Statement of research achievements, if any, on which any award has already been received by the applicant. ICMR, DST Please also upload brief citation(s) on the research work(s) for which the applicant has already received the award(s) (not to exceed 2000 words)

Over the past twenty-six years, I have been affianced in Research and teaching was part of the team which started the first DM Pediatric Neurology Program in South Asia(2004), leading since 2008. Has mentored/mentoring DM Pediatric Neurology (51), other DM (4), PhD (18), MD (43), and trainees (18) from across the world.

Over 26 years of experience, affianced in Research and teaching. Has foreseen and developed Pediatric Neurology in India as a specialty (academics/clinical care/patient education/research/advocacy) and has received many International/ National awards.

Envisioned, conceptualized and is faculty in-charge of Centre of Excellence and Advanced Research for Childhood Neurodevelopmental Disorders:providing high quality affordable care for all sections of the society, performing high end diagnostic/therapeutic research, developing a National Registry, and acting as an education/ training hub; National Child Neurology Helpline (24X7; toll free)/ Tele- Consultation Services.

Has 405 research publications (including NEJM, JAMA pediatrics), Citations: 6674; h-Index 38; i10-index 142; 570 abstracts.

**Innovations** in teaching/Empowering professionals/parents <u>www.pedneuroaiims.org</u> (bilingual Education material/Seizure card/videos; Mobile app-:Pedneuroaiims Diagnostics-Autism, Epilepsy, ADHD, Neuromotor impairments(google/ios);E-learningmodules: <u>www.pedneuroaiims.chalopadho.com</u>; Neuropharmacopeia, Remedial intervention program for Specific Learning Disability (SLD) – An artificial intelligence based web page application developed

**Research:** National/International(NIH, Autism speaks, MRC, UK, DBT, ICMR, DST, UNICEF, WHO, National trust, USAID, MOHFW; AIIMS-UCL collaboration)leading to innovations/advocacy

- Developed/Validated culture sensitive Screening /Diagnostic Instruments: Autism, ADHD, Epilepsy, Cerebral Palsybeing used in the National Programme"Rashtriya Bal SwasthyaKaryakram (Ministry of Health and Family Welfare)/ autism certification by Ministry of Social Justice and Empowerment. Trainer of Master trainers for Autism
- Drug refractory epilepsy: Developed and studied indigenous novel dietary therapies: 13 studies including RCTs, Neuromodulation: rTMS (NEJM/JAMA Pediatrics)
- Autism: etiopathogenesis/biomarkers RCTs- Probiotics, GFCF diet, Music therapy; sleep disturbances, neurorehabilitation (virtual/augmented reality/ Artificial intelligence/Robotics/textile based/Alternative Augmentative Communication app, scalable mobile platform for screening, Communication-centered Parent-mediated treatment for Autism in South Asia, iPSC, exosomes.
- Neuromuscular disorders: Skin biopsy to replace muscle biopsy, RCTs: DMD-Ataluren, exon skipping; SMA- Gene therapy and humanitarian access: SMA-Zolgensma, Spinraza, Risdiplam
- Cerebral palsy: Constraint induced movement therapy along with Virtual reality assist or rTMS
- LGIT (intermittent) RCT (Expert member of CORE-KDT (International Consortium))

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#### **Awards & Recognition**

## Few prestigious awards received since 2015- till date

- National Senior Women Bio scientist Award, DBT 2021-22
- President, Academy of Pediatric Neurology, (AOPN) Delhi, 2021
- Elected as fellow of Royal college of Paediatrics and child health; UK October 2021.
- "National Award for outstanding efforts in Science & Technology communication through innovative & traditional methods". from the Department of Science & Technology on National Science Day - 28th February, 2021
- President, Association of Child Neurology (AOCN), India 2023-2025; also Founder Member (2002)
- INSAR (International society for Autism Research) Global Senior Leader for India
- Member, ILAE Equity, Diversity and Inclusion Task Force
- Convenor, Pediatric subsection, Indian Academy of Neurology
- National Delegate, India Asian Oceanian Child Neurology Association (AOCNA)
- Past Chairperson (2021), National Guidelines Coordinator, Academy of Pediatric Neurology, IAP
- Chairperson, Academy of Pediatric Neurology, IAP, 2021
- Editor of Autism, Sage journals, UK
- Vice-Chair, Technology Governance Steering committee-Health, All India Council for Robotics & Automation (AICRA)
- Member, Advisory board (ICNTN), Coordinator, Neurodevelopmental disorders module ICNTN (ICNA)
- Executive Board Member, Indian Epilepsy Society 2021
- Only Asian Expert selected for Elicitation Board Expert Group for Autism Spectrum Disorder, France, January 2020
- Co-Convenor, Pediatric Epilepsy Subsection, Indian Epilepsy Society 2020
- Awarded Atal Swasthya Bhushan Samman 2019 for her extraordinary services extended through clinical practice
- Received 2<sup>nd</sup> best poster award for Digital Health & Medical Education poster on AIIMS 66<sup>th</sup> Institute day exhibition September 2021
- Award by Pediatric Neurology Chapter of IAP, in recognition of outstanding contribution in the field Pediatric Neurology and Commendable devotion and hard work to Pediatric Neurology Chapter of IAP during Neuropedicon 2019
- Advisory Board Member, Academy Of Pediatric Neurology, IAP 2019 onwards
- AIIMS Excellence Research Award 2018 by AIIMS, New Delhi for Clinical Research titled "Development of All India Institute of Medical Sciences-Modified International Clinical Epidemiology Network Diagnostic Instrument for Neuromotor Impairments in Children Aged 1Month to 18 years"
- 6th DR I C Verma Excellence in Research Award 2018 by The Dr K.C Chaudhuri Trust & Indian Journal of Pediatrics for research in the field of Child Neurology in India
- Amrut Mody Unichem Prize-2015 by Indian Council of Medical Research (ICMR), New Delhi for research in Epilepsy and Neurodevelopmental Disorders conferred in October 2017
- AIIMS Excellence Research Award 2017 by AIIMS, New Delhi for Clinical Research titled "Development of validation of AIIMS modified INCLEN diagnostic instrument for epilepsy in children aged 1month-18 years"
- Dr. S. Janaki Memorial Oration by National Academy of Medical Sciences October2016 in recognition of outstanding contribution in the field of Child Neurology and delivered oration on: Neurodevelopmental disorders: The Journey, The Dreams and Their Realizations and felicitated with a gold medal

