog (*HealthFeed*): Brew for Your Heart: Tea Help Lower Blood Pressure, Nov 3, 2014.
https://healthcare.utah.edu/healthfeed/2014/11/brew-your-heart-tea-helps-lower-blood-pressure

Comment on Trans-fat featured in University of Utah Health Care Blog (*HealthFeed – Expert Health News & Information*): You're Probably Still Eating Trans-fat, Sep 8, 2014.
https://healthcare.utah.edu/healthfeed/2014/09/youre-probably-still-eating-trans-fat

Interview for *Shape* Magazine: 'Why Drinking Green Tea Can Really Do for you' by Jessica Cassity, Interview featured in *Shape Magazine* website, Apr 14, 2014.

Conrad Foundation 2014, Spirit of Innovation Awards Judge. As a semi-final judge reviewed 4 projects (Health and Nutrition category), Feb 7, 2014.

American Heart Association – Heart Walk Team Kick Off: Presentation on the 'green tea in the prevention of cardiovascular disease'. New River Valley Heart Walk Team Kick-Off, 26 Jul 2011.

American Heart Association – Heart Walk: Presentation on the 'role of dietary flavonoids in the prevention of vascular disease'. Roanoke Heart Walk CEO Lunch, 15 Mar 2011.

Interview for *Life Extension Magazine*: New Research on the Health Benefits of Green tea, featured in the issue - Apr 2008.