

# Meghana Adoor, MD, PhD

## Work Experience

Aug 2019      **School of Health Sciences**  
                  **University of Northern British Columbia, Prince George, Canada**  
Till Present    ***Senior Lab Instructor, I***

- Designing and implementing an engaging course syllabus for Human Physiology and Anatomy Lab
- Teaching human physiological responses using computer-based data acquisition systems
- Grading assignments, quizzes and relaying information to back to them with expected accurate responses.
- Performing the dissection of organs to understand the detailed Anatomical structures.
- Conducting the Lab exams on a regular interval and graded the students
- Effectively used the digital resources for teaching Human Physiology and Anatomy

June 2016  
to July 2019      **Stay at Home Mom**

Nov 2015      **NIMHANS, Bangalore, India**  
to May 2016    ***Research Associate***

- Performed cardiac autonomic regulatory tests such as Blood Pressure Variability, Heart Rate Variability, Baro Reflex Sensitivity, Tilt table test, QSART and Pulmonary Function Tests on human subjects, analyzing and preparing reports
- Standardizing physiological parameters variability and Baroreflex sensitivity
- Conducted Neuro anatomy and Neurophysiology lectures and practical training in neurophysiological techniques for the trainees and freshmen

Mar 2014      **St. John's Research Institute, Bangalore, India**  
to Oct 2015    (Two positions held across two studies)  
                  ***Post-Doctoral Fellow (Research Scientist)***

Wellcome Trust DBT Muscle study – Clinical Trial  
Study title: Human skeletal muscle quality and insulin sensitivity: A study to understand the impact of lifestyle intervention in pre-diabetics

- Conducting research activities in support of research project confirming consistency with established methodological approaches.
- Adhering to project timelines for completion of documentation like Standard Operating Procedure (SOP), log sheets and CRF.

- Designing overall research management, including the monitoring and evaluation of project inputs along with the Principal Investigator.
- Supervising day-to-day operations of the study team.
- Assisting in identification of study sites and recruitment of subjects both within and outside the institution.

***Post-Doctoral Fellow***

Study title Neuro-Electrophysiological Measures to Study Cognition in Neonates

- Conducting EEG recordings in Neonates and children
- Recording ERP in infants and children
- Analyzing data using MATLAB

April 2013  
to Oct 2013

**KUTPM-GEF International Medical School, MSU, Bangalore, India**  
***Lecturer***

- Conducting class lectures and laboratory sessions in physiology for med students

June 2012  
to Oct 2012

**NIMHANS, Bangalore, India**  
***Senior Research Fellow***

Study Title: Effect of Yoga & Hydratic Application on Migraine - A Clinical, Electrophysiological & Immunological Study

- Screening patients, undertaking comprehensive history, physical and mental status examination
- Conducting cardiac autonomic regulatory tests
- Data management and statistical analyses
- Publication & project reporting

**Education**

2013: **PhD**, Neurophysiology, National Institute of Mental Health And Neurosciences (NIMHANS); Bangalore, India

2007: **M.D.** Rajiv Gandhi University of Health Sciences; Bangalore, India

**Certifications**

ICH- Good Clinical Practice

EEG Workshop

Electrophysiology of Auditory Event Related Potential

Care, Breeding and Management of Laboratory Animals

## **Instruments Handled**

- iWorx system - Data Acquisition Systems
- PowerLab 16 channel (ADInstruments) – Data Acquisition Systems
- Finometer® PRO – Finapres Medical Systems
- Q-Sweat: Quantitative Sweat Measurement System – WR Medical Systems
- EEG: 10-20 system - Galileo NT (EBN)
- ENOBIO EEG – Neuroelectric
- Zephyr BioHarness ECG
- Micro quark spirometry- COSMED

## **Publications**

1. **Meghana A**, Sriranjini SJ, Sujana MU, Boris W Kramer, TR Raju, Sathyaprabha TN. Influence of age and gender on blood pressure variability and baroreflex sensitivity in a healthy population in the Indian sub-continent. Journal of Basic and Clinical Physiology and Pharmacology- Accepted 2018 Jan.
2. **Meghana A**, Sriranjini SJ, Sathyaprabha T, Sanjib S, Prathyusha V, Satishchandra P. Autonomic function in reflex and non-reflex epilepsy--an exploratory study. Acta Neurol Scand. 2016 Jun;133(6):459-65. doi: 10.1111/ane.12486. Epub 2015 Sep 15. PubMed PMID: 26369268.
3. **Meghana A**, Sathyaprabha TN, Sinha S, Satishchandra P. Cardiac autonomic dysfunction in drug naïve hot water epilepsy. Seizure. 2012 Nov;21(9):706-10. doi: 10.1016/j.seizure.2012.07.014. Epub 2012 Aug 13. PubMed PMID: 22898675.
4. **Meghana A**, Sinha S, Sathyaprabha TN, Subbakrishna DK, Satishchandra P. Hot water epilepsy clinical profile and treatment--a prospective study. Epilepsy Res. 2012 Dec;102(3):160-6. doi: 10.1016/j.epilepsyres.2012.05.011. Epub 2012 Jun 22. PubMed PMID: 22727658.
5. Abhishekh HA, Nisarga P, Kisan R, **Meghana A**, Chandran S, Trichur Raju, Sathyaprabha TN. Influence of age and gender on autonomic regulation of heart. J Clin Monit Comput. 2013 Jun;27(3):259-64. doi: 10.1007/s10877-012-9424-3. Epub 2013 Jan 8. PubMed PMID: 23297094.
6. Dhargave P, Nalini A, Abhishekh HA, **Meghana A**, Nagarathna R, Raju TR, Sathyaprabha TN. Assessment of cardiac autonomic function in patients with Duchenne muscular dystrophy using short term heart rate variability measures. Eur J Paediatr Neurol. 2014 May;18(3):317-20. doi: 10.1016/j.ejpn.2013.12.009. Epub 2014 Jan 8. PubMed PMID: 24445161.
7. Kisan R, Sujana M, **Adoor Meghana**, Rao R, Nalini A, Kutty BM, Chindanda Murthy B, Raju T, Sathyaprabha T. Effect of Yoga on migraine: A comprehensive study using clinical profile and cardiac autonomic functions. Int J Yoga. 2014 Jul;7(2):126-32. doi: 10.4103/0973-6131.133891. PubMed PMID: 25035622; PubMed Central PMCID: PMC4097897.

8. Dhargave Pradnya , Atchayaram Nalini , **Meghana A**, Raghuram Nagarathna, Trichur R.  
Respiratory Dysfunctions in Children with Duchenne Muscular Dystrophy. International Journal of Physiotherapy and Research, Int J Physiother Res 2016, Vol 4(1):1365-69. ISSN 2321-1822. DOI: <http://dx.doi.org/10.16965/ijpr.2016.101>.
9. Talakad N. Sathyaprabha, Laura A. M. Koot, Ben H. M. Hermans, **Meghana A**, Sanjib Sinha, Boris W. Kramer, Trichur R. Raju, et al. Effects of Chronic Carbamazepine Treatment on the ECG in Patients with Focal Seizures. Clin Drug Investig (2018) 38:845- 851 DOI 10.1007/s40261-018-0677-6. PubMed PMID: 30047104.
10. Dhargave Pradnya, Atchayaram Nalini, Raghuram Nagarathna, Trichur R Raju, Ragupathy Sindhikumar, **Adoor Meghana**, Talakad N Sathyaprabha. Effect of yoga as an add-on therapy in the modulation of heart rate variability in children with duchenne muscular dystrophy. Int J Yoga. 2019 Jan-Apr;12(1):55-61. doi: 10.4103/ijoy.IJOY\_12\_18. PubMed PMID: 30692784

#### Chapter Author

1. **Quantitative Sudomotor Axon Reflex Test (QSART), Conventional Cardiovascular Autonomic Function testing and Analysis of Blood pressure – Blood Pressure variability and Baroreflex Sensitivity-** published in the Proceedings of the DST sponsored workshops – Current Physiological Techniques: From Basic to Applied Aspects: Emerging Trends in Neurophysiology: From Cell to Systems; Multiparametric Evaluation of Autonomic Functions; Techniques in Body Composition Measurements in Health and Disease; Evaluation of Aerospace Stresses using Simulators held at NIMHANS, Institute of Aerospace Medicine and St. John’s National Academy of Health Sciences, Bangalore, India from 26th – 27th November 2013, published by Department of Neurophysiology, NIMHANS, Bangalore

#### CONFERENCE, WORKSHOPS Attended, PRESENTATIONS and AWARDS

- Normative Data of Spontaneous Baroreflex Sensitivity in a Healthy South Indian Population – A pilot study- PSI-SAAP 2010, Bangalore, India
- A comparative study of Heart Rate Variability in Hot Water Epilepsy. 29th International Epilepsy Congress, August 2011, Rome, Italy - *Young Scientist Award (ICMR travel fellowship)*
- Profile and treatment Strategies in patients with Hot Water epilepsy – A prospective study - ECON 2012, Cochin, India
- Autonomic function in reflex and non-reflex epilepsy – An exploratory study, TS Srinivasan-Knowledge Conclave on "Autonomic Dysfunction" February 2015, Bangalore, India – **Best Poster Award**
- Effect of Carbamazepine Monotherapy on Electrocardiogram in Patient with Complex Partial Seizure, ECON 2016, Pondicherry, India - **Best Poster Award**
- Electrophysiology of Auditory Event related Potential workshop, 2014, Kolar, India
- DST Sponsored Pre-conference workshop on “Current Physiological Techniques – From Basic to Applied Aspects: Comprehensive Multiparametric Evaluation of Autonomic Functions” APPICON 2013 November 2013, NIMHANS, Bangalore, - Resource Person
- Workshop on Psychopharmacology relevant to Yoga Research 19th March 2016, Bangalore, India – *Resource Person*