

Faculty Profile

Dr.KarthikBabu S, PT, PhD is an administrator, researcher, educator and clinician. Karthik studied *Master of Physiotherapy in Neurosciences* and *PhD in "Trunk Rehabilitation Post-Stroke"* from *Manipal Academy of Higher Education (MAHE)*, formerly Manipal University (MU), India. He is the Principal and Professor of *KMCH College of Physiotherapy, Kovai Medical Center Research and Educational Trust*, Coimbatore, India. He is one of the Co-Principal Investigators of *Biotechnology Industry Research Assistant Council (BIRAC)* joint funded project (50 lakhs). As on February 2022, he published *50 research papers* in indexed journals including 35 articles (*500 citations*) from PubMed, Scopus and/or Web of Science with an H-index of 10. He underwent upper limb stroke rehabilitation summer school in *University of Leuven – KU Leuven, Belgium* in 2018. He taught skill training on 'core business after stroke' in *Saxion University, Netherlands* in 2018. His major research interests are trunk training, physical activity, mobility training and hand functioning for people with stroke and Parkinson's disease. He established a play and art based motor skill training in children with developmental challenges. He underwent international certifications in *Constrained Therapy, vestibular rehabilitation, Proprioceptive Neuromuscular Facilitation, aquatic therapy (Bad Razag Ring Method and Halliwick), wheelchair service provision, Cranio-Sacral Therapy, Neuro-Developmental Therapy, Prechtl's General Movements, pediatric Bobath concepts and Movement Analysis and Educational Strategies Therapy*. His clinical expertise involves habilitation of children with developmental disabilities, and rehabilitation of people with stroke, head injury, spinal cord injury, Parkinson diseases and related neuromuscular conditions. He was born on 27th November 1978. Personal email karthikbabu78@gmail.com

Educational/ Academic Qualifications

- ✚ Philosophy of Doctorate (PhD in Trunk Rehab Post Stroke). Manipal University (MU), Manipal. November 2010 - January 2017.
- ✚ Master of Physiotherapy in Neurosciences. MU, Manipal. August 2003 - July 2006.
- ✚ Bachelor of Physiotherapy. Sri Ramakrishna College of Physiotherapy, Coimbatore. Dr. M.G.R Medical University, TN. August 1996 – August 2000.

Current Academic and Administrative Position

- ✚ Principal and Professor, KMCH College of Physiotherapy, Kovai Medical Center Research & Educational Trust, Coimbatore, India. Since February 2022.

Previous Academic Positions

- ✚ Associate Professor, Manipal College of Health Professions (MCHP), MAHE, Department of Physiotherapy, Bangalore. February 2017 – January 2022.
- ✚ Assistant Professor - Selection Grade, Department of Physiotherapy, SOAHS, MU, Bangalore. August 2012 – January 2017.
- ✚ Assistant Professor, Department of Physiotherapy, Kasturba Medical College (KMC), MU, Mangalore. August 2008 – August 2012.
- ✚ Lecturer, Physiotherapy, KMC, Mangalore. November 2006 - July 2008.
- ✚ Tutor, Manipal College of Allied Health Sciences, July 2005 - July 2006.
- ✚ Faculty, Kakatiya College of Physiotherapy, AP, August 2000- August 2003.

Previous Administrative positions

- ✚ Academic coordinator for the allied health postgraduate courses offered at MCHP, Bangalore
- ✚ NAAC coordinator/ NAAC committee member, MCHP
- ✚ Alumni relations coordinator, MCHP, Bangalore, MAHE
- ✚ PhD supervisor (MAHE Senate approval number – 201815)
- ✚ I & II year, research coordinator for MPT program, MCHP, Bangalore

Academic experience: 18 years 6 months (BPT: 2000–2003; MPT: Since 2006)

Clinical experience: 20 years (2000 – 2021)

Specialization in major field: Neurorehabilitation

Specialization in fine fields: Motor control; Motor learning; Motor development; Brain plasticity and neural repair; Trunk control; Arm recovery; Postural control; Mobility; Physical activity; Cognitive and behavioral neuroscience; Art and integrative therapy and technology-based rehabilitation.

Website links and citation sources of research database

S. Karthikbabu | Semantic Scholar

<https://www.semanticscholar.org/author/S.-Karthikbabu/4203178>

ORCID <http://orcid.org/0000-0002-7513-0606>

ResearchGate https://www.researchgate.net/profile/Suruliraj_KarthikBabu

Web of Science ResearcherID – ABE-2873-2020

<https://publons.com/researcher/2953529/suruliraj-karthikbabu/>

Scopus ID – 44961060900

<https://www.scopus.com/inward/authorDetails.uri?authorID=44961060900&partnerID=5ESL7QZV&md5=d2e5dba1c932139588b96d3ab1306de4>

Loop profile – 1384391

http://loop.frontiersin.org/people/1384391/overview?referrer=orcid_profile

LinkedIn <https://in.linkedin.com/in/suruliraj-karthikbabu-12555367>

Funded Research Projects

- ✚ BIRAC-PACE funded project titled “Enabling Functional Mobility through Advanced Gait Analysis and Virtual Reality”. Collaborators: IIT, Chennai, MSRIT, Bangalore and APD, Karnataka.
- ✚ Dr. TMA Pai sponsored project titled “Effect of Enhanced Bilateral Hand Activity Training on Upper Limb Functional Recovery in People with Stroke - A Randomized Controlled Trial”. (PhD Supervisor for Mr. Alexander).

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- ✚ Alexander D, Karthikbabu S, Solomon JM. Bilateral Hand Activity Training Manual – Government of India – Diary No. 29242/2021-CO/L
- ✚ Pavithra DP, Rao PT, Karthikbabu S. Kinesthetic and Visual Imagery Questionnaire (KVIQ) – Translated & Cross-culturally adapted Kannada version for assessing Imagery Abilities in Children (Diary No. created)

Honorary member – Academic bodies, research and development

- ✚ Member, Board of studies, Physiotherapy: Sikkim Manipal University.
- ✚ Advisory member, Institutional research committee: Chitkara University, Punjab & Association of People with Disability, Karnataka
- ✚ Subject expert: Institute of Cognitive Neuroscience
- ✚ Member/ subject expert, DAC: Health sciences, SRM University; Kasturba Medical College, Mangalore; Anatomy, Melaka Manipal Medical College.
- ✚ Coordinator, Centre for Comprehensive Stroke Rehabilitation and Research, MCHP, Bangalore, MAHE

Member in Professional Societies

- ✚ International Parkinson & Movement Disorders Society Member ID. 99141
- ✚ International Stroke Recovery and Rehabilitation Alliance (ISSRA)
- ✚ World Federation of Neuro Rehabilitation (WFNR)
- ✚ Indian Federation of Neuro Rehabilitation (IFNR) LM No: 167
- ✚ Indian Academy of Cerebral Palsy (IACP). Regd. No. LM26/PT/2014
- ✚ International Spinal Cord Society (ISCoS). Regd. No. 1608
- ✚ Indian Association of Physiotherapy (IAP). Regd. No. L-32031

- ✚ Special Interest Group –Rehabilitation Engineering and Assistive Technology Society of North America (RESNA)
- ✚ International Society of Wheelchair Professionals (ISWP)

International Certifications, Organization

Certification in Constrained Induced Therapy for Health Professionals - The University of Alabama at Birmingham

- ✚ UAB, USA, May 31 – June 2, 2019.

Vestibular Rehabilitation Certification: Duke University

- ✚ Duke University, USA, October 27-31, 2018.

Upper Limb Stroke Rehabilitation Summer School -University of Leuven

- ✚ KU Leuven, Belgium, September 19-21, 2018.

Aquatic Therapy - Association of International Aquatic Therapy Faculty (IAFA)

- ✚ Clinical Ai Chi and Aqua T Relax., March 31 & April 1-2, 2018.
- ✚ Bad Razag Ring Method, March 27-30, 2018.
- ✚ Water Specific Therapy – Halliwick, March 22-26, 2018.

Proprioceptive Neuromuscular Facilitation (PNF): International Proprioceptive Neuromuscular Facilitation Association (IPNFA)

- ✚ Advanced Neurological PNF level 4b: December 13-17, 2019.
- ✚ Advanced PNF 3b/4a: June 19-23, 2018.
- ✚ PNF course level 3: August 26-30, 2017
- ✚ PNF Basic course level 1 & 2: August 18-27, 2016.

Management of Spinal Cord Injuries

- ✚ Physiotherapy for SCI: The International Spinal Cord Society, June, 2016.
- ✚ Basic course on Wheelchair Service Provision: International Society of Wheelchair Professionals, May, 2016.

Movement Disorders Certification, International Parkinson and Movement Disorder Society

- ✚ Virtual Aspen course/ MDS online regional course - A Comprehensive Review of Movement Disorders for Clinical Practitioner, July 25-29, 2021
- ✚ MDS-AOS 4th Allied Health Course: Rehabilitation for Parkinson's disease and Other Movement Disorders, July 29, 2021

Neuro Developmental Therapy (NDT) – NDTA, International Bobath Instructors Training Association

- ✚ Advanced Upper Extremity Course: Neuro Developmental Therapy Association (NDTA), USA, January 21-25, 2016.
- ✚ Assessment and treatment of adult neurological conditions-Bobath concepts:IBITA, February 20 – March 9, 2012.

Pediatric neuro developmental certification

- ✚ Movement Analysis and Educational Strategies (MAES) Therapy, UK, January 16 to February 6, 2017.
- ✚ Advanced Handling & Problem Solving Course: NDTA, USA, Oct 6-8, 2015.
- ✚ Certificate course in specialized treatment of cerebral palsy based on the Bobath concept: Asia Pacific Bobath Instructors Association (APBIA), Pasig, Philippines, April 21 - June 13, 2014.
- ✚ Introductory course –Bobathpediatric approach: APBIA, Jan20-24, 2014.

Prechtl's Method on the Qualitative Assessment of General Movements:GM Trust, Austria.

