

Details of the research work duly signed by the applicant, for which the Sun Pharma Science Foundation Research Award is claimed, including references and illustrations (not to exceed 6000 words).

- Dr. Shefali Gulati MBBS (Gold medalist; AIIMS), MD (AIIMS), FRCPCH (UK), FAMS, FIAP, FIMSA, joined AIIMS as an UG (1988), was part of the team which started the first DM Pediatric Neurology Program in South-Asia(2004), heading it since 2008.
- Her 52 students have completed the DM Pediatric Neurology program. She has contributed towards establishing of this program in 5 more institutes across India and also in Fellowships in Pediatric Neurology and now Doctorate National Board,.
- Has over 27 years post MD teaching / work experience and has developed Pediatric Neurology in India as a specialty and has received many International and National awards for her efforts in this field.
- Has developed this specialty in academics, clinical care including laboratory investigations, patient education/ awareness, research, advocacy and public health domains
- President, Academy of Pediatrics (AOPN), Delhi 2023
- Elected as fellow of Royal College of Paediatrics and Child health; UK, October, 2021
- President, Association of Child Neurology, India 2023-2025; also Founder Member (2002)
- National Delegate for India, Asian Oceanian Child Neurology Association (AOCNA)
- President, 17th Asian Oceanian Congress on Child Neurology & Executive Board Member, AOCNA
- Advisory Board Member, Academy of Pediatric Neurology, IAP 2019
- Chairperson, Academy of Pediatric Neurology, Indian Academy of Pediatrics, 2021
- Executive Board Member, Indian Epilepsy Society, 2021-2023
- Co-Convenor, Pediatric Epilepsy Subsection, Indian Epilepsy Society 2020 -2022
- INSAR (International Society for Autism Research) Global Senior Leader for India 2021-2023
- Editor of Autism, Sage journals(Journal impact factor 6:684, 5-year impact factor 7.525.)
- Member, ILAE Equity, Diversity and Inclusion Task Force
- Convenor, Pediatric subsection, Indian Academy of Neurology

She envisioned, conceptualized and is faculty in-charge of Centre of Excellence and Advanced Research for Childhood Neurodevelopmental Disorders: providing performing high end diagnostic/therapeutic research, developing a National registry, National Child Neurology Helpline (24x7; toll free)/Tele-Consultation Services.

- Mentored PhD(at AIIMS, NDRI, Gurgaon and IIT Kanpur), Short term trainees 18(from India, USA, Bangladesh, Nepal, Sri Lanka, Kenya, Norway, Srinagar), MD (Pediatrics), MBBS, MSc and BSc Nursing
- Guide in thesis in the field of Child Neurology: 23 PhD, 52 MD/MS, 74 DM thesis
- 35 students/ collaborators have been awarded various National/ International awards for work mentored/ collective work done
- Examiner/Reviewer of various thesis of MD, DCH, DM PGI Chandigarh, M.Tech. IIT, Delhi, Fellowship in Pediatric Neurology and PhD from various Indian and Nepal colleges and universities/ visiting faculty
- Innovations in teaching
 - Telemedicine AIIMS: Lectures for National/International networks
 - Website (www.pedneuroaiims.org)-educational material including audiovisuals for clinicians on various neurodevelopmental disorders/ interactive
- Pedneuroaiims Diagnostics: Free Mobile app for diagnosing Autism, epilepsy, ADHD, neuromotor impairments
- E-learning modules in Child Neurology (<https://pedneuroaiims.chalopadho.com>)
- Neuropharmacopeia a drug book for Pediatricians

- Neuropedicon 2018 proceedings on youtube
- Has established a Comprehensive tertiary Paediatric Neurology Care Service
 - Five Specialty Clinics besides routine OPD services: Development, Neurocysticercosis, Paediatric Neurology, Autism, Neuromuscular disorders; annual attendance is over 25,000
 - Clinical services: Outpatient, Day Care, In-patient, High Dependency Unit Established Pediatric
 - Electrophysiology lab services in the year 2000 over 4000patients done annually).
 - Neuromodulation: Transcranial magnetic stimulation established and working in area of refractory epilepsy and hemiplegic CP and rTMS SOP manuals have been developed
 - Various Neuropsychological tests, cognitive and developmental assessment
 - NeuroIntensive care: ambulatory continuous EEG monitoring , Ambulatory NCS, Intracranial pressure monitoring,

Research publications

- Has 470 publications in International and National journal; Highest Impact Factor: 96.2, Maximum citation: 684; Citations-7972; H-Index-40; i10-index-171; (in top 3% researchers globally)
- > 600 abstracts
- Edited 1 book, assisted in editing 1 book and section editor of 1 book
- Educational books/ learning resource material: 60

Ten best publications

| S.No | Journal Details | Year | Impact Factor | Citations |
|--------|--|------|---------------|-----------|
| 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 | 24.7 | 113 |
| 2 | Gulati, Sheffali(coresponding); 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 | 2.9 | 42 |
| 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 | 10.5 | 267 |
| 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 | 96.2 | 517 |
| 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. | 2013 | 6.6 | 203 |

