



Dr Ela Chakkarapani
M.B.,B.S., F.R.C.P.C.H., MD

Consultant Senior Lecturer in Neonatology

Area of research

Newborn neuroscience

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Summary

Biography

Dr Ela Chakkarapani completed his MD in translational research of xenon with hypothermia in perinatal asphyxia in 2012, which has transpired to two ongoing randomised clinical trials. He successfully completed his fellowship in Neonatal neurology and neuroimaging in Vancouver, Canada in 2013. He was appointed as a consultant Senior Lecturer in Neonatology on October 2013. His research interests are in neonatal neuroscience.

Activities / Findings

Optimising neuroprotective interventions of known efficacy following perinatal brain injury.

Translational research of novel neuroprotective interventions in perinatal brain injury and understanding neuronal repair following perinatal brain injury.

Longterm cognitive, emotional and social outcome of Children who underwent neuroprotective interventions following perinatal brain injury.

Advanced structural, microstructural and metabolic neuroimaging and neurophysiology to understand the effect of neuroprotective interventions on perinatal brain injury.

Teaching

Lecturer for Reproductive Health and Care of the Newborn Unit, MBChB year 4.

Keywords

- perinatal brain injury
- neuroprotection
- Translational research

Skills

- Perinatal brain injury

Processes and functions

- Translational research
- clinical trials

Methodologies

- laboratory and clinical research

Memberships

Organisations

[Bristol Medical School \(THS\)](#)

Other sites

- [Neuroscience](#)

Academic staff

- [School of Clinical Sciences Academic Staff](#)

Research groupings

- [Neonatal Neurology Group](#)

Recent publications

- Lee-Kelland, R, Jary, S, Tonks, J, Cowan, F, Thoresen, M & Chakkarapani, E, 2019, '[School-age outcomes of children without cerebral palsy cooled for neonatal hypoxic-ischaemic encephalopathy in 2008-2010](#)'. *Archives of Disease in Childhood: Fetal and Neonatal Edition*.
- Chakkarapani, E, 2019, '[Cognitive and behavioural outcomes: are they impaired in children without cerebral palsy following neonatal hypoxic-ischaemic encephalopathy?](#)'. *Acta Paediatrica*.
- Jary, S, Lee-Kelland, R, Tonks, J, Cowan, F, Thoresen, M & Chakkarapani, E, 2019, '[Motor performance and cognitive correlates in children cooled for neonatal encephalopathy without cerebral palsy at school age](#)'. *Acta Paediatrica*.
- Cawley, P & Chakkarapani, E, 2019, '[Fifteen-minute consultation: Therapeutic hypothermia for infants with hypoxic ischaemic encephalopathy—translating jargon, prognosis and uncertainty for parents](#)'. *Archives of Disease in Childhood: Education and Practice Edition*.
- Tonks, J, Cloke, G, Lee-Kelland, R, Jary, S, Thoresen, M, Cowan, FM & Chakkarapani, E, 2019, '[Attention and visuo-spatial function in children without cerebral palsy who were cooled for neonatal encephalopathy: a case-control study](#)'. *Brain Injury*, vol 33., pp. 894-898
- Pregnolato, S, Chakkarapani, E, Isles, AR & Luyt, K, 2019, '[Glutamate Transport and Preterm Brain Injury](#)'. *Frontiers in Physiology*, vol 10.
- Dingley, J, Okano, S, Planas, S & Chakkarapani, E, 2018, '[Feasibility of a miniature esophageal heat exchange device for rapid therapeutic cooling in newborns: preliminary investigations in a piglet model](#)'. *Therapeutic Hypothermia and Temperature Management*, vol 8., pp. 36-44
- Cizmeci, MN, Lequin, M, Lichtenbelt, KD, Chitayat, D, Kannu, P, James, AG, Groenendaal, F, Chakkarapani, E, Blaser, S & Vries, LSd, 2018, '[Characteristic MR Imaging Findings of the Neonatal Brain in RASopathies](#)'. *American Journal of Neuroradiology*, vol 39., pp. 1146-1152
- Williams, DJ, Hallowell, GD, Chakkarapani, E & Dingley, J, 2018, '[Real-Time Measurement of Xenon Concentration in a Binary Gas Mixture Using a Modified Ultrasonic Time-of-Flight Anesthesia Gas Flowmeter: A Technical Feasibility Study](#)'. *Anesthesia and Analgesia*, vol 129.
- Geary, G, Jary, S, Tonks, J, Lee-Kelland, R, Thai, J, Brooks, J, Thoresen, M, Cowan, F & Chakkarapani, E, 2018, '[Corpus callosal associations with cognitive and motor abilities in school-age children cooled for neonatal encephalopathy](#)'.

[View complete publications list](#) in the University of Bristol publications system

Networks & contacts

- Prof Marianne Thoresen Prof Steven Miller Dr Sally Jary Dr Vann Chau Dr Jonathan Davis Dr Hemmen Sabir Dr David Odd