

## Research publications in the last three years

### List of publications 2020

1. Krishna L, Sampson U, Annamala PT, Unni KM, Binukumar B, George A, Sreedharan R. Genomic Instability in Exfoliated Buccal Cells among Cement Warehouse Workers. *The International Journal of Occupational and Environmental Medicine*. 2020 Jan;11(1):33.
2. Rafi Mohammed, Varghese P R, Kuttichira.P. COVID 19 Pandemic- Affidavit by academic personnel on wellbeing and social responsibility from a Medical College in Central Kerala. *Journal of the Social Sciences*; 48(3): July 2020, 427-430.
3. Puthur Donata, Prasad Krishna, Varghese P R and Shadevan C D: Study on effect of ayurvedic treatment to stabilize creatinine level and control progression of Chronic Kidney Disease. *International Ayurvedic Medical Journal*; 4(4): April- May 2020, 2298-2302.
4. Kuttichira P, M Unni K, Varghese PR. Sustained Support for a Dissertation Will Facilitate Postgraduate Research Publication: An Experience From South India. *Journal of Medical Education.*;19(1).
5. Saji K.G and Varghese P.R. A preliminary study on pulmonary function in workers exposed to dry cement. *International Journal of Research and Analytical Reviews* July 2020, 7(3), 960-963.
6. Rafi, A. M., Varghese, P. R., & Kuttichira, P. (2020). The Pedagogical Shift During COVID 19 Pandemic: Online Medical Education, Barriers and Perceptions in Central Kerala. *Journal of Medical Education and Curricular Development*. 2020 Aug; <https://doi.org/10.1177/2382120520951795>
7. Varghese P D, Leelamma A George, Lekha K.S, Anjali K Mathew, Varghese P R. Finger Ridge Patterns In Psoriasis Patients. *Indian Journal Of Applied Research* 2020; 10 (11): 1-2
8. Al-Yozbaki M, Acha-Sagredo A, George A, Liloglou T, Wilson CM. Balancing neurotrophin pathway and sortilin function: Its role in human disease. *Biochimica et Biophysica Acta (BBA)-Reviews on Cancer*. 2020 Sep 18:188429.
9. Harini Rajagopal, Nithya T, Hemlin Thomas, Varghese P R, Aparna Namboodirippad. Rotavirus: Preventive Vaccines and a Rare Side Effect. *International Journal of Innovative Science and Research Technology*. 2020 Sep.
10. Kuruvilla K, Kuttichira P, Varghese PR, Vinu EV, Gopi IK. Paradigm shift in health-care seeking behavior: A report from central Kerala, India, during COVID-19 pandemic. *CHRISMED J Health Res* 2020;7:271-5.
11. Rafi AM, Varghese PR, Kuttichira P. Concerns and confidences expressed by teaching staff about the shift of medical education to online mode in South India during the COVID 19 pandemic. *Journal of Ideas in Health*. 2020 Dec 24;3(Special2):272-5.
12. Nimisha Soloman, P R Varghese and Praveenlal Kuttichira (2020); Health Needs of Migrant Workers in Kerala during COVID-19 Pandemic and Associated Medical Observations. *IAR J Med Sci*, 1(7); 328-331.
13. Hancy Varghese P, Mridula Vellore. An overview of trends in Communication: teaching, learning and research. *International Journal of Research and Analytical Reviews* 2020; 7(4): 958-960
14. Wilkin PJ, Al-Yozbaki M, George A, Gupta GK, Wilson CM. The Undiscovered Potential of Essential Oils for Treating SARS-CoV-2 (COVID-19). *Current Pharmaceutical Design*. 2020 Nov 1;26(41):5261-77.
15. Sinju C, Manju S R, Sreevidya C.G., Vellore Mridula. Effect of *Dasapushpa Kera* in the management of *Vicharchika* (Eczema). *International Ayurvedic Medical Journal*; 4(3):February-March 2020, 2209-2213.
16. Maina J, Santhakumar R, Manoj VC, Vellore M. Screening for hearing impairment in high-risk neonates in a tertiary care centre in central Kerala. *J Evid Based Med Healthc* 2020; 7(49), 2959-63.