Fellow, National Academy of Medical Sciences, October 2016

## Other prestigious awards received since 1985-2014

- Sheila Wallace Award (First Indian recipient) by International Child Neurology Association conferred in May 2014for excellence of the CV and substantial contributions made in many areas of Child Neurology and delivered the award plenary lecture:- Establishing a program for Neuro-developmental disorders in resource constrained settings: Opportunities and challenges in International Child Neurology Congress, Iguazu falls, Brazil
- Lifetime Achievement Award by Child Neurology Chapter of Indian Academy of Pediatrics, Oct 2014 conferred for invaluable services rendered for the development of Pediatric Neurology in India and historical and memorable attainments in this field
- **AIIMS Excellence Research Award** in the Clinical Research category in September 2014 for 2013-14: Neurodevelopmental and epilepsy outcome in children aged one to five years with infantile spasms- A North Indian cohort
- Fellow, Indian Academy of Pediatrics, June 2012
- **ISNS Bursary Award**, for International Symposium on Neonatal Seizures and related Disorders April 2011,
- Fellowship Award by Vice President of Research & the Faculty of Medicine of McGill University 2006 and International Child Neurology Association 2010,
- Fellow, International Medical Science Academy, April 2009
- Founder Member, Association of Child Neurology 2002 onwards
- Dr Sarla Vaishnav award, 1995 for the thesis-based research paper entitled "A clinico-biochemical probe into suspected neurometabolic disorders"
- Dr. Satyanand gold medal for being the best undergraduate in Psychiatry, 1992
- Sardari Lal Kalra gold medal for being the best undergraduate in Microbiology, 1990
- National Talent Search Examination scholarship holder 1986 to 1996
- Junior Science Talent Scholarship holder 1985

#### **Research publications**

Has 405 publications in International and National journal; Highest Impact Factor: 91.245, Maximum citation: 499; Citations: 6605; h-Index 38; i10-index 142

- Abstracts 570
- Edited 1 book, assisted in editing 1 book and section editor of 1 book
- Educational books/learning resource material: 60

Ten best publications

S.N	Journal Details	Year	Impact	Citatio
0			Factor	ns
1	Sondhi, Vishal; Agarwala, Anuja; Pandey, Ravindra M; Chakrabarty, Biswaroop; Jauhari, Prashant; Lodha, Rakesh; Toteja, Gurudyal S; Sharma, Shobha; Paul, Vinod K; Kossoff, Eric;GulatiSheffali (corresponding) Efficacy of Ketogenic Diet, Modified Atkins Diet, and Low Glycemic Index Therapy Diet Among Children with Drug-Resistant Epilepsy: A Randomized Clinical Trial. JAMA Pediatrics 2020; 174(10): 944-951	2020	26.8	66
2	Gulati, Sheffali(corresponding); Kaushik, Jaya Shankar; Saini, Lokesh; Sondhi, Vishal; Madaan, Priyanka; Arora, NK; Pandey, RM. Jauhari, Prashant; Manokaran, Ranjith K; Sapra, Savita. Development and validation of DSM-5 based diagnostic tool for children with Autism Spectrum Disorder. Plos one 2019;14(3); e0213242	2019	3.752	28