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| | Epilepsia. 2013 Mar;54(3):481–6. | | | |
| 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 | 6.6 | 98 |
| 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 | 75 |
| 8 | Raju KNV, Gulati S, 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 | 2.5 | 91 |
| 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 | 2013 | 1.5 | 87 |
| 10 | Choudhary A, Gulati S, 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 | 3.8 | 30 |
| 11 | Panda PK, Gupta J, Chowdhury SR, Kumar R, Meena AK, Madaan P, Sharawat IK, Gulati S, 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 | 684 |
| 12 | Gupta J, Gulati 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 | 3.7 | 4 |

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

Has many Research Projects (NIH, Autism speaks, MRC, UK, DBT, ICMR, DST, UNICEF, WHO, National trust, USAID, MOHFW; AIIMS-UCL)leading to innovations/advocacy.

Developed/Validated culture sensitive Screening /Diagnostic Instruments: Autism, ADHD, Epilepsy, Neuromotor impairment (“Rashtriya Bal SwasthyaKaryakram” (MOHFW)/ autism certification/training of master trainers by MOSJE. (Mobile app Pedneuroaiims Diagnostics (google/ios); studied prevalence of Neurodevelopmental disorders

- Involved in research projects on diverse areas of Pediatric Neurology at International and National level which have led to advocacy and innovations
- **Research to Advocacy**
 - These tools are being used in the National Programe“Rashtriya Bal SwasthyaKaryakram of Ministry of Health and Family Welfare(MOHFW)
 - The tool developed for diagnosing Autism has been notified for use in certification of Autism by GOI, Ministry of Social Justice and Empowerment(MOSJE)
 - Part of the team that submitted proposal for National Epilepsy Control Program to

MOHFW

- Assigned responsibility to train master trainers in diagnosing and certifying Autism, Have developed resource material/website www.pedneuroaiims.org, organized 4 national workshops and developing e-courses.
- First certificate for Autism given in India at AIIMS on 28th April, 2016
- Organized National conference on Autism and conducted Autism marvel hunt (with National trust on 3rd April 2017)
- Chairperson of subcommittee on Developmental Disorders Certification as a Disability
- Expert in International group for launching of a Global Action for Autism, Dhaka
- Auto disabled syringes were introduced in Universal Immunization Program, MOHFW
- Biomedical waste management in India has been revolutionized
- Strategic framework document for children with developmental difficulties (MOHFW)
- **Research to Innovations**
 - Mobile app Pedneuroaiims Diagnostics: Mobile app for diagnosing Autism, epilepsy, ADHD, neuromotor impairments (freely available on google and apple play store)
 - Various Dietary therapies based on local diets for intractable epilepsy
 - Seizure card: Domiciliary management of acute seizure
 - Telephone based consultation for epilepsy: National Child Neurology Helpline (24x7; toll free) and Tele- Consultation Services launched
 - Mobile app for diagnosis (Pedneuroaiims Diagnostics)
 - Weighted compression vest for hyperactivity besides Mobile app for diagnosis
 - Skin biopsy can possibly replace muscle biopsy in diagnosis and follow up in muscle dystrophies
 - Remedial intervention program for Specific Learning Disability (SLD) – An artificial intelligence based web page application developed
- **Center Of Excellence & Advanced Research For Childhood Neurodevelopmental Disorders**
 - Development of a National Registry for Childhood Neurodevelopmental Disorders
 - National Knowledge and Training Center for Childhood Neurodevelopmental Disorders
 - Childhood Neurodevelopmental Disorders: Advanced diagnostics
 - Childhood Neurodevelopmental Disorders: Advanced Therapeutics/Rehabilitation
 - Establishment of Child Neurology Helpline and Teleconsultation Services {Funded by AIIMS Grant in aid (supported by Ministry of Health and Family Welfare) and India Infrastructure Finance Company Limited (IIFCL) as a part of its Corporate Social Responsibility (CSR)}
- **Domain specific research projects**
 - **Multicentric International collaboration with Universities of Stanford, Pennsylvania, Wisconsin: *Neuro-developmental Disabilities among children in India: An INCLIN study (funded by NIH, Autism speaks, National Trust) Site- PI, Network coordinator*** Developed & Validated culture sensitive Diagnostic Instruments for Autism, ADHD, Epilepsy; Cerebral Palsy and a 12 question Neurodevelopmental Screening tool. Prevalence data for these disabilities has been obtained for the first time in India
 - **Five collaborative studies: Further developing and validating tools for screening and diagnosing neurodevelopmental disorders.** The above tools have been modified further as per latest guidelines and the age range broadened (upto 18 yrs) and revalidated:
 - ✓ Screening tool: ASQ for the age upto 24 months
 - ✓ Diagnostic tools for autism, epilepsy, ADHD and neuromotor impairments including cerebral palsy.
 - **Epilepsy: Multiple collaborative studies Over 100 indexed publications (including 1 in NEJM and 2 in JAMA Pediatrics)** Acute control of seizures; West syndrome; febrile seizures, Phenytoin and gingival overgrowth; PNEE, status epilepticus, ESES, epilepsy surgery work up, RCT in Neurocysticercosis, biomarkers in calcified NCC, bone mineral