### List of publication 2021

17. Maria BC, Maria JP, Thomas R, Varghese PR, Kuttichira P. Demographic profile of alcohol use disorder patient who received care from a de-addiction centre in central Kerala. *Int J Community Med Public Health* 2021;8:243-7.

18. Chithra Valsan, Ronnie Thomas, Joshi Paul Chirayath, Varghese P R , Praveenlal Kuttichira. COVID-19 Essentials: Preparing Health Care Professionals before the Pandemic Spread in Kerala. *Indian Journal of Public Health Research & Development*, Jan-March 2021, 12(1): 47-51.
19. Krishnamoorthy S, Ramakrishnan S, Colaco LB, Dias A, Gopi IK, Gowda GA, et al. Comparing a deep learning model's diagnostic performance to that of radiologists to detect Covid -19 features on chest radiographs. *Indian J Radiol Imaging* 2021;31:S53-60.
20. Lofi P, Gopi I K, Varghese P R, Kuttichira P. COVID-19 pandemic: Missed initial and follow up appointments at an academic medical institution in south India . *EPRA International Journal of Multidisciplinary Research (IJMR)*. April 2021, 7(4), 270-275.
21. Liji MJ, Varghese PR, Innah SJ, Kuttichira P. Alcohol state markers- facility and utility for clinical management of alcohol use disorders: study from a tertiary care centre in South India. *Int J Res Med Sci* 2021;9:3105-9.
22. Praveenlal K, Varghese PR, Lofi PEL, Prasad AB. The elections and campaign styles influence the spread of COVID-19 pandemic: lessons learned from Kerala, India. *Int J Community Med Public Health* 2021;8:5441-5.
23. Ganesh E M, Varghese P R, Vasudevan D M, Anoop Kumar A N, Kuttichira P. Vaccine-Induced Mutation in SARS-Cov-2, a Matter of Concern. *Himalayan Journal of Community Medicine and Public Health* 2021; 2(6): 20-21.
24. Rai S, Badarinath AR, George A, Sitaraman S, Bronson SC, Anandt S, Babu KT, Moses A, Saraswathy R, Hande MP. Association of telomere length with diabetes mellitus and idiopathic dilated cardiomyopathy in a South Indian population: a pilot study. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*. 2021 Dec 31:503439.
25. Chandran R, Dileep KV. Exploring the binding mode of PQ912 against secretory glutaminyl cyclase through systematic exploitation of conformational ensembles. *Chemical Biology & Drug Design*. 2021 Nov;98(5):850-6.
26. Joy M Liji, PR Varghese, Susheela Jacob Innah, Praveenlal Kuttichira. Biomarker Signatures to Monitor Alcohol Consumption and Induced Organ Damage. *Journal of Clinical and Diagnostic Research*. 2021 Feb, Vol-15(2): LE01-LE05
27. Ajit A, Vishnu AG, Varkey P. Incorporation of grape seed extract towards wound care product development. *3 Biotech*. 2021 Jun;11(6):1-0.
28. Maria Babu, Sherly Joseph, Praveenlal Kuttichira. Role of psychotherapy in alcohol use disorders-a review. *International Journal of Medical and Health Research*. 7(6), 2021, 34-39.
29. Woodman C, Vundu G, George A, Wilson CM. Applications and strategies in nanodiagnosis and nanotherapy in lung cancer. In *Seminars in cancer biology* 2021 Feb 1 (Vol. 69, pp. 349-364). Academic Press.
30. Renu K, Chakraborty R, Haritha M, Rajeshwari K, Famurewa AC, Madhyastha H, Balachandar V, George A, Abilash VG. Molecular mechanism of heavy metals (Lead, Chromium, Arsenic, Mercury, Nickel and Cadmium) induced hepatotoxicity—A review. *Chemosphere*. 2021 Jan 30:129735.
31. Mukherjee AG, Wanjari UR, Chakraborty R, Renu K, Vellingiri B, George A, CR SR, Gopalakrishnan AV. A review on modern and smart technologies for efficient waste disposal and management. *Journal of Environmental Management*. 2021 Nov 1;297:113347.
32. Renu K, Panda A, Vellingiri B, George A, Valsala Gopalakrishnan A. Arsenic: an emerging role in adipose tissue dysfunction and muscle toxicity. *Toxin Reviews*. 2021 Oct 20:1-0.
33. James V, Vellore M. A rare case of hypertrophic lichen planus caused by ingestion of ink. *Int J Res Med Sci* 2021;9:1216-8.
34. John M\*, Maria E, Das S. Identification of Novel Serum Proteins Associated with Myelination and Cholesterol Transport in Neuromyelitis Optica Spectrum Disorders by Mass Spectrometry. *Indian Journal of Clinical Biochemistry*. 2021 Nov 12:1-0.DOI: 10.1007/s12291-021-01004-w
35. John M\*, Priyanka S, George JB, Maria E, Unni G. Oxidative stress parameters in atherosclerotic cardiovascular disease high and low risk score groups as indicators of acute myocardial infarction. *Int J Medical Sciences and Technology*. 2021, 10(1):1-7

