

Published Manuscripts of Abdul Jaleel, Ph.D

1. Kumar AA, Anusree VR, Satheesh G, Vijayakumar G, Chandran M, Simon L, Lakshmi S, Pillai MR, **Jaleel A**. Hyperhomocysteinemia-related Serum Metabolome Alterations Not Normalized by Short-Term Folic Acid Treatment. *Metabolomics* (2021) 17:47
<https://doi.org/10.1007/s11306-021-01798-z>
2. Jabeena CA, Govindaraju G, Rawat M, Gopi S, Sethumadhavan DV, **Jaleel A**, Sasankan D, Karmodiya K, Rajavelu A. Dynamic association of the H3K64 trimethylation mark with genes encoding exported proteins in *Plasmodium falciparum*. *Journal of Biological Chemistry*. 2021 Apr 8;100614. doi:10.1016/j.jbc.2021.100614
3. Tamhane VA, Sant SS, Jadhav AR, War AR, Sharma HC, **Jaleel A**, and Kashikar AS. Label-free quantitative proteomics of *Sorghum bicolor* reveals the proteins strengthening plant defense against insect pest *Chilo partellus*. *Proteome Science* 19: 2021; 6
doi.org/10.1186/s12953-021-00173-z
4. Riyas A, Kumar AA, Chandran M, **Jaleel A**, Biju Kumar A. The venom proteome of three common scyphozoan jellyfishes (*Chrysaora calipareia*, *Cyanea nozakii* and *Lychnorhiza malayensis*) (Cnidaria: Scyphozoa) from the coastal waters of India. *Toxicon* 195: 2021; 93–103
5. Anandan V, Santhosh Kumar TR, **Jaleel A**, Thulaseedharan T, Mullasari A, Pillai MR, Kartha CC, Ramachandran S. Cyclophilin A induces macrophage apoptosis and enhances atherosclerotic lesions in high-fat diet-fed hyperglycemic rabbits. *FASEB BioAdvances*. 2021;00:1–18 (doi.org/10.1096/fba.2020-00135)
6. Chandel S, Manikandan A, Mehta N, Nathan AA, Tiwari RA, Mohapatra SB, Chandran M, **Jaleel A**, Manoj N, Dixit M. The protein tyrosine phosphatase PTP-PEST mediates hypoxia-induced endothelial autophagy and angiogenesis via AMPK activation. *Journal of Cell Science* 2021;134: jcs250274 doi: 10.1242/jcs.250274. IF 4.573
7. Surendran A, Edel A, Chandran M, Bogaert P, Hassan-Tash P, Kumar AA, Hiebert B, Solati Z, Sandhawalia S, Raabe M, Kass M, Shah A, Jassal DS, **Jaleel A**, Ravandi A. Metabolomic Signature of Human Aortic Valve Stenosis. *JACC : Basic to Translational Science* 2020;5(12):1163-1177. doi:10.1016/j.jacbts.2020.10.001
8. Kumar AA, Satheesh G, Vijayakumar G, Chandran M, Prabhu PR, Simon L, Kutty VR, Kartha CC & **Jaleel A**. Plasma Leptin Level Mirrors Metabolome Alterations in Young Adults. *Metabolomics* 2020; 16(8):87. doi: 10.1007/s11306-020-01708-9
9. Kalavani V, & **Jaleel A**. Apolipoprotein(a), an Enigmatic Anti-angiogenic Glycoprotein in Human Plasma: A Curse or Cure? *Pharmacological Research*. August 2020; Volume 158
<https://doi.org/10.1016/j.phrs.2020.104858>
10. Chandraprabha VR, Sreedharan H, **Jaleel A**, Chandran M, Nair RH. L-Ascorbic acid and α -Tocopherol synergistically triggers apoptosis inducing antileukemic effects of arsenic trioxide via oxidative stress in human acute promyelocytic leukemia cells. *Frontiers in Oncology, section Molecular and Cellular Oncology* 2020; 10:65 doi: 10.3389/fonc.2020.00065
11. Kumar AA, Satheesh G, Vijayakumar G, Chandran M, Prabhu PR, Simon L, Kutty VR, Kartha CC & **Jaleel A**. Postprandial Metabolism is Impaired in Overweight Normoglycemic Young Adults without Family History of Diabetes. *Scientific Reports* volume 10, Article number: 353 (2020) DOI <https://doi.org/10.1038/s41598-019-57257-2>
12. Gopika Satheesh, Surya Ramachandran, **Abdul Jaleel**. Metabolomics-Based Prospective Studies and Prediction of Type 2 Diabetes Mellitus Risks. *Metabolic Syndrome and Related Disorders*. 2019 Oct 21. doi: 10.1089/met.2019.0047.