densitometry, pharmacogenomics; trace elements; telephone based follow up in NCC, west syndrome and LGS; autoimmune disorders; Quality of life; Difficult to treat epilepsy; Analysis of neural networks underlying west syndrome using Functional MRI and their correlation with response to therapy; More than 13 publications assessing role of various dietary therapies in epilepsy in multiple studies; Recently completed RCT to compare KD vs MAD vs LGIT is the first study to compare these three dietary therapies (JAMA Pediatrics); LGIT (intermittent) RCT (Expert member of CORE-KDT (International Consortium)), besides Epilepsy diagnostic tool; Early Vs Late epilepsy Surgery (NEJM), FIRES (in collaboration with UCL), Biomarkers in ESES. Focal intractable epilepsy, ESES: role of TMS

- **Autism:** Multiple International and National collaborative studies, Global Senior Leader for INSAR, Site leader of Indo-Canadian Autism Network (ICAN), Editor for Autism, Sage Journal
 - ✓ PI: Blood heavy metal levels and quantitative EEG; training modules; weighted compression vest; gut flora; Advanced paternal age and poor lifestyle on sperm epigenome: possible etiology in ASD; pathways to cure for ASD; Health related quality of life of children (aged 3-12 yrs); Vitamin D and trace elements; polysomnography; depression in mothers besides DSM 5 based diagnostic tool; Autism diagnostic tool (1-18 months), Mobile platform; Emotion recognition and social behaviour, Autism and oxidative biomarkers, Probiotics, Alternative Augmentative Communication, Artificial Intelligence, Nanotechnology: exosomes, Robotics
- **Neuromuscular Disorders**
 - ✓ **PI 3 RCTs** Gabapentin, Valproate & Valproat/ levocarnitine in **Spinal Muscular atrophy**; RCT on Corticosteroid therapy; Meta analysis on Inspiratory muscle training,; pulmonary functions in DMD, telephone follow up in DMD; Induced pluripotent stem cells in DMD, various myopathies; Various studies on muscle biopsy and skin biopsy in various muscle dystrophies besides diagnostic tool; evaluation of various neuropathies associated with systemic diseases; Telephone follow up in DMD, Smooth muscle function in DMD; Genotype-phenotype correlation in LGMD type 2A/R1 ;RCT of Ataluren in DMD, RCT of Vitrolarsen, Exon skipping agents (Exon 45, 51 and 53), Zolgensma
 - ✓ **SMA:** Coordinating Spinraza Humanitarian Access program 12 on follow up since December 2019 and 38 more selected now , 1st Genethrapy (Zolgensma) for SMA administered in May2020 and total 4 given thus far as a part of Global access Program, Risdiplam 6 patients have been selected for humanitarian access program
- **Cerebral palsy**
 - ✓ Constraint induced movement therapy, FMRI based mCIMT, Structured weight bearing, heavy metals and cerebral palsy; quality of life besides diagnostic tool. Virtual reality reinforced Modified Constraint Induced Movement Therapy, Sensory Profile and Sensory Integration; rTMS and Modified CMT, r TMS in dystonia
 - ✓ A cross-sectional study to explore the association of molecular, genetic and environmental markers in Autism Spectrum Disorders and other neurodevelopmental disorders, including ADHD and Cerebral Palsy
- **ADHD and Specific learning disability**
 - ✓ Blood trace elements and vitamin D in ADHD, Quantitative EEG, Polysomnography, Remedial Intervention Programme in SLD, artificial intelligence being studied
- **Other Multicentric International studies**

- Site PI: Ataxia Telangiectasia- Intra- Erythrocyte Dexamethasone; Site PI: Rett Syndrome- Sarizotan; Co investigator: Development & validation of a scalable mobile platform for screening of developmental neuropsychiatric disorders in low-resource settings (MRC, UK); Site PI: Communication-centred Parent-mediated treatment for Autism Spectrum Disorder in South Asia (COMPASS). Site PI: 2 RCTs of Lasmiditan and Galcanezumab in migraine
- Phase 3, 12-Month, Open Label Study of Lasmiditan in Pediatric Patients with Migraine-PIONEER-PEDS2
- Pediatrics Options for Migraine Relief: A Randomized, Double-Blind, Placebo-Controlled Study of Lasmiditan for Acute Treatment of Migraine:PIONEER PEDS1
- Randomized, Double-Blind, Placebo-Controlled Study of Galcanezumab in Patient 6 to 17 Years of Age with Episodic Migraine- the REBUILD-1 Study
- A Phase iii Multicenter, Randomized, Double-Blind, Double-Dummy Study to Evaluate Safety and Efficacy of Ocrelizumab in Comparison with Fingolimod in Children and Adolescents with Relapsing-Remitting Multiple Sclerosis
- A Phase 2B, Multicenter, 30-week, Prospective, Cross-over, Double- blind, Randomized, Placebo-controlled Study Followed by a 52-Week Open-label Extension Study to Evaluate the Efficacy and Safety of Basimglurant Adjunctive to Ongoing Anticonvulsive Therapy in Children, Adolescents, and Young Adults with Seizures Associated with Tuberous Sclerosis Complex.
- A Randomized, Double-Blind, Dose Finding and Comparison Study of the Safety and Efficacy of a High Dose of Eteplirsen, Preceded by an Open-Label Dose Escalation, in Patients with Duchenne Muscular Dystrophy with Deletion Mutations Amenable to Exon 51 Skipping.