## List of publication 2022

36. Raj TA, Gopinath P, Raj JG, Narayanan G, Nair SG, Philip DS, Raveendran S, Geetha P, Sreedharan H. Acute myeloid leukemia patients with variant or unusual translocations involving chromosomes 8 and 21—A comprehensive cytogenetic profiling of three cases with review of literature (2022). *Journal of Cancer Research and Therapeutics*. 18(3), pp.697-703.(IF-1.3)
37. K.V. Dileep, K. Ihara, C. Mishima-Tsumagari, M. Kukimoto-Niino, M. Yonemochi, K. Hanada, M. Shirouzu, K.Y.J Zhang. Crystal structure of human acetylcholinesterase in complex with tacrine: Implications for drug discovery. *Int. J. Biol. Macromol.* 210 (2022) 172-181.
38. P. Gupta, I.P. Kadamberi, S. Mittal, S.W. Tsaih, J. George, S. Kumar, D.K. Vijayan, A. Geethadevi, D. Parashar, P. Topchyan, L. McAlarnen, B.F. Volkman, W. Cui, K.Y.J. Zhang, D. Di Vizio, P.C. Raghavan, S. Pradeep. Tumor Derived Extracellular Vesicles Drive T Cell Exhaustion in Tumor Microenvironment through Sphingosine Mediated Signaling and Impacting Immunotherapy Outcomes in Ovarian Cancer. *Adv Sci (Weinh)*. 9 (2022) 2104452 (1-15).
39. E Maria, S Das, AM Varghese, H Thangheswaran et.al. Differentially Expressed Erythrocyte Proteins in Neuromyelitis Optica Spectrum Disorders and Their Functional Annotation Using DAVID Bioinformatics Tool. *Neurochemical journal*. 2022; 16 (4): 465-471.
40. Kumar SS, Krishnakumar K, John M. Flavonoids from the butanol extract of *Carica papaya* L. cultivar 'Red Lady' leaf using UPLC-ESI-Q-ToF-MS/MS analysis and evaluation of the antioxidant activities of its fractions. *Food Chemistry Advances*. 2022 Oct 1;1:100126.
41. Dileep KV, Ihara K, Mishima-Tsumagari C, Kukimoto-Niino M, Yonemochi M, Hanada K, Shirouzu M, Zhang KY. Crystal structure of human acetylcholinesterase in complex with tacrine: Implications for drug discovery. *International Journal of Biological Macromolecules*. 2022 May 6.
42. Raj TA, Gopinath P, Raj JG, Narayanan G, Nair SG, Philip DS, Raveendran S, Geetha P, Sreedharan H. Acute myeloid leukemia patients with variant or unusual translocations involving chromosomes 8 and 21—A comprehensive cytogenetic profiling of three cases with review of literature.