13. Kumar V, Kumar AA, Joseph V, Dan VM, **Jaleel A**, Kumar TRS, Kartha CC. Untargeted metabolomics reveals alterations in metabolites of lipid metabolism and immune pathways in the serum of rats after long-term oral administration of Amalaki rasayana. *Molecular and Cellular Biochemistry*. 2019 Oct 8. doi: 10.1007/s11010-019-03637-1.
14. Kumar V, Kumar AA, Sanawar R, **Jaleel A**, Santhosh Kumar TR, Kartha CC. Chronic Pressure Overload Results in Deficiency of Mitochondrial Membrane Transporter ABCB7 Which Contributes to Iron Overload, Mitochondrial Dysfunction, Metabolic Shift and Worsens Cardiac Function. *Scientific Reports*. 2019 Sep 11;9(1):13170. doi: 10.1038/s41598-019-49666-0.
15. Krishna MS, Revathy VM, **Jaleel A**. Adipocytes utilize sucrose as an energy source-Effect of different carbohydrates on adipocyte differentiation. *Journal of Cellular Physiology*. 2019 Jun 25. doi: 10.1002/jcp.29003.
16. Vijayakumar G, Manghat S, Vijayakumar R, Simon L, Scaria LM, Vijayakumar A, Sreehari GK, Kutty VR, Arun R, **Jaleel A**. Incidence of type 2 diabetes mellitus and prediabetes in Kerala, India: results from a 10-year prospective cohort. *BMC Public Health*. 2019;19:140 (<https://doi.org/10.1186/s12889-019-6445-6>).
17. Muhamed J, Anilkumar T, Rajan A, Surendran A and **Jaleel A**. Identification of potentially immunogenic proteins in porcine cholecyst extracellular matrix *Biomedical Physics and Engineering Express* 5 (2019) 025003 <https://doi.org/10.1088/2057-1976/aaf4e6>
18. **Jaleel A**, Aneesh Kumar A, Ajith Kumar GS, Surendran A, Kartha CC. Label-free quantitative Proteomics Analysis Reveals Distinct Molecular characteristics in Endocardial Endothelium. *Molecular and Cellular Biochemistry* 2018 Jun 22. doi: 10.1007/s11010-018-3387-8
19. Sharan AA, Nikam AN, **Jaleel A**, Tamhane VA, Rao SP. Method for Label-Free Quantitative Proteomics for Sorghum bicolor L. Moench. *Tropical Plant Biology* 2018 (<https://doi.org/10.1007/s12042-018-9202-6>)
20. Azeez JM, Vini R, Remadevi V, Surendran A, **Jaleel A**, Santhosh Kumar TR, Sreeja S. VDAC1 and SERCA3 Mediate Progesterone-Triggered Ca²⁺ Signaling in Breast Cancer Cells *Journal of Proteome Research*. 2018 Jan 5;17(1):698-709 (doi:10.1021/acs.jproteome.7b00754)
21. Mahesh S. Krishna A. Aneesh Kumar, **K A. Abdul Jaleel** Time-dependent alterations in mRNA, protein and microRNA during in vitro adipogenesis. **Molecular and Cellular Biochemistry** 2018: DOI 10.1007/s11010-018-3307-y
22. Vijayakumar G, Sreehari GK, Vijayakumar A and **Jaleel A**. Distinct Predictors and Comorbidities in Early Onset Type 2 Diabetes Mellitus Among Asian Indians. *Metabolic Syndrome and Related Disorders* 2017;15(9):458-64
23. Sengodan S, Rajan A, Hemalatha S, Nadhan R, **Jaleel A**, Srinivas P. Proteomic profiling of β -hCG induced spheres in BRCA1 defective triple negative breast cancer cells. *J Proteome Res* 2017 (DOI: 10.1021/acs.jproteome.7b00562)
24. Abraham R, Singh S, Nair SR, Hulyalkar NV, Surendran A, **Jaleel A**, Srikanth J, Sreekumar E. Nucleophosmin (NPM1)/B23 in the Proteome of Human Astrocytic Cells Restricts Chikungunya Virus Replication. *J Proteome Res* 2017 DOI: 10.1021/acs.jproteome.7b00513