- **Other National Multicentric studies**
 - Assessment of Injection Practices in India: An IndiaCLEN Program Evaluation Network study (World Bank; MOHFW) CCT member; Model Injection Centres: An IndiaCLEN study (funded by USAID)Site PI, CCT member
 - Enrichment through demonstration and sensitization of paramedics, teachers and students towards children with neurological/neurodevelopmental disorders using multimodal approach and evaluating KAP levels at pre and post intervention (funded by DST STEMM)
 - A Brain Machine Interface enabled Assistive System for children with special needs (Funded by MeITY)

- **Academic Recognition for Research**
 - Folic acid supplementation prevents phenytoin-induced gingival overgrowth in children (Neurology 2011);Podcastinterview; Faculty 1000-n top 2% of articles in biology/ medicine; Evaluated as Exceptional
 - Surgery for Drug-Resistant Epilepsy in Children (NEJM 2017) cited in many articles like Reuters Online, Medical Dialogues, Journal Watch, Physicians Briefing, Aleteia, tips, Heilpraxisnet, Medical online, Sachsische Zeitung, British Journal of Sports Medicine, Medical dialogues, Gesundheitsstadt Berlin
 - Reuters health Article:Modified Atkins diet reduces seizures in pediatric epilepsy- (*Reuters Health*)
 - Neurology practice update commentary: Gulati S. Skin Biopsy to Diagnose Sarcoglycanopathies. PracticeUpdate
 - Cystic Fibrosis Unite' is a Wellcome Trust-funded public engagement in science
 - "Vitamin E Administration and Reversal of Neurological Deficits in Protein – Energy Malnutrition;paper of the month;indexed in Current Awareness in Biomedicine: Oxygen Radicals; cited in the latest recommendations for Vitamin

- JAMA Pediatrics Aug 2020 article on dietary therapies in intractable epilepsy quoted in medpage today, neurology live and many other citations in social media and print media and Journal club/podcast in ICNAPEDIA March 2021
- Paper on psychological issues in children, October 2020, has been featured in Neurology today
- Commentator for Evidence- Based Mental Health, an International digest (BMJ publishing group)

Awards to Co-Authors/ Students for Collective Research Work Done 37:

- Remediating Indian school going children having Specific learning disorder with Dyslexia using Artificial Intelligence based structured intervention program: A longitudinal intervention study, conference ICNC 2022, Antalya Turkey
- Study of the Spectrum of Childhood Leukodystrophies, Correlation with Imaging, Spectroscopic and Biochemical Features at the 58th Annual Congress of Indian Radiological And Imaging Association, January, 2005.
- Tuberous sclerosis spectrum and magnetic resonance spectroscopy (accepted for presentation at the 7th Annual Meeting of the Infantile Seizure Society” International Symposium on Neuronal Migration disorders and childhood epilepsies-clinical manifestations, pathomechanisms and epileptogenesis”, Tokyo, Japan April 16th –April 17th, 2004.
- **Second best original research award/ Thesis for the year 2003 by Indian Journal of Pediatrics** Intranasal midazolam versus per rectal diazepam in the treatment of acute childhood seizure.
- “Mutation analysis and Prenatal Diagnosis of Megalencephalic leukodystrophy” in International conference on Medical & community Genetics 15-17 February 2008, Chandigarh, India.
- Efficacy of modified constraint induced movement therapy for cerebral palsy children with asymmetric motor impairment. National Childhood Disability Conference 2010 (13-14 November)
- Menke’s disease: An important cause of early onset refractory seizures.t International Conference on Inborn errors of Metabolism and 2nd National conference of ISIEM April 5th to April 7th 2013
- Finger drop sign as isolated presenting feature of Acute Motor Axonal Neuropathy variant of Guillian Barre Syndrome. **(5th National Conference of Association of Child Neurology (AOCN) 5th Child Neurocon on 7th, 8th & 9th February 2014**
- Clinical spectrum of psychogenic non - epileptic events in children (6-16 years)(Platform Award presentation)) DelhiCON 2014 7th December **Dr P N Taneja Award**
- Use of the Modified Atkins Diet for Treatment of Refractory Childhood Epilepsy: A Randomized Controlled Trial PEDICON22-25th January 2015 Hotel Ashok Samrat New Delhi
- Cognitive- behavioural and symptom profile of children with Autism spectrum Disorder: A study from tertiary care hospital NACIACP 6-8th February 2015 .
- MoyaMoya Pattern and cerebral venous sinus thrombosis: a rare combination in tuberculous meningitis (Poster) 6th Child Neurocon AOCN21-23 Feb 2015
- Telephone based follow up of children with West syndrome (after 12 weeks of ACTH/Steroid/Vigabatrin therapy) and Lennox-Gastaut syndrome aged 4 months to 7 yrs: How accurate is it to identify critical clinical events requiring face to face: P1001**(Recognised as of the best poster category) 31st International Epilepsy Congress, Istanbul, Turkey 5th to 9th September, 2015**