43. Kannampuzha S, Ravichandran M, Mukherjee AG, Wanjari UR, Renu K, Vellingiri B, Iyer M, Dey A, George A, Gopalakrishnan AV. The mechanism of action of non-coding RNAs in placental disorders. *Biomedicine & Pharmacotherapy*. 2022 Dec 1;156:113964.
44. Mukherjee AG, Wanjari UR, Gopalakrishnan AV, Bradu P, Sukumar A, Patil M, Renu K, Dey A, Vellingiri B, George A, Ganesan R. Implications of cancer stem cells in diabetes and pancreatic cancer. *Life Sciences*. 2022 Nov 19;121211.
45. Padinharayil H, Alappat RR, Joy LM, Anilkumar KV, Wilson CM, George A, Valsala Gopalakrishnan A, Madhyastha H, Ramesh T, Sathiyamoorthi E, Lee J. Advances in the Lung Cancer Immunotherapy Approaches. *Vaccines*. 2022 Nov 19;10(11):1963.
46. Renu K, Mukherjee AG, Wanjari UR, Vinayagam S, Veeraraghavan VP, Vellingiri B, George A, Lagoa R, Sattu K, Dey A, Gopalakrishnan AV. Misuse of Cardiac Lipid upon Exposure to Toxic Trace Elements—A Focused Review. *Molecules*. 2022 Jan;27(17):5657.
47. Renu, K.; Vinayagam, S.; Veeraraghavan, V.P.; Mukherjee, A.G.; Wanjari, U.R.; Prabakaran, D.S.; Ganesan, R.; Dey, A.; Vellingiri, B.; Kandasamy, S.; Ramanathan, G.; Doss C, G.P.; George, A.; Gopalakrishnan, A.V. Molecular Crosstalk between the Immunological Mechanism of the Tumor Microenvironment and Epithelial–Mesenchymal Transition in Oral Cancer. *Vaccines* 2022, 10, 1490. <https://doi.org/10.3390/vaccines10091490>
48. Padinharayil H, Varghese J, John M C, Rajanikant G K, Wilson C M, Al-Yozbaki M, Renu K, Dewanjee S, Sanyal R, Dey A, Mukherjee A G, Wanjari U R, Gopalakrishnan A V, George A. Non-small cell lung carcinoma (NSCLC): Implications on molecular pathology and advances in early diagnostics and therapeutics. *Genes and Disease*
49. Ramgir SS, Renu K, Vellingiri B, George A, Tirupapuliur D, Thiagarajan P, Valsala Gopalakrishnanan A. Phytomedicinal therapeutics for male infertility: critical insights and scientific updates. *Journal of natural medicines*. 2022 Apr 4:1-28.
50. Rai S, Badarinath AR, George A, Sitaraman S, Bronson SC, Anandt S, Babu KT, Moses A, Saraswathy R, Hande MP. Association of telomere length with diabetes mellitus and idiopathic dilated cardiomyopathy in a South Indian population: A pilot study. *Mutation Research/Genetic Toxicology and Environmental Mutagenesis*. 2022 Feb 1;874:503439.