25. Kumar V, Aneesh KA, Kshemada K, Ajith KGS, Binil RSS, Deora N, Sanjay G, **Jaleel A**, Muraleedharan TS, Anandan EM, Mony RS, Valiathan MS, Santhosh KTR, Kartha CC. Amalaki rasayana, a traditional Indian drug enhances cardiac mitochondrial and contractile functions and improves cardiac function in rats with hypertrophy. *Scientific Reports*. 2017;7(1):8588
26. Kannan M, V. Aathmanathan S, Saravanakumar M, **Jaleel A**, Romanelli D, Tettamanti G, Krishnan M Proteomic analysis of the silkworm midgut during larva-pupa transition. *Invertebrate Survival Journal* 2016; 13: 191-204

27. Mahadevan C, Krishnan A, Saraswathy GG, Surendran A, **Jaleel A**, Sakuntala M. Transcriptome- assisted label-free quantitative proteomics analysis reveals novel insights into Piper nigrum – Phytophthora capsici phytopathosystem. *Frontiers in Plant Science* 2016;7:785
28. Saritha VN, George J K, **Jaleel A**, Surendran A, Saravanakumar M, Kalavathy MC, Somanathan T, Rema P, Sujathan K. Analysis of differentially expressed proteins in the exfoliated cells of normal and squamous cell carcinoma of the uterine cervix to define candidate markers for cervical cancer. *International Journal of Biochemistry and Biotechnology* 2016; 5(1):626-36
29. Muhamed J, Rajan A, Surendran A, **Jaleel A**, Anilkumar TV. Comparative profiling of extractable proteins in extracellular matrices of porcine cholecyst and jejunum intended for preparation of tissue engineering scaffolds. *J Biomed Mater Res B Appl Biomater.* 2015, doi: 10.1002/jbm.b.33567.
30. Gopinath V, Raghunandan A, Gomez RL, Jose L, Surendran A, Ramachandran R, Pushparajan AR, Mundayoor S, **Jaleel A** and Kumar RA. Profiling the proteome of Mycobacterium tuberculosis during dormancy and reactivation. *Molecular & Cellular Proteomics.* 2015;14(8):2160-76
31. Mahadevan C, **Jaleel A**, Deb L, Thomas G, Sakuntala M. Development of an Efficient Virus Induced Gene Silencing Strategy in the Non-Model Wild Ginger-Zingiber zerumbet and Investigation of Associated Proteome Changes. *PLoS One.* 2015;10(4):e0124518
32. Abraham R, Mudaliar P, **Jaleel A**, Srikanth J, Sreekumar E. High throughput proteomic analysis and a comparative review identify the nuclear chaperone, Nucleophosmin among the common set of proteins modulated in Chikungunya virus infection. *J Proteomics.* 2015;120:126-41
33. Dharmaprakash A, Mutt E, **Jaleel A**, Ramanathan S and Thomas S. Proteome profile of a pandemic Vibrio parahaemolyticus SC192 strain in the planktonic and biofilm condition. *Biofouling* 2014;30(6):729-39
34. Ammu Mathew , Ganapati Natarajan , Lauri Lehtovaara , Hannu Häkkinen, Ravva Mahesh Kumar, Venkatesan Subramanian, **Abdul Jaleel**, Thalappil Pradeep. Supramolecular Functionalization and Concomitant Enhancement in Properties of Au₂₅ Clusters *ACS Nano* 2014;8(1):139-52
35. Piotr Zabielski, G. Charles Ford, X. Mai Persson, **Abdul Jaleel**, Jerry D. Dewey and K. Sreekumaran Nair. Comparison of different mass spectrometry techniques in the measurement of L-[ring-¹³C₆] phenylalanine incorporation into mixed muscle proteins. *Journal of Mass Spectrometry* 48(2):269-75, 2013
36. **Abdul Jaleel**, Gregory C. Henderson, Benjamin J. Madden, Katherine A. Klaus, Dawn M. Morse, Srinivas Gopala, and K. Sreekumaran Nair. Identification of De Novo Synthesized and Relatively Older Proteins Accelerated Oxidative Damage to De Novo Synthesized Apolipoprotein A-1 in Type 1 Diabetes. *Diabetes* 59:2366–2374, 2010
37. **Abdul Jaleel**, Klaus K, Morse D, Karakelides H, Irving BA, K. Nair KS. Differential Effects of Insulin Deprivation and Systemic Insulin Treatment on Plasma Protein Synthesis in Type 1 Diabetic People. *Am J Physiol Endocrinol Metab* 297: E889–E897, 2009
38. **Abdul Jaleel**, Marion Jourdan, , Helen Karakelides, G. Charles Ford Barbara B. Kahn, K Sreekumaran Nair. Impact of type 1 diabetes and insulin treatment on plasma levels and fractional synthesis rate of retinol-binding protein 4 *J Clin Endocrinol Metab.* 2009 Dec;94(12):5125-30
39. **Abdul Jaleel** Short KR, Asmann YW, Klaus KA, Morse DM, Ford GC, Nair KS In vivo measurement of synthesis rate of individual skeletal muscle mitochondrial proteins. *Am J Physiol Endocrinol Metab* 295(5):E1255-68, 2008

40. **Abdul Jaleel**, Barbara A. L. Owen, Michelle K. Manske, Jerry A. Katzmann, Robert A. Kyle, Roshini S. Abraham. Bence Jones Cryoglobulinuria: Characterization of a Urinary Kappa Light Chain Cryoglobulin. *Clinical Chemistry* 52(7):1435-1436, 2006
41. **Abdul Jaleel**, Vandana Nehra, Xuan-Mai T Persson, Yves Boirie, Maureen Bigelow, K Sreekumaran Nair. In vivo measurement of synthesis rate of multiple plasma proteins in humans *Am J Physiol Endocrinol Metab* 291(1):E190-7, 2006
42. **Abdul Jaleel**, Panagiotis Halvatsiotis, Brian Williamson, Peter Juhasz, Stephen Martin and K.Sreekumaran Nair Identification of amadori modified plasma proteins in type 2 diabetes and the effect of short-term intensive insulin treatment. *Diabetes Care* 28:645-652,2005
43. **Abdul Jaleel**, K.Sreekumaran Nair: Identification of multiple proteins whose synthetic rates are enhanced by amino acids in rat hepatocytes. *Am J Physiol Endocrinol Metab* 286:E950-E957, 2004.
44. Nair K.S., **Jaleel A**, Asmann YW, Short KR, Raghavakaimal S: Proteomic research: potential opportunities for clinical and physiological investigators. *Am J Physiol Endocrinol: Metab* 286:E683-E874, 2004.
45. Goswami R, Kochupillai N, Crock PA, **Jaleel A**, Gupta N. Pituitary autoimmunity in patients with Sheehan's syndrome. *J Clin Endocrinol Metab* 2002 Sep;87(9):4137-41
46. R Goswami, **A Jaleel**, and N Kochupillai. Insulin antibody response to bovine insulin therapy: functional significance among insulin requiring young diabetics in India. *Diabetes Research and Clinical Practice* 2000; 49 (1) 7-15
47. R Goswami, N Jayasuryan, **A Jaleel**, N Tandon and N Kochupillai. Insulin autoantibodies before and after Carbimazole therapy in Asian Indian patients with Grave's disease. *Diabetes Research and Clinical Practice* 1998; 40 (3) 201-206