- .Nuclear- Mitochondrial cross-talk: Implications in mitochondrial function and disease pathophysiology 7th to 10th December 2016; Third National Conference of the Society for Indian Academy of Medical Genetics (SIAMG)
- Chronic Meningitis with persistent hypoglycorrachia: An unusual presentation of Lyme's disease 03-05 Feb, 2017; VIIIth National Child Neurology Conference- Child Neurology Conference 2017
- Cerebral venous sinus thrombosis in a child with Lesch-Nyhan Syndrome 03-05 Feb, 2017;VIIIth National Child Neurology Conference- Child Neurology Conference
- Nuclear – Mitochondrial cross-talk: Implications in mitochondrial function and disease pathophysiology 10-11 Feb, 2017; 6th International Conference on “Mitochondria in Health and Disease” of Society for Mitochondrial Research and Medicine-India (SMRM)
- Association of sleep apnoea with development and behavior related abnormalities in Down Syndrome 8-10 Dec, 2017; 4th National Conference of Society of Indian Academy of Medical Genetics
- Effect of structured weight bearing exercises on Bone mineral density in children with cerebral palsy. Presented (oral presentation) at Paediatric conference of North India- 1st national conference on research in child health held from 22-24th December 2017
- .Dietary Therapy In Epilepsy Treatment (DIET-Trial): A Randomised Non-Inferiority Trial Comparing KD, MAD & LGIT for Drug Resistant Epilepsy. Presented (oral presentation) at Paediatric conference of North India- 1st National Conference on Research in Child Health held from 22-24th December 2017
- Profile of Neurologic syndromes, cognition, behavior and sleep related problems in HIV infected children. presented (oral presentation) at Pediatric Conference of North India-1st National conference on research in child health held from 22-24th December 2017
- Comparative analysis of predominant gut micro flora and their metabolites in autistic versus normal children for probiotic interventions.presented at 4th Biennial Conference of PAi and International Symposium on Probiotic Therapy: Translating to Health and Clinical Practice held from 16-17th February
- Re-evaluating the reduced social motivation theory of autism in International Society for Autism Research Annual Meeting from 2018 May 9-12 at Rotterdam, Netherlands **(received the Best Technical Demonstration award at the Measuring Behaviour Conference 2018)**
- Screening Tools for autism risk using technology in International Society for Autism Research Annual Meeting from 2018May 9-12 at Rotterdam, Netherlands **(won the overall jury prize for the START app at the ehealth summer university conference)**
- . Effect of structured weight bearing exercise on bone mineral density in children with Cerebral Palsy- an observational cohort.**(Best Poster) at in 15th International Child Neurology Congress (ICNC)**
- **Best technical demonstration at 11th International Conference on Measuring Behaviour 2018, Manchester, UK, Title: START: a Tablet-Based Platform to Detect Autism Risk Jury prize across all categories at the international eHealth awards competition (from over 800 entries from 23 countries)**
- .Neurocognitive outcome and their diffusion tensor imaging (DTI) correlates in children with Mild Traumatic Brain Injury (mTBI) **2019 International Scholarship Award by the American Academy of Neurology**
- 'Evaluation of impact of timely institution of applied behavior analysis on the clinical course of young children at risk for developing autism spectrum disorder aged 18 to 36 months: a single centre observational study' Neuropedicon 2019
- “Structured remedial intervention for Indian school going children up to Class VI having Specific Learning Disorder (SLD) with Dyslexia: A longitudinal study assessing change of brain activation profile using Functional MRI and Resting state MRI and clinical severity scores using standard tools post intervention of 12 weeks” has been selected for the **ICNA Junior Investigator Award**

- **Dr. P.N.Taneja. Award** for-‘Evaluation of repetitive Transcranial Magnetic Stimulation as an adjunct to modified Constraint Induced Movement Therapy in improving Upper Limb Function in Children with Hemiparetic Cerebral Palsy aged 5 – 18 years - A Randomized Controlled Trial’
- ***Best Award Paper Presentation*** - "Electroclinical response to steroids in children with electrical status epilepticus in sleep (ESES): A longitudinal cohort study" Neuropedicon 2021
- ***Best Free Paper Presentation*** - "Effect of low frequency rTMS therapy on cognition and behaviour in childhood drug refractory focal epilepsy - A randomised double blinded sham controlled study" Neuropedicon 2021