51. Sreekumar VN, Madhulaxmi M, Ankathil R, Arumugham P. Dysregulated Noncoding Micrnas As Potential Biomarkers In Oral Potentially Malignant Disorders And Oral Squamous Cell Carcinomas-An Updated Review. *European Journal of Molecular & Clinical Medicine*.;9(08):2022.
52. Aiswarya N, Remya C, Remashree AB, Sadasivan C, Dileep KV. Binding of rosmarinic acid curcumin and capsaicin with PLA2: A comparative study. *Biochemical and Biophysical Research Communications*. 2022 Oct 20;626:187-91.
53. "Genetic Syndromes. A Comprehensive Reference Guide" (Author(s): Kannampuzha, S., Ravichandran, M., George, A., Vellingiri, B., Valsala Gopalakrishnan, A.
54. Vanditha M, Das S, John M. Lipid Metabolism and Associated Molecular Signaling Events in Autoimmune Disease. *Fatty Acids-Recent Advances*.

### List of publication 2023

55. Ragitha TS, Sunish KS, Gilvaz S, Daniel S, Varghese PR, Raj S, Francis J, Kumar RS. Mutation analysis of WNT4 gene in SRY negative 46, XX DSD patients with mullerian agenesis and/or gonadal dysgenesis-an Indian study. *Gene*. 2023 Feb 2:147236.
56. F. Saritha, N. Aiswarya, R. Aswath Kumar & K.V. Dileep (2023): Structural analysis and ensemble docking revealed the binding modes of selected progesterone receptor modulators, *Journal of Biomolecular Structure and Dynamics*, DOI: 10.1080/07391102.2023.2166999
57. Sree Himaa , Chandran Remyaa , C. Sadasivanb and K.V. Dileepa. Carboxylic acid derivatives suppress the growth of *Aspergillus flavus* through the inhibition of fungal alpha-amylase. *Journal of biomolecular structure and dynamics*.
58. Kumar SS, Krishnakumar K, John M. Antihemolytic activity of flavonoids from butanolic extract of *Carica papaya* L. cultivar 'Red Lady' leaf. *Food and Humanity*. 2023 May 12.
59. Liggri PG, Pérez-Garrido A, Tsitsanou KE, Dileep KV, Michaelakis A, Papachristos DP, Pérez-Sánchez H, Zographos SE. 2D finger-printing and molecular docking studies identified potent mosquito repellents targeting odorant binding protein 1. *Insect Biochemistry and Molecular Biology*. 2023 May 20:103961.
60. Remya C, Dileep KV, Variyar EJ, Omkumar RV, Sadasivan C. Lobeline: A multifunctional alkaloid modulates cholinergic and glutamatergic activities. *IUBMB life*.
61. Mukherjee, A.G.; Renu, K.; Gopalakrishnan, A.V.; Veeraraghavan, V.P.; Vinayagam, S.; Paz-Montelongo, S.; Dey, A.; Vellingiri, B.; George, A.; Madhyastha, H.; et al. Heavy Metal and Metalloid Contamination in Food and Emerging Technologies for Its Detection. *Sustainability* 2023, 15, 1195. <https://doi.org/10.3390/su15021195>.
62. Padinharayil, H.; Rai, V.; George, A. Mitochondrial Metabolism in Pancreatic Ductal Adenocarcinoma: From Mechanism-Based Perspectives to Therapy. *Cancers* 2023, 15, 1070. <https://doi.org/10.3390/cancers15041070>
63. Kannampuzha, S.; Gopalakrishnan, A.V.; Padinharayil, H.; Alappat, R.R.; Anilkumar, K.V.; George, A.; Dey, A.; Vellingiri, B.; Madhyastha, H.; Ganesan, R.; et al. Onco-Pathogen Mediated Cancer Progression and Associated Signaling Pathways in Cancer Development. *Pathogens* 2023, 12, 770. <https://doi.org/10.3390/pathogens12060770>
64. Kannampuzha, S., Ravichandran, M., George, A., Vellingiri, B., Valsala Gopalakrishnan, A. (2023). Kanzaki Disease. In: Rezaei, N. (eds) *Genetic Syndromes*. Springer, Cham. [https://doi.org/10.1007/978-3-319-66816-1\\_1762-1](https://doi.org/10.1007/978-3-319-66816-1_1762-1)