3 *	Arora NK, Nair MKC, Gulati S, Deshmukh V, Mohapatra A, Mishra D, Patel V, Pandey RM, et al. Neurodevelopmental disorders in children aged 2-9 years: Population-based burden estimates across five regions in India. PLoS Med. 2018 Jul 24;15(7):e1002615. doi: 10.1371/journal.pmed.1002615. PMID: 30040859; PMCID: PMC6057634.*	2018	11.61	205
4 *	Dwivedi R, Ramanujam B, Chandra PS, Sapra S, Gulati S, Kalaivani M, Garg A, Bal CS, Tripathi M, Dwivedi SN, Sagar R, Sarkar C, Tripathi M. Surgery for Drug-Resistant Epilepsy in Children. N Engl J Med. 2017 Oct 26;377(17):1639-1647.*	2017	91.24	432
5	Sharma S, Sankhyan N, Gulati S (corresponding author), Agarwala AUse of the modified Atkins diet for treatment of refractory childhood epilepsy: a randomized controlled trial. Epilepsia. 2013 Mar;54(3):481–6.	2013	6.655	176
6	Arya R, Gulati S(corresponding author), Kabra M, Sahu JK, Kalra V. Intranasal versus intravenous lorazepam for control of acute seizures in children: a randomized open-label study. Epilepsia. 2011 Apr; 52(4):788–93	2011	6.655	90
7	Arya R, Gulati S (corresponding author), Kabra M, Sahu JK, Kalra V. Folic acid supplementation prevents phenytoin-induced gingival overgrowth in children. Neurology. 2011 Apr 12;76(15):1338–43.	2011	9.901	68
8	Raju KNV, Gulati S(corresponding author),, Kabra M, Agarwala A, Sharma S, Pandey RMEfficacy of 4:1 (classic) versus 2.5:1 ketogenic ratio diet in refractory epilepsy in young children: a randomized open labeled study Epilepsy Res. 2011 Sep;96(1-2):96-100.	2011	2.75	79
9	Choudhary, Anita; Gulati, Sheffali (Corresponding); Kabra, Madhulika; Singh, Upinder Pal; Sankhyan, Naveen; Pandey, Ravindra Mohan; Kalra, Veena. Efficacy of modified constraint induced movement therapy in improving upper limb function in children with hemiplegic cerebral palsy: a randomized controlled trial.Brain Development. 2013; 35(9): 870-876 (Corrosponding)	2013	1.961	83
10	Choudhary A, Gulati S(corresponding author),, Sagar R, Sankhyan N, SripadaK.Childhood epilepsy and ADHD comorbidity in an Indian tertiary medical center outpatient population. Sci Rep. 2018 08;8(1):2670.	2018	4.996	25
11	Panda PK, Gupta J, Chowdhury SR, Kumar R, Meena AK, Madaan P, Sharawat IK, Gulati S(corresponding author), Psychological and behavioral impact of lockdown and quarantine measures for COVID-19 pandemic on children, adolescents and caregivers: a sustematic review and meta-analysis	2021	1.794	515
12	Gupta J, Gulati (corresponding author), S, Singh U, Kumar A, Juhari P, Chakrabarty B, Pandey RM, Bhatia R, Jain S, Srivastava A, Evaluation of repetitive Transcranial Magnetic Stimulation as an adjunct to modified Constraint Induced Movement Therapy in improving Upper Limb Function in Children with Unilateral Cerebral Palsy aged 5-18 years – A Randomized Controlled Trial (S10.002)	2022	4.89	

# \* Only in 3 & 4 not corresponding author hence submitting 2 more

Officer bearer: International Society for Autism Research: Global Senior Leader (India); President elect, Association of Child Neurology; Chairperson, Academy of Pediatric Neurology, IAP; Co-Convenor, Pediatric subsection/Executive Board member Indian Epilepsy Society/National representative, International League Against Epilepsy; Advisory Board member, International

Child Neurology Teaching network (ICNA); Core member and site leader of Indo-Canadian Autism Network, Editor of Autism, Sage journals (Journal impact factor 6:684, 5-year impact factor 7.525

I have been instrumental in transforming the care of children with neurodevelopmental disorders. Has pioneered the DM Pediatric Neurology program in South Asia and is doing extensive research. I have immensely contributed to the field of epilepsy, autism, and neuromotor impairments, which are unmatched and further complementing the research with help of technology; I have continued to widen these efforts to remote parts of the country. Have been a global leader (India) with Center of Excellence International Society for Autism Research. In this committed mission I, am looking forward to is a stepping-stone to take Academics, Clinical Care and Research in Paediatric Neurology to greater heights both at National and International level

Over the past several years, a paradigm shift has made me research oriented and committed towards neurological and neurodevelopmental disorders.

### Citation of the following attached:

- "National Award for outstanding efforts in Science & Technology communication through innovative & traditional methods". from the Department of Science & Technology on National Science Day, 28th February 2021
- Amrut Mody Unichem Prize-2015 by Indian Council of Medical Research (ICMR), New Delhi for research in Epilepsy and Neurodevelopmental Disorders conferred in October 2017