

## Biodata

**Dr. Mathew John**

**Designation:** Scientist C

**Lab:** Biochemistry and Phytochemistry Research Division

**Department:** Jubilee Centre for Medical Research,

**Institute:** Jubilee Mission Medical College & Research Institute, Thrissur

**Date of Birth:** 27-03-1981, Sex: Male, Category: General

**Email:** mathewbio@gmail.com, mathewjohn@jmmc.ac.in Phone: 8281629087

### 5. Educational Qualification:

Degree	Institution	Field	Year
B.Sc	Government College Kariavattom, University of Kerala	Biochemistry	2002
M.Sc	JIPMER, Pondicherry University,	Medical Biochemistry	2006
Ph.D (CSIR fellowship)	NIMHANS, Bangalore,	Neurochemistry Title: Role of Insulin in Alzheimer's disease	2013

### Work experience

Duration & Details	Institution	Particulars of work done
July 2016 till date Scientist C	JCMR, Jubilee Mission medical college & Research Institute, Thrissur	Immunology & phytochemistry Proteomics of chronic inflammatory diseases, Phytochemical extraction of plant compounds focusing on <i>Carica papaya</i> L. and study on <i>in-vitro</i> and <i>in-vivo</i> calcium signaling mechanism and platelet proteomics
DBT-Research associate (DBT-RA)	Moleculare Neurobiology lab, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram	Voltage gated and NMDA receptor mediated calcium signaling in <i>in vivo</i> model
Guided 45 PG students	Jubilee Centre for Medical Research, Jubilee Mission Medical College & Research Institute, Thrissur	Proteomics of Diabetes mellitus and secondary complications, Proteomics of chronic inflammatory diseases and Neuroimmunology diseases focusing on encephalitis and neuromyelitis optica Spectrum disorders
Guided MBBS student for ICMR-STS fellowship months) 2018	Jubilee Centre for Medical Research, Jubilee Mission Medical College & Research Institute, Thrissur	Erythrocyte proteomics of cardiovascular diseases

Co Guide for MD dissertation	Jubilee centre for medical research, Jubilee Mission medical college & Research Institute, Thrissur	Cystatin C as early marker of renal dysfunction in critically ill children
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**Approved guide for KUHS in paramedical and allied health sciences:  
 UO No. 83/2019/Dean (R)Dtd 30/10/2019.**

Number of Ph.D scholars guiding: 6

**Project as Principal investigator**

1. Funding agency Indian Council of Medical Research (Budget: 36 lakhs)  
**Title:** Lipid protein multi-omics integrative approaches for differential diagnosis of autoimmune neuromyelitis optica disease spectrum – a comparative cross sectional study

**Co-investigator of projects**

1. Non-invasive treatment of uterine fibroids through rationally designed Selective progesterone receptor modulators – DHR funded (PI: Dr Dileep Vijayan)
2. Elucidating the role of spices as preventive and therapeutic agents for Alzheimer’s disease – Spices board funded (PI: Dr Dileep Vijayan)
3. Elucidating the association of serum protein levels and genetic polymorphisms of FABP4 with obesity and breast cancer risk in post-menopausal obese women  
 Funding agency: ICMR (PI:Prof Dr. Ravindran Ankathil, Co-PI: Dr Sureshkumar R, JCMR)

**Reviewer in Wiley and Springer Journals**

Number of citations: 195  
 Cumulative impact factor: 65  
 Number of poster presentations as presenter and corresponding author: 25

**List of Publications**

1. Das S, Adiody S, Varghese J, Vanditha M, Maria E, **John M**. Exploring the novel duo of Reticulocalbin, and Sideroflexin as future biomarker candidates for Exacerbated Chronic Obstructive Pulmonary Disease. *Clinical Proteomics*. 2024 Dec;21(1):10.
2. Das, S., **John, M.**, Maria, E. *et al*. A journey to unravel the pathophysiology of stable and exacerbated Chronic Obstructive Pulmonary Disease through erythrocyte proteomics: a combined mass spectrometry/bioinformatics approach. *J Proteins Proteom* **14**, 277–286 (2023). <https://doi.org/10.1007/s42485-023-00120-w>
3. Kumar SS, Krishnakumar K, Maria E, **John M** (Corresponding author). . Exploring the cytoprotective potential of flavonoid fraction from *Carica papaya* L. Cultivar ‘Red Lady’Leaf: Insights into Nrf2 activation via *in-vitro* and *in-silico* approaches. *South African Journal of Botany*. 2024 Sep 1;172:373-87.
4. 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 Dec 1;1:159-64.
5. Babu A, **John M**, Liji MJ, Maria E, Bhaskar SJ, Binukumar BK, Sajith AM, Reddy EK, Dileep KV, Sunil K. Sub-pocket-focused designing of tacrine derivatives as potential acetylcholinesterase inhibitors. *Computers in Biology and Medicine*. 2023 Feb 11:106666. <https://doi.org/10.1016/j.combiomed.2023.106666>
6. Kumar SS, Krishnakumar K, **John M (Corresponding author)**. 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.

7. Leena C.O, Mahendra Kumar Varma, **Mathew John**, Harisuthan T, E.Maria,- Importance of Inflammatory Marker Ratio and Lipid Profile Ratio in Acute Ischemic Stroke, *International Journal of Brain Sciences* <https://journals.stmjournals.com/ijbs>, Volume 1, Issue 1, 2024, DOI (Journal): 10.37591/IJBS.
8. Leena C.O, Mahendra Kumar Varma, **Mathew John**, Harisuthan T- The Relationship Between HbA1c and Inflammatory Markers in Acute Ischemic Stroke with and without Diabetes Mellitus, *Research & Reviews: A Journal of Medical Science and Technology* DOI (Journal): 10.37591/RRJoMST [medicaljournals.stmjournals.in/index.php/RRJoMST/index](https://medicaljournals.stmjournals.in/index.php/RRJoMST/index), Volume 13, Issue 1, 2024
9. Maria E , Das S , Varghese An , Harisuthan T , and **John M (corresponding author)** Differentially Expressed Erythrocyte Proteins in Neuromyelitis Optica Spectrum Disorders and Their Functional Annotation Using DAVID Bioinformatics Tool. *Neurochem J* (2022) 16(4):465-71.
10. Maria E, Yohannan M, Harisuthan T, **John M (corresponding author)** Comparative Proteomics of Lipid Transport Proteins and Assessment of Oxidative Stress Parameters in Acute Ischemic Stroke and Healthy Control. *Int J of Biochem & Biophys.* (2022),10(1):1-7
11. **John M (corresponding author)**, 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
12. **John M (corresponding author)**, 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
13. Siddiqua MSH, **John M**, Manoj V.C, Santhakumar R. Cystatin C- an early marker indicative of renal dysfunction in critically ill children: a prospective cohort study. *International J of Contemporary pediatrics.* *International J of Contemporary pediatrics.* 2019; 6(5): 1981-84
14. Kumar M, **John M\***, Madhavan M, James J, Omkumar RV. Alteration in the phosphorylation status of NMDA receptor GluN2B subunit by activation of both NMDA receptor and L-type voltage gated calcium channel. *Neuroscience letters,* 2019; 709 (14): 134343 \* Equal contribution as first author
15. **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
16. Siddiqua MSH, **John M**, Manoj V.C, Santhakumar R. Cystatin C- an early marker indicative of renal dysfunction in critically ill children: a prospective cohort study. *International J of Contemporary pediatrics.* *International J of Contemporary pediatrics.* 2019; 6(5): 1981-84
17. Kumar M, Paul S, **John M**, Mayadevi M, Omkumar RV. Prevention of excitotoxicity associated changes in GluN2B and TRKB levels by NMDA receptor in vivo. *J Neurochemistry* 2017;142, pp242-243 (Conference paper)
18. **John M**, Maria E, Sabu MM, Asok K, Sinju R. Presence of albumin in erythrocyte lysate of autoimmune hemolytic anemia patients observed in electrophoretogram. *J Biomed Pharm Res.* 2019;8(3):39-44
19. **John M**, Varghese A, Maria E, Sinju R. Electrophoretic analysis of erythrocyte proteins in neonatal jaundice. *IOSR-JBB,* 2019;5(1):10-14
20. **John M**, Jahan KS, Sinju R, Maria E. Effect of Pro-oxidants in Erythrocyte Membrane Protein in electrophoretogram. *Journal of Biochemistry International,* 2018;6:17-22
21. **John M**, Mohandas N, Sinju R. Electrophoretic Protein Analysis of Red blood cell Membrane Proteins upon Ionic and Non-ionic detergent lysis. *International Journal of Biosciences and Technology,* 2018;11(6):52-9.
22. **John M**, Sinju R, George R, Annamala P T, Bhaskaran R. Antioxidant status in blood of patients with elevated C-reactive protein in acute myocardial infarction. *Annals of Int medical and dental research,* 4(3):48-50
23. **John M** and Subramanian S. Intranasal insulin modulates hippocampal amyloid beta levels by regulating Glycogen Synthase Kinase GSK 3alpha in diabetic rats. *International Journal of Biosciences and Technology,* 2012; 5: 49-53
24. Subramanian S and **John M.** Intranasal administration of insulin lowers amyloid beta levels in rat model of diabetes.

Indian Journal of Experimental Biology, 2012; 50: 41-44

25. Subramanian S Bandopadhyay D, Mishra PK, Mathew M and **John M.** Design and development of non-fibrillar amyloid beta as a potential Alzheimer vaccine, Biochemical and Biophysics Research Communications, 2010; 394: 393-397

26. Sridhar M.G., Setia S, **John M**, Bhat V. Oxidative stress varies with the mode of delivery in intrauterine growth retardation: Association with Apgar score. Clinical Biochemistry, 2007; 40: 688-691.

27. Setia S, Sridhar M.G, M.G Bhat V, Chaturvedula L, Vinayagamoorti R and **John M**, Insulin sensitivity and insulin secretion at birth in intrauterine growth retarded infants, Pathology, 2006; 38(3): 236-238

### **Chapter in book**

Vanditha M, Das S, **John M.** Lipid Metabolism and Associated Molecular Signaling Events in Autoimmune Disease. Fatty Acids-Recent Advances. DOI: 10.5772/intechopen.105746

### **MEMBERSHIP**

Life term member of Society of Biological Chemists (India)  
Member in Research gate

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