Expert for various committees/ other recognition

- **Ministry of Health and Family Welfare:** Covid 19, Core member, Independent Expert of Technical Resource Group(TRG), Developmental delays including Disabilities of the Rashtriya Bal SwasthyaKaryakram., Expert for developing Framework for Convergent action towards comprehensive care of children with difficultiesExpert for developing guidelines for certification in Autism , formulating guidelines for treatment of rare diseases:Member of committee and Coordinator of DMD/SMA subgroup; Consultation on Early Childhood Development: Journey of the First 1000 days
- **Lancet commission expert for covid 19**
- **Representative of Ministry of Health and Family Welfare for reviewing National Trust Act Amendment**
- **Ministry of Social Justice and empowerment:** Chairperson of subcommittee on Certification of Developmental Disorders including Autism; Member of National Expert Committees: for developing guidelines for assessment and certification of specified disabilities; Disabilities requiring high support; Identification of posts in government jobs for persons with disabilities, PH reservation in MCI and Combined Medical Services; sub committee on multiple disabilities; Expert group for finalizing training module for In-Service Training & Sensitization Programme, Rehabilitation Council of India,: Member of Expert Committee for starting of pre-school intervention centre for children with disabilities in Composite Regional Centres (CRCs) and National Institutes (NIs)
- **National trust:** Autism; National Coordinator for training master trainers in Autism tools; early intervention
- **Ministry of Women and Child Development:** Expert for Sensitizing the communities to the needs of persons with disabilities in Promoting Promising Dietary Practices: Social & Behavioral Change Communications (SBCC) strategies to advance “Jan Andolan” in Poshan Aabhiyaan.
- **Chairperson, Expert Committee meeting on Categorization of Special Needs Children;** Chairperson of the NOC Expert Committee of CARA (Central Adoption Resource Authority);Expert to renew Medical Examination Report of Children to be adopted by CARA, Protocol for seamless functioning of the NOC Committee
- **Expert of the IAP, WHO, UNICEF Early childhood development program**
- **Expert of Academic committee of Fellowship program and Journal committee of Neurodevelopmental Chapter of IAP**
- **Expert for initiating the development of Doctrate of National board in Pediatric Neurology**
- **Member of ICMR PRG- Reproductive Biology, Maternal & Child Health**
- **Member ICMR Task Force:** IEM, AFP, children in difficult circumstances, Standard Treatment Workflow-Neurology Group, Stem Cell Research and Therapy, Rare disease Registry (Neuromuscular disorders)
- **Neurology Expert Group** to discuss the advisory and editorial board recommendations for STWs, and the Health Benefit Packages under the AB-PMJAY scheme in collaboration with the NHA.
- **Member of DBT Technical Expert Committee (TEC) of Maternal and Child Health- Developmental and Disease Biology**

- Biotechnology Industry Research Assistance Council (**BIRAC**): Expert for evaluation of projects
- **National List of Essential Medicines (NLEM)**: member of the "Neurology/ Psychiatry Expert Group"
- **Indian pharmacopeia mission**: Expert of Subject review committee for 6th edition of National Formulary of India (NFI) 2019-2020
- Expert to examine reports of Serious Adverse Events of death that have occurred in clinical trials, (**DCGI**), **Signal review panel**
- **Member of MCI expert group** for development of DM (Pediatric Neurology) curriculum, ,competency based guidelines, MSR and teacher eligibility qualifications and Expert for , Member of UGC Expert Committee (Santosh University, Ghaziabad, Uttar Pradesh)
- Inspections of Medical colleges ,including for MD Pediatrics and DM pediatric Neurology (CMC Vellore, Medical college, Thiruvanthapuram)
- **UGC expert** for evaluating medical universities (Santosh university), selection for fellowships, travel grants
- Member Neurology Expert Group to discuss the advisory and editorial board recommendations for STWs, and the Health Benefit Packages under the AB-PMJAY scheme in collaboration with the NHA.
- **UNICEF**: Global partnership on children with disability- ECD task force
- **NCERT**: inclusion of children with special needs in mainstream schools, ECCE, Member of Expert committee on Education of children with special needs
- **CBSE**:Member of Expert committee on Education of children with special needs
- **WHO**: Expert for Rapid assessment of national preparedness for implementing Nurturing Care for Early Childhood Development and gave in depth interview for the same on 16th December 2019
- Deliver lectures for Advanced Diploma in Child Guidance & Counseling Course, National Institute of Public Cooperation and Child Development
- Member of Association of Child Neurology -Indian Epilepsy Society expert groups on: Social and legal aspects of childhood epilepsy (SOLACE), West syndrome and Febrile seizures
- **Scientific Advisory Committee member** for Comprehensive Care Centre for various Neurodevelopmental Disorders of Sree Chitra Tirunal Institute of Medical Sciences and Technology, Trivandrum
- Scientific Advisory Committee member for Kerala University of Health Sciences,Thrissur
- Member of the Steering Cum Advisory Committee for Centre of Excellence on Early Childhood Development at Department of Psychology, Utkal University
- Member of National Level consultative Expert Group for multicentric research opportunities in ASD., National Institute of Physical Medicine and Rehabilitation ,Thrissur
- Member of Steering cum Advisory Committee for Centre of Excellence on Early Childhood Development (COE ECD), at Department of Psychology, Utkal University
- Drug Controller General of Health Sciences (DGHS) expert for discussing regarding use of drugs
- Expert in Consortium of Academia and Industry for capacity building in clinical research
- Expert for faculty recruitment for various hospitals and universities. External Subject Expert in the panel of Standing Selection Committee constituted for recruitment of Faculty positions in the of All India Institute of Medical Sciences: Bhubaneswar, Bhopal, Patna
- National Advisory Board Member of Indian Rett Syndrome Foundation
- Patron The Blessed Heart Foundation
- Patron for the 3rd International BMI Autism conference , February 2020
- Nodal office for AFP surveillance since 2000; Empanelled for Brain death certification, Member Staff Council, AIIMS; Member of the AIIMS committees on Accessibility India campaign (Sugamya Bharat Abhiyan), committee on Polio virus containment, Strengthening of Emergency Services at AIIMS, hostel subcommittee on Food court, Member of Anti-Ragging Squad, Member, Scientific Advisory Committee Endowment fund, compassionate use of drugs; Member of Committee to Review proposal for Fellowship in Multiple Sclerosis and Immunology.

- Chairperson, Board for disability assessment and certification. Department of Pediatrics AIIMS and 89 Autism Spectrum Disorder and 214 other disabilities certificates issued in the current year
- **Expert for Developing and updating** Guidelines for diagnosis and management of Childhood epilepsy (**National Guidelines of IAP Oct 2014,2017**) ;**National Advisory Board member of Indian Epilepsy Society** for developing Phenobarbitone - Drug status guidelines; Valproate - Drug status guidelines; Fosphenytoin guidelines **Abstract reviewer and poster faculty guide** in 31st IEC 2015 for **International League Against Epilepsy, AAN** , **Member of Child Neurology and Developmental Neurology work group 2019**
- **Organizing Secretary of Childhood neurodevelopmental disorders workshop 1-3 Dec 2014; launched a mobile based website:** microsite: m.nddworkshop2014.org for neurodevelopmental disorders by honorable Health Minister. **Had conceptualized and was a Expert for developing Framework for Convergent action towards comprehensive care of children with difficulties (MOHFW) December 2014** which was released by the honorable Health Minister at this event. This microsite has now been changed to m.pedneuroaiims.org on 2nd December 2015 and has educational material for physicians and parents on various neurodevelopmental disorders
- National Coordinator of 4 **National Workshops for Training Master Trainers in Autism Tools** along with National trust (August-September 2016, February 2017, April 2017)
- **Co-Organizer for Augmentative and Alternative Communication (2017 and 2020) course** by Action for Ability Development and Inclusion (AADI)
- **Organizing Secretary, Neuropedicon 2018, Annual Conference of Child Neurology Chapter of IAP and Scientific Chairperson for Neuropedicon 2021 and its 5 pre conference workshops**
- **Member of PH reservation in light of “Rights to Disability Act by Ministry of Social Justice 2016”**

Reviewer of Projects

- Medical research Council, UK
- Indian Council for Medical Research
- National Trust
- DST
- DBT
- DGHS
- Biotechnology Industry Research Assistance Council (BIRAC)

Membership of Editorial boards of Journals

- **Editor** for Autism, Sage Journal
- **Review Editor** for Frontiers in Psychiatry: Child and Neurodevelopmental psychiatry (2011 onwards)
- **Associate editor** in Child & Adolescent Psychiatry Section of Frontiers in Psychiatry (Jan 2021 onwards)) Associate editor in Children & Health Specialty Section of Frontiers in Public Health and Frontiers in Pediatrics (Jan 2021 onwards)
- **Editorial Board Member:** Journal of Special Education and Rehabilitation (2013 onwards); International Journal of Epilepsy: **Section Editor:** Pediatric Epilepsy (2013 -2020) Editorial Board member (2021 onwards); Journal of Pediatric Neuroscience (2013 onwards), Behavioural Neurology (2014 onwards)
- **Editorial Board member of JRTDD (Journal for ReAttach Therapy and Developmental Diversities)**
- **Editorial Board member of Annals of Child Neurology**

Reviewer of articles for the following Journals:

- Acta Pediatrics
- Medical Science Monitor
- Pediatric Clinics of India
- Indian Journal of Pediatrics
- Indian Pediatrics
- Neurology India
- Indian Journal of Medical Sciences
- Indian Journal of Clinical biochemistry
- The National Medical Journal of India
- Journal of Pediatric Infectious Diseases
- Journal of Pediatric Neurology
- Journal of Medical Case reports
- American Journal of Medical Genetics
- Journal of Pediatric Epilepsy
- Journal of Pediatric Neuroradiology
- BMJ open
- Case Reports in Paediatrics
- Journal of inherited metabolic disease
- Journal of Bioscience and medicine
- Review editorial board member of Frontiers in Neuropediatrics
- Journal of Pediatric Neurosciences
- Research in Developmental Disabilities
- Journal of Special Education and Rehabilitation
- International Journal of Epilepsy
- Indian Journal of Medical Research
- Medical Sciences
- Journal of the Neurological Sciences
- International Journal of Disability , Development and Education
- Frontiers in Pediatrics
- Child & Adolescent Behaviour
- Annals of Indian Academy of Neurology
- Annals of Medical & Health Sciences Research
- Frontiers in Neurology
- Journal of International Medical Research
- Acta Neurologica Belgica
- JICNA
- Seizure
- BMC Pediatrics
- Journal of Post Graduate Medicine
- Drug Research
- BAOJ Neurology
- Journal of Autism and Developmental disorder
- Current Nutrition and Food Science
- Journal of Emergency Medicine, Trauma and Surgical care
- Meta Gene
- Asian Journal of Psychiatry
- Journal of Ophthalmology and Clinical Research
- Journal of Genetics & Genomic Sciences
- Journal of Child Science
- Epileptic disorders
- Scientific Reports

- Frontiers in Public Health
- Epilepsy Research
- Experimental Biology and medicine
- Bone
- PLOS one
- Developmental Medicine and Child Neurology
- eNeurological Sci
- International Journal of Molecular Sciences
- Iranian Journal of Pediatrics

Examiner and Reviewer for MD/ DCH/ Fellowship/ DM/ PhD

University of South Campus, Delhi

- PGI Chandigarh
- B P Koirala Institute of Health Sciences, Dharan, Nepal
- SGPGI, Lucknow
- Gujarat University (MD and DCH Practical Examiner)
- PhD examiner for JNU
- Baba Faridkot University of Health Sciences (Punjab)
- University of Kerala, Thiruvanthapuram
- Dr MGR Medical University, Tamil Nadu
- Amrita Vishwa Vidyapeetham University, Kochi
- Thesis examiner of M.Tech. student, IIT, Delhi
- PhD examiner for University of Calcutta
- The West Bengal University of Health Sciences, Kolkata
- Pt BD Sharma PGIMS, Rohtak
- Vishwa Vidyapeetham University

Membership of Professional Bodies:

- Founder member, Executive Board Member, Life member of Association of Child Neurology, 2004
- Elected as the Executive Board Member of Child Neurology Chapter of IAP 2017
- Advisory Board Member, Academy of Pediatric Neurology, IAP 2019 onwards
- Chairperson Elect, Academy of Pediatric Neurology, IAP, March 2020
- CO Convenor, Pediatric subsection, Indian Epilepsy Society, 2020
- Executive Board member, Indian Epilepsy Society 2021
- Fellow of Indian Academy of Pediatrics
- Fellow of International Medical Sciences Academy
- Member of National Academy of Medical Sciences
- Life member of Indian Academy of Pediatrics, Delhi branch.
- Life member of Indian Academy of Pediatrics.
- Life member of Neurological Society of India.
- Life member, Indian Epilepsy Society
- Life member, Indian Epilepsy Association
- Life member of International Child Neurology Association.
- Life member of Asian and Oceanian Child Neurology Association.
- Founder member, Life member of Association of Child Neurology
- Life Associate Member, of Indian Academy of Neurology.
- Life member, Genetics Chapter of Indian Academy of Pediatrics.

- Life member, Child Neurology Chapter of Indian Academy of Pediatrics.
- Member, Clinical epidemiological Unit, AIIMS.
- Member, India CLEN
- Member, Childhood Disability Group, Indian Academy of Pediatrics.
- Member, Infantile Seizure Society
- Member, Indian Society of inborn errors of metabolism
- National Advisory Board Member of Indian Rett Syndrome Foundation
- Patron, The Blessed Heart Foundation
- Life Member, Pediatric Research and Education Society of India (PRESiDE)
- Member, American Academy of Neurology 2019
- Member, International Society for Autism Research, 2019 onwards

Other recognition

- Core member of **Indo-Canadian Autism Network** 2019 onwards
- Only Asian for Elicitation Procedure for Clinical significant CARS 2 scoring March 2020
- Member **ICMR Task Force:** IEM, AFP, children in difficult circumstances
- Member of **MClexpert** group for drafting DM (Pediatric Neurology curriculum), Teacher qualifications
- **UGC expert** for evaluating medical universities
- Expert for formulating Comprehensive services for individuals with Autism, **Thiruvanthapuram**
- Expert for module development for strengthening Early childhood intervention program, **Orissa**
- **National Advisory Board Member**, Indian Rett Syndrome Foundation; **Patron**, The Blessed Hearts foundation
- **Scientific Advisory Committee member for Comprehensive Care Centre for various Neurodevelopmental Disorders of Sree Chitra Tirunal Institute of Medical Sciences and Technology, Trivandrum**
- **Scientific Advisory Committee member for Kerala University of Health Sciences, Thrissur**
- **Expert to renew Medical Examination Report of Children to be adopted by CARA**
- Expert to examine reports of **Serious Adverse Events of death** that have occurred in clinical trials, (DCGI); Expert for the **Development of Indian Extrapulmonary TB guidelines**(MOHFW); Expert for **5th National Formulary of India** of Indian Pharmacopoeia commission. MOHFW, **National list of essential medicines**
- **Expert for faculty recruitment** for various hospitals and universities
- **Expert for Neurology projects** for MRC, UK, Indian Council of Medical Research, DBT, DST, National Trust, Drug Controller General of Health Sciences (DGHS)
- