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BIOGRAPHY

I am a Senior Consultant Neurosurgeon at the University Malaya Medical Centre, Kuala Lumpur. I earned my medical degree (MBBS) at The University Of Malaya in 1995 and completed my 4 years of General Surgical Training and started my Neurosurgical training at University Malaya Medical Centre in 2002. I underwent subspecialty training in Functional Neurosurgery and Movement Disorders under Professor Tipu Aziz (a world authority in the field of Functional Neurosurgery and Deep Brain Stimulation) at Functional Neurosurgery group, Oxford University.

Under the guidance of Professor Tipu Aziz and Professor John Stein (a senior Neuroscientist at Oxford University and a world authority on Dyslexia), I received my DPhil (Oxon) from the University of Oxford and completed my training in Functional Neurosurgery in 2009.

My research focused mainly on the advanced Parkinson s symptoms such as akinesia and the role of Pedunculopontine Nucleus in movement disorder. I also worked out the connectivity of the pedunclopontine connectivity in humans and non-human primates and their role in movement disorder. I have numerous publications in international medical journals mainly on the role of PPN in movement disorder.

ACADEMIC QUALIFICATION

- MBBS(UM), UNIVERSITY OF MALAYA (UM)
- MSURGERY(UM), UNIVERSITY OF MALAYA (UM)
- DPhil (Oxon), University of Oxford.

PROFESSIONAL

- Malaysian society of Neurosciences., Life Member since 2004,
- Neurosurgical Association of Malaysia , Life Member since 2003,
- Malaysian Medical Association, Life Member 2018,
- The World Society for Stereotactic and Functional Neurosurgery, member

AREAS OF EXPERTISE

- Central Nervous System (Movement Disorder)
- Central Nervous System (Primate Research in Movement Disorder)
- Magnetic Resonance Imaging(Mri) (DTI and Tractography)
- Neurosurgery (Neuromodulation & Functional Neurosurgery)

RECENT SELECTED PUBLICATIONS (Publication).

Article In Academic Journals

2016

- Isobel T. French and Kalai A. Muthusamy. A REVIEW OF SLEEP AND ITS DISORDERS IN PATIENTS WITH PARKINSON'S DISEASE IN RELATION TO VARIOUS BRAIN STRUCTURES. *Front. Aging Neurosci.* | doi: 10.3389/fnagi.2016.00114 (*ISI-Indexed*)

2015

- Simul Healthc. 2015 Feb;10(1):43-8. doi: 10.1097/SIH.000000000000060. Neurosurgical endoscopic training via a realistic 3-dimensional model with pathology. Waran V1, Narayanan V, Karuppiah R, Thambynayagam HC, Muthusamy KA, Rahman ZA, Kirollos RW. (*ISI-Indexed*)

2014

- Norlisah Ramli , Farhana Fadzli , Kalai Arasu Muthusamy , Chan Kam Hong. Multiloculated hydrocephalus in an adult: Role of MRI FIESTA sequence in diagnosis and management. *Neurology Asia* 2014; 19(4) : 425- 427 (*ISI-Indexed*)

2013

- Parameswari Shunmugama, VijayakumarVengadasalamb, Muthusamy KA. 2013 Theory on improving reading for readers with abnormal eye saccades through colored filters. *Procedia - Social and Behavioral Sciences* 97 (2013) 392 396 (*ISI-Indexed*)

2012

- Muthusamy KA, Lian LH, Vairavan N, Chua KH, Waran V. 2012. Genetic polymorphisms of EGF 5'-UTR and NAT2 857G/A associated with glioma in a case control study of Malaysian patients. *Genet Mol Res.* 2012 Jun 15;11. (*ISI-Indexed*)

2009

- Ned Jenkinson, Dipanker Nandi, Kalai Muthusamy, Nicola J Ray, Ralph Gregory, John F Stein, Tipu Z Aziz. 2009. Anatomy, physiology, and pathophysiology of the pedunclopontine nucleus. *Mov Disord.* Vol 24, No 3, Pg 319-328 (*ISI/SCOPUS Indexed Publication*)

2008

- E A Pereira, K A Muthusamy, N De Pennington, C A Joint, T Z Aziz. 2008. Deep brain stimulation of the pedunclopontine nucleus in Parkinson's disease. Preliminary experience at Oxford. *Br J Neurosurg.* 22 Suppl 1 :S41-4 (*ISI/SCOPUS Indexed Publication*)
- Muthusamy KA, Azmi K, Narayanan P, Rajagopalan R, Raman NA & Waran V. 2008. Bilateral Temporal Bone Xanthoma-case report. *Journal of Clinical Neuroscience* 108(2):361-4 (*ISI/SCOPUS Indexed Publication*)

2007

- Kalai A Muthusamy, Bhooma R Aravamuthan, Morten L Kringelbach, Ned Jenkinson, Natalie L Voets, Heidi Johansen-Berg, John F Stein, Tipu Z Aziz. 2007. Connectivity of the human pedunclopontine nucleus region and diffusion tensor imaging in surgical targeting. *J Neurosurg.* 107 (4):814-20 (*ISI/SCOPUS Indexed Publication*)
- Kalai Arasu Muthusamy, Vicknes Waran, Savithri D Puthuchear. 2007. Spectra of central nervous system melioidosis. *J Clin Neurosci.* (*ISI/SCOPUS Indexed Publication*)

- B R Aravamuthan, K A Muthusamy, J F Stein, T Z Aziz, H Johansen-Berg. 2007. Topography of cortical and subcortical connections of the human pedunculo-pontine and subthalamic nuclei. *Neuroimage. (ISI/SCOPUS Indexed Publication)*

2005

- K Arasu, A Khairul, V Waran. 2005. Neurocysticercosis an uncommon intra-cerebral infection in Malaysia. *Med J Malaysia 60(4):514-6 (ISI/SCOPUS Indexed Publication)*

2003

- Kalai Arasu M, Dharmendra G, Ramli MN, Puthuchery SD, Waran V. 2003. Central Nervous System Meliodosis: Three cases from University Malaya Medical Center. *The Philippine Journal of Neurology 7 (2): 81. (Non-ISI/Non-SCOPUS)*