- ✚ Basic GM training course, March 18-21, 2016.
- ✚ Advanced GM training course, March 24-27, 2016.

CranioSacral Therapy (CST),Upledger Institute International, USA

- ✚ CST I & II: November 16-19; 22-25, 2015.

Diploma in Fascial Manipulation

- ✚ Level I:Stecco L, Italy, July 3-9, 2015.

Biostatistics and Research Methodology

- ✚ Evidence Synthesis. Public Health Evidence South Asia (PHESA), Prasanna School of Public Health, MAHE. July 20 – August 1, 2020.
- ✚ Certificate course in Biostatistics, Epidemiology and Research Methodology: Dept. of Statistics, MAHE, July-December, 2008.

Topic Editor – Textbook

- ✚ Proprioceptive Neuromuscular Facilitation in Neurorehabilitation. In: Physiotherapy for Adult Neurological Conditions.*Springer Nature Publisher.*

Editor – FrontiersJournal(s)

- ✚ Topics Editor of *Frontiers in Rehabilitation Sciences* – “Upper limb rehabilitation post-stroke”
- ✚ The topic “Upper limb rehabilitation post-stroke” is cross-linking with “*Frontiers in Neuroscience*”.

Reviewer for PubMed/SCOPUS/Web of Science indexed journals

- ✚ Journal of Aging Research
- ✚ Frontiers in Neurology
- ✚ Journal of International Medical Research
- ✚ BMC Sports Science, Medicine and Rehabilitation
- ✚ Journal of Neurosciences in Rural Practice
- ✚ Journal of Bodywork & Movement Therapies
- ✚ Journal of Medical Engineering and Technology
- ✚ Somatosensory Motor Rehabilitation
- ✚ Journal of Hand Therapy
- ✚ Brazilian Journal of Physical Therapy
- ✚ Topics in Stroke Rehabilitation
- ✚ Clinical Rehabilitation
- ✚ BMC Open
- ✚ International Journal of Therapy and Rehabilitation
- ✚ Neuroscience
- ✚ Disability and Rehabilitation
- ✚ Neural Regeneration Research Journal
- ✚ Tohoku Journal of Experimental Medicine
- ✚ Journal of Diagnostic and Clinical Research
- ✚ British Journal of Medicine and Medical Sciences.
- ✚ International Journal of Physical Therapy
- ✚ Physiotherapy and Occupational Therapy Journal
- ✚ Physiotherapy Research International
- ✚ Journal of Scientific society
- ✚ Scientific Research Publications

Research Publications (2010 – till date)

50. Tunga A, Prem V, Karthikbabu S*. A randomized clinical trial of yoga versus physiotherapy on neuropsychiatric symptoms and quality of life in Parkinson's disease *Annals of Movement Disorders* 2022 (Accept).
49. Suresh V, Prem V, Karthikbabu S*. Proprioceptive neuromuscular facilitation in chronic mechanical spinal pain and disabilities. A systematic review and meta-analysis. *Physiotherapy Practice & Research* 2022 (Accept)
48. Nawge S, Karthikbabu S*. Does bimanual task practice influence the hand function and grip strength in children with spastic diplegia? *Journal of Pediatric Rehabilitation Medicine* 2022 (Accept)
47. Khushboo, Karthikbabu S, Rao PT. Review of Bruininks-Oseretsky Test of Motor Proficiency in children with attention deficit hyperactivity disorders. *Clinical and Experimental Pediatrics* 2022 (Accept)
46. Anand B, Karthikbabu S*. Does the pulmonary function test reflect true lung function in school children with cerebral palsy? A concordance and discordance. *Iranian Journal of Child Neurology* 2022 (In Press)
45. Akhila RM, Karthikbabu S*, Mohan D, Prem V, Roy AK. Task-related trunk training on balance, trunk control, pulmonary function and quality of life in Parkinson's disease: A randomized controlled trial. *International Journal of Therapy & Rehabilitation* 2022 (In Press).
44. MohamoodA,...KarthikbabuS, ... Solomon JM. Development of strategies to support home-based exercise adherence after stroke in Low- and Middle-income Countries: A Delphi Consensus. *BMJ Open* 2022
43. Anand B, Karthikbabu S*. Effects of additional inspiratory muscle training on mobility capacity and respiratory strength for school-children and adolescents with cerebral palsy: A randomised controlled trial. *Brazilian Journal of Physical Therapy* 2021
42. Da Cunha CP, Rao PT, Karthikbabu S*. Motor and non-motor factors contributing to sit-to-stand transfer of people with Parkinson's disease: A systematic review. *Egyptian Journal of Neurology, Psychiatry and Neurosurgery* 2021
41. Karthikbabu S*, Sharma S, Balaji GK, Sahana A. Responses to the comments on "Effects of Cognitive Versus Mind-Motor Training on Cognition and Functional Skills in the Community-Dwelling Older adults". *Indian Journal of Psychological Medicine*. 2021
40. Kolibylu M, Mohan D, Karthikbabu S*. Effects of traditional Indian dance on motor skills and balance in children with Down syndrome. *Journal of Motor Behavior* 2021.

39. Karthikbabu S*, Ganesan S, Ellajosyula R, Solomon JM, Rakshith K, Chakrapani M. Core stability exercises yield multiple benefits for patients with chronic stroke – Randomized controlled trial. *American Journal of Physical Medicine and Rehabilitation* 2021.
38. Jha KK, Karunanithi GB, Sahana A, Karthikbabu S*. Randomized trial of virtual reality gaming and physiotherapy on balance, gross motor performance and daily functions among children with bilateral spastic cerebral palsy. *Somatosensory & Motor Research* 2021.
37. Talati D, Prem V, Rao PT, Karthikbabu S. Normative value of respiratory muscle strength in healthy children aged 8-12 years. (Published preprint 2020)
36. Sharma S, Balaji GK, Sahana A, Karthikbabu S*. Effects of cognitive versus mind-motor training on cognition and function skills in the community-dwelling older adults. *Indian J Psychol Med.* 2020;42-46.
35. Karthikbabu S*, Verheyden G. Relationship between trunk control, core muscles strength and balance confidence in community-dwelling patients with chronic stroke. *Top Stroke Rehabil* 2020; 1-9.
34. Jayasree TJ, Karthikbabu S*. Gaze stability exercises incorporating physical activity on functional mobility and disability in unilateral peripheral vestibular hypofunction: a case report. *Ind J Otolology* 2020.
33. Kaur A, Balaji GK, Sahana A, Karthikbabu S*. Virtual reality game therapy versus task-specific neurodevelopmental treatment on motor recovery in stroke survivors. *Int J Ther Rehabil* 2020; 1-11.
32. Darak V, Karthikbabu S*. Lower limb motor function and hip muscle weakness in stroke survivors, and their relationship with pelvic tilt, weight-bearing asymmetry, and gait speed. A cross-sectional study. *Curr J Neurol* 2020.
31. Mehta M, Joshua AM, Karthikbabu S, Misri Z, Unnikrishnan B, Mithra P., et al. Effect of taping and abdominal muscles on pelvic alignment and forward reach distance among stroke subjects: A randomized controlled trial. *Ann Neurosci* 2020; 1-7.
30. Karthikbabu S*, Chakrapani M, Ganesan S, Ellajosyula R, Solomon JM. Efficacy of trunk regimes on balance, mobility, physical function and community reintegration in chronic stroke: A parallel-group randomized trial. *J Stroke Cerebrovasc Dis* 2018;27(4):1003-1011.
29. Dubey L, Karthikbabu S*, Mohan D. Effects of pelvic stability on movement control, hip muscles strength, walking speed and daily activities after stroke. A randomized controlled trial. *Ann Neurosci* 2018;25(2):80-89.
28. Karthikbabu S*, Chakrapani M. Hand-held dynamometer is a reliable tool to measure trunk muscle strength in chronic stroke. An observational study. *J Clin Diagn Res* 2017;11(9):YC09-YC12.

27. Dubey L, Karthikbabu S*. Trunk proprioceptive neuromuscular facilitation influences pulmonary function and respiratory muscle strength in a patient with pontine bleed. *Neurol India* 2017;65(1):183-184.
26. Karthikbabu S*, Chakrapani M, Ganesan S, Ellajosyula R. Relationship between pelvic alignment and weight-bearing asymmetry in community-dwelling chronic stroke survivors. *JNeurosci Rural Pract* 2016;7(5):37-40.
25. Karthikbabu S*, Chakrapani M, Ganesan S, Ellajosyula R. Pelvic alignment in standing, and its relationship with trunk control and motor recovery of lower limb after stroke. *NeurolClinNeurosci* 2016;1-7.
24. Reethu E, Karthikbabu S, Syed N. Effect of motor imagery of truncal exercises on trunk function and balance in early stroke: RCT. *Int JMed Health Sci* 2016;3:8.
23. Manoj, KM, Karthikbabu S*. Kinesio-taping of shoulder complex influences sensory motor recovery of upper limb in stroke. *Int J Stroke* 2016.
22. Sneha BS, Karthikbabu S, Nafeez S, Prashanth LK. Effects of trunk proprioceptive neuromuscular fascilitation on dynamic balance, mobility and quality of life in Parkinson's disease. *Parkinsonism RelatDisord* 2016;22:68-69.
21. Shah P, Karthikbabu S*, Syed N, Ratnavalli E. Effects of truncal motor imagery practice on trunk performance, functional balance, and daily activities in acute stroke. *JSciSoc* 2016;43(3):127-134.
20. Naval DS, Syed N, Karthikbabu S*. Intra-rater and inter-rater reliability of measuring pelvic tilt using the palpation meter (PALMTM) device in stroke. *Int J Med Health Sci* 2016;5(4):276-280.
19. Toshniwal A, Joshua AM, Karthikbabu S*. Modified Ashworth scale and alpha motor neuron excitability indicators of F-wave in spastic soleus muscle early after stroke. *BrJ MedMed Res* 2016;13(5):1-7.
18. KarthikBabu S*, Chaudhary S, Syed N, E Ratnavalli, M Chakrapani, Ganeshan S. Development and reliability of BalanceGrid and Walkmeter to measure limits of stability and spatial- temporal gait parameters in people post stroke. *Nig J Med Rehabil* 2015;18(2):1-15.
17. Patel B, Karthikbabu S*, Syed N. Feasibility of multisensory training and its effects on balance control in children with cerebral palsy. *Indian J Cerebral Palsy* 2015;1(2):101-107.
15. Karvannan H, Prem V, Syed N, Karthikbabu S, Saroja. Prevalence of work-related musculoskeletal pain among Indian nurses: A Field Survey. *IJCNE* 2014;15 (1):87-92.
14. Aishwarya, Vijayakumar K, Karthikbabu S, BV Suresh, ZK Misri, M Chakrapani. Effects of pneumatic abdominal binder and calf compression Vs elastic compression bandaging on orthostatic hypotension during tilt table standing

following acute stroke: A pilot randomized controlled trial. *Int J NeurolNeurosurg* 2013;5:31-38.

13. Mohan U, Karthikbabu S, Vijayakumar K, Suresh BV, Misri ZK, Chakrapani M. Effectiveness of mirror therapy on lower extremity motor recovery, balance and mobility in patients with acute stroke: A randomized sham-controlled pilot trial. *Ann Indian Acad Neurol* 2013;16:634-39.

12. Karthikbabu S*, Das B, Moodbidri D, Karnad S. Forward reach distance as a measure of dynamic stance postural control under six different sensory conditions in neurologically intact adults: Descriptive study. *POTJ* '12;5(1):27-33.

11. Prem V, Chakravarthy RD, Karvannan H, Karthikbabu S, Syed N. Normative value for the unsupported upper limb exercise test in asymptomatic individuals: A cross-sectional study. *POTJ* 2012;5(1):35-38.

10. Karvannan H, Chakravarthy RD, Maiya GA, Prem V, Karthikbabu S, Syed N. Behavior graded activity in patients with osteo-arthritis. *Indian J Rheumatol* 2012;7:141-46.

9. Shashikumar CG, Syed N, Shareif M, Karthikbabu S. Position sense acuity across shoulder rotational range of movement in healthy adults. *J Musculoskelet Res* 2012;15.

8. Karthikbabu S*, Chakrapani M, Ganeshan S, Rakshith KC, Nafeez S, Prem V. A review on assessment and treatment of trunk in stroke: a need or luxury. *Neural Regen Res* 2012;7(25):1974-1977.

7. Prem V, Karvannan H, Kumar SP, Karthikbabu S, Syed N, Sisodia et al. Study of nurses' knowledge about palliative care: A quantitative cross-sectional survey. *Ind J PalliCare* 2012;18:122-27.

6. Karthikbabu S*, Rao BK, Manikandan N, Solomon JM, Chakrapani M, Nayak A. Role of trunk rehabilitation on trunk control, balance and gait in patients with chronic stroke. *Neurosci Med* 2011;2:61-67.

5. Karthikbabu S*, Nayak A, Vijayakumar K, Misri ZK, Suresh BV, Ganesan S, Joshua AM. Comparison of physio ball and mat trunk exercises regimens on trunk control and balance in acute stroke patients: A pilot randomized controlled trial. *Clin Rehabil* 2011;25(8):709-19.

4. Nayak A, Karthikbabu S*, Vijayakumar K, Ganesh S, Chakrapani M, Prem V. Sitting postural control is prerequisite for standing and stepping after stroke: A cross-sectional study. *POTJ* 2011;4(1):25-35.

3. Prem V, Chakravarthy RD, Maiya GA, Syed N, Karthikbabu S, Karvannan H. Physiotherapy assessment and management of obesity-clinical commentary. *IJCRR* 2011;12(3):194-200.

2. Vijayakumar K, Karthikbabu S, Nayak A. Additional trunk training improves sitting balance following acute stroke: A randomized controlled trial. *Int J Cur Res Review* 2010;3(2):26-42.

1. Nayak A, Vijayakumar K, Karthikbabu S. Does training on swiss ball improve trunk performance after stroke? A single blinded quasi experimental study design. *IJPOT* 2010;6(1):172-75.

* *Corresponding author*

Conference Paper Presentation (National/International)

32. Manure S, Karthikbabu S. Benefits of circuit training on wheelchair skills in people with paraplegia. *World Physiotherapy Congress online* 2021.

31. Alexander G, Karthikbabu S. Bilateral hand arm functional training on upper limb recovery post stroke – A case series. *Virtual World Stroke Congress* 2020.

30. Prabhu SJ, Karthikbabu S, Rao P. Screening of preterm and term infants for motor behavioral disability. *Amar SevaSangam Early Intervention International Conference* 2020, Chennai.

29. Kalwankar M, Prem V, Karthikbabu S, Rao P. Normative value of 20 meter shuttle run test in healthy school going children aged 8-12 years. *Amar SevaSangam Early Intervention International Conference* 2020, Chennai.

28. Ganachari P, Karthikbabu S, Rao P. Traditional Indian games and its implications for developing locomotor skills: A review. *Amar SevaSangam Early Intervention International Conference* 2020, Chennai.

27. Talati D, Prem V, Karthikbabu S, Rao P. Maximum static respiratory pressure in healthy school going children in Bangalore, India. *Amar SevaSangam Early Intervention International Conference* 2020, Chennai.

26. Raghu A, Karthikbabu S. Effects of bimanual hand training with dynamic dorsal splint on hand function in stroke. *RCT. Upper Limb Stroke Rehabilitation Summer School* 2018, KU Leuven, Belgium.

25. Koli J, Karthikbabu S, Mohan D. Indian semi-classical Kathak and Bharatnatyam movements for balance confidence and quality of life in Parkinson's disease: Pilot RCT. *World Congress for Neuro Rehabilitation (WCNR) 2018, Mumbai.**

24. Manasa, Mohan D, Karthikbabu S. Holistic benefits of Indian semi-classical dance therapy in institutional children with Down syndrome. *WCNR 2018.**

23. Gangai, Mohan D, Karthikbabu S. Correlation between DQ5 and DIS in children with CP. *WCNR 2018.**

22. Jayasree P, Karthikbabu S. Lower extremity surface EMG activity during functional mobility in a 22 year old lady with post-partum cerebral venous thrombosis – A case report. *WCNR 2018.**

21. Darak V, Karthikbabu S, Mohan D. Association of hip muscular strength with weight bearing asymmetry, pelvic tilt and gait speed in patients post stroke.WFNR 2018.*

20. Dubey L, Karthikbabu S, Mohan D. Influences of proximal hip muscles retraining on movement control of lower extremity and walking ability in ambulatory stroke individuals. WFNR 2018.*

19. Karthikbabu S, Chakrapani M, Ganesan S, Ellajosyla R. Randomized trial of trunk training on trunk control and community participation in chronic stroke. WFNR 2018.*

(*Abstract published in Neurorehabil Neural Repair)

18. Jayasree P, Karthikbabu S. **Best paper award** for ‘Activity integrated relearning for chronic cervical dystonia and motor recovery in a young adult with subcortical bleed’ in MIPCON 2017.

17. Jayasree P, Karthikbabu S. **Best paper award** for the work titled ‘Physical exercise and physical activity profile in chronic vestibular hypofunction: A case report’ in BPN Conference 2017, Bangalore.

16. Ravi S, Mohan D, Karthikbabu S. Profile of selective voluntary motor control deficits in children with cerebral palsy with crouch gait pattern. IACP Conference 2016, Bangalore.

15. Murthy R, Mohan D, Karthikbabu S. Factors influencing participation in children with cerebral palsy: A narrative review. IACP Conference 2016, Bangalore.

14. Agrawal K, Mohan D, Karthikbabu S. Motor skills in children with profound hearing impairment aged 6 -10 years’ pattern. IACP Conference 2016, Bangalore.

13. Manoj KM, Karthikbabu S. Kinesio-taping of shoulder complex influences sensory motor recovery of upper limb in stroke. World Stroke Congress 2016, Hyderabad.

12. Darak V, Karthikbabu S, Mohan D. Association of hip muscle function with weight symmetry, pelvic tilt in patients post stroke. IFNR conference 2016, NIMHANS, Bangalore.

11. Dubey L, Karthikbabu S, Mohan D. Influence of pelvic control training on lower extremity motor function and functional mobility in patients with stroke – A case series. IFNR conference 2016, NIMHANS, Bangalore.

10. Mahesh A, Karthikbabu S, Mohan D. **Second prize** for poster titled ‘Effect of task-related spinal mobility training on postural control and pulmonary function in Parkinson’s disease’. IFNR conference 2016, NIMHANS, Bangalore.

9. Dubey L, Karthikbabu S. **First prize** for poster titled ‘Motor function and quality of life in patients with stroke: A case series’. Neuro Update 2016, Manipal University, Manipal.

8. Darak V, Karthikbabu S. Airway clearance using acapella in Guillain - Barre syndrome: A case report. National ICU Physiotherapy Conference 2015, Manipal University, Bangalore.
7. Sneha BS, Karthikbabu S, Nafeez S, Prashanth LK. Effects of trunk proprioceptive neuromuscular fascilitation on dynamic balance, mobility and quality of life in Parkinson's disease. XXI World Congress on Parkinsonism & Related Disorders, 2015, Milan, Italy. **Travel grant to Europe.**
6. Karthikbabu S, Patel B. Effects of multi-sensory training on BESTest in children with cerebral palsy. IACP CON 2014, Hyderabad.
5. Karthikbabu S, Chakrapani M, Ellajosyla R, Ganesan S. Comparison of Swiss ball and therapeutic mat exercises on trunk function in chronic stroke: RCT. ISACON 2014, Thiruvananthapuram, Kerala. **Top 5 podium presentations**
4. Karthikbabu S, Khullar S. **Best paper award** for 'Functional training effects on PEDI, balance and strength in diplegic cerebral palsy'. 3rd RECOUP International Conference on Cerebral Palsy, 2014, Bangalore.
3. Karthikbabu S, Chakrapani M, Ganesan S, Ellajosyla R. Effectiveness of trunk regimes on trunk control, balance and gait in chronic stroke: RCT. AOCPRC 2014, Bangkok, Thailand.
2. Karthikbabu S, Rao BK, Chakrapani M. Does trunk training improve trunk control, balance, and gait in chronic stroke?. Singapore Rehabilitation Conference 2013, Singapore.
1. Vijayakumar M, Aishwarya, Karthikbabu S. Effects of pneumatic abdominal binder and calf compression Vs elastic compression bandaging on orthostatic hypotension in patients with acute stroke: A RCT. WCNR '12, Melbourne, Australia.

Professional Contribution – Resource Person/ Guest Speaker

44. Neurorehab webinar on "Setting Functional Rehabilitation Goal Based on Neurological Level of Spinal Cord Injury", College of Physiotherapy, Srinivas University, Mangalore, April 30, 2021.
43. **IFNR Young Fellowship Award** - Shreya Donakar, Mentor for the project titled "Telerehabilitation using facial expressions and neuromuscular exercises on hypomimia and social communication in people with Parkinson's disease".
42. Lecture on "Circuit Training for SCI" in National webinar series in spinal cord injury rehabilitation and research. Centre for SCI rehabilitation and research. The Association of People with Disability. September 19, 2020.
41. Webinar on "Trunk after stroke". 6th E-Neuraxis 2020, September 5-6, 2020.
40. Webinar on "trunk after stroke". PT Teacher's consortium. April 21, 2020.

39. Panel discussion on 'Static or dynamic AFO in neuro conditions'. BPN bimonthly meeting, Bangalore, February 29, 2020.
38. Lecture on "Precht's General Movement Assessment of Infants" in Cerebral Palsy Symposium in St. John's National Academy of Health Sciences, Bangalore, November 8-9, 2019.
37. Lecture on 'Rehabilitation of BPPV' in PHYSIOCON-19, Sri Ramakrishna Institute of Para Medical Sciences, Coimbatore, October 12, 2019.
36. Symposium on 'Benign Paroximal Positional Vertigo' in MGM-PHYSIOCON, Aurangabad, September 21-22, 2019.
35. Vestibular rehab workshop in Chitkara University, Chandigarh, August 5, '19.
34. Lecture on 'Physiotherapy training in elderly with stroke' in 'Comprehensive management of stroke in the elderly' at CMC, Vellore, June 29, 2019.
33. Lecture on 'Task training of upper limb using dorsal splint in stroke' in 'Upper limb motor recovery strategies in stroke' at CCSRR, SOAHS, Manipal, March 15, 2019.
32. Workshop on 'An Overview of PNF Approach in Clinical Practice', SRIPMS, February 16-17, March 2-3, 2019.
31. Workshop on 'Upper limb stroke rehabilitation' in Chitkara University, Chandigarh, October 12, 2018.
30. Invited workshop on 'Core business after stroke' in Saxion University, Netherlands, September 25, 2018.
29. Lecture on 'Constrain Induced Movement Therapy' at CME on 'Neural plasticity after Stroke: From restoration to rehabilitation' in KMC, Mangalore, September 1, 2018
28. Stroke rehabilitation symposium in Manipal International Conference, December 6-9, 2017.
27. Workshop on 'Motor Relearning Program' in Chitkara University, Chandigarh, October 29, 2017.
26. Judge for paper presentations in Synapse-17 physiotherapy conference, Chandigarh, October 27-28, 2017.
25. Lecture on 'Neuro Approaches: Overview and Critique' in Chitkara University, Chandigarh, October 28, 2017.
24. Workshop on 'PNF and its Clinical Implication' in NITTE University, Mangalore, September 23-24, 2017.
23. 'Vestibular Rehabilitation' training in SOAHS, Bangalore, May 21, 2017.
22. Lecture on "Potential for change: Children with CP" at Physiotherapy, SOAHS, Bangalore, May 7-8, 2017.
21. Workshop on 'Physiotherapy management in stroke' in Kamalam Viswanathan College of Physiotherapy, Trichy, April 7-8, 2017.

20. Workshop on 'Physiotherapy management in SCI' in Chitkara University, Chandigarh, November 3-4, 2016.
19. Lecture on 'Recent Trends in NeuroRehabilitation' in Flair 16: National Level Physiotherapy Conference organized by Sri Venkateshwaraa College of Physiotherapy, Puducherry, September 29-30, 2016.
18. Lecture on 'Setting Rehab Goals in Spinal Cord Injury: Clinical Guidelines to Neurotechnology' in BPN Physiotherapy Conference, July 31, 2016.
17. Organized NeuroTech Symposium in SOAHS, Manipal University, Manipal Hospital, Bangalore, June 19, 2016.
16. Workshop on 'Clinical Rehabilitation – Post Stroke' in PSG IMS & R Hospital, Coimbatore, May 11-12, 2016.
15. Lecture on 'Clinical Strategies in Spasticity Management' in Physiogala-16, Nandha College of Physiotherapy, May 7, 2016.
14. Neuro symposium on 'Assessment and Treatment of Trunk after Stroke' in the Joint Conference of IFNR and Indian Academy of Neurology, NIMHANS, April 1-3, 2016.
13. Lecture on "Coma Stimulation" in National conference on physiotherapy management in intensive care unit at Department of Physiotherapy, SOAHS, Bangalore, December 9-10, 2015.
12. Lecture on "Stroke Management and Rehabilitation" at PSG& IMSJR Hospital, October 29, 2015.
11. Workshop on 'Sensory Integration for Developmental Disorders' at Department of Physiotherapy, SOAHS, Bangalore, September 19-20, 2015.
10. **Best Lecturer award**, Physiosummit 2015, IAP, Vellore, September 6, 2015.
9. Workshop on "Facilitation of Functional Movements in Adult Hemiplegia: Bobath/NDT Concepts" at Department of Physiotherapy, SOAHS, Manipal University, Manipal Hospital, Bangalore, May 24, 2015 and June 14, 2015.
8. Workshop on "Trunk Control Influences Balance and Mobility Post Stroke; NDT/Bobath perspective" at Srinivas College of Physiotherapy and Research Center, Mangalore, March 15, 2015.
7. Lecture on "Recent Trends in Stroke Rehabilitation" at RVS college of Physiotherapy, Coimbatore, Dec 5-6, 2014.
6. Workshop on "NDT approach in neurological conditions" at NDMVP college of Physiotherapy, Nashik, Maharashtra, March 24-26, 2014.
5. Workshop on "Vestibular Rehabilitation" in JSSCP, Mysore, 2013.
4. Lecture on "Electroneuromyography" at Department of Physiotherapy, KMC, Mangalore, Nov 29-30, 2008.

3. Lectures on Neural Plasticity & MRP in PHYSIOCON" EAST-2008, Bhubaneswar, Orissa February 8-9, 2008.
2. Judge for paper presentation in PHYSIOCON" EAST-2008 conference at Bhubaneswar, Orissa, February 9, 2008.
1. Lecture on "Trunk Impairment and Rehabilitation in Stroke" at MCOAHS, Manipal University, March 30-31, 2007.

Ongoing Professional Development

17. MDS Virtual Congress 2021, September 17-22, 2021.
16. Essentials of Medical Writing – 2020: Indian Association of Medical Journal Editors & Springer Nature. Ethics and Etcetera. October 9. Placing the Results in Perspective. September 25. Presenting the Findings. September 11. The Middle (Methods). August 28, 2020. The Beginning. August 21.
15. Webinar series– Research 2020: Publishing Ethics in Biomedicine & Life Science Research of webinar series on "All about Scientific Publishing – Trends, Nuances, Tools, Ethics etc!" Springer Nature & DeLCON, September 16. Nuances & Tools of Scientific Publishing and Publishing Ethics & Misconducts. Springer Nature & Manipal Health Sciences Department, MAHE, August 31. Structuring your manuscript to impress journal editors and selecting a journal and preparing a great submission package. Editage, June 19.
14. Appropriate paper-based technology. MAHE, Manipal, January 6-8, 2015.
13. Treatment strategies for Dyskinetic & Ataxic CP, Hyderabad, Dec 27-28, '14.
12. Gait course. BIMRA, December 14-15, 2013.
11. Advances in motor control. Mindy Levin, MAHE, January 24, 2012.
10. Pedagogic and personal effectiveness for Physiotherapy teachers. Manipal, April 11-13, 2011.
9. Constrained induced movement therapy & locomotion training. Stacy Fritz (University of South Carolina), July 13-14, 2009.
8. Physiotherapy for critically ill adult patients, Jennifer Paratz (University of Queensland, Australia), May 10-12, 2008.
7. Enhancing trunk stability for children with movement dysfunction – Based on neuro developmental approach. Timmie Wallace, NDTA, September 17-18, 2007.
6. Training on spinal cord injury: International workshop: Physiotherapy management of spinal injury. Feb 18-19, '11, March 6, '06, Lisa Harvey, International Network of SCI Physiotherapists; ISSICON '06; Wheelchair research and clinical practice featuring wheelchair skills training. March 7, '16, Rory Cooper, ISSICON '06, New Delhi.
5. Neuro-pediatric Physiotherapy assessment and training: Sneh Centre for Pediatric Rehab; Mumbai, Jan 3-10, 2005.

4. NDT course: The Spastic Society of Tamilnadu; August 23-17, 2004.
3. Neurodevelopmental Therapy: Faculty of Oakland Children Hospital, USA; MAHE, Manipal, March 17- 27, 2004,
2. Orientation course in Leprosy Physiotherapy: The Leprosy Mission, Training School; Naini, Allahabad, UttarPradesh, 9th-14th February 2004.
1. In-service Physiotherapy training for Leprosy: Schieffelin Leprosy Research and Training Centre.Karigiri, Tamil Nadu, May 31- June 5, 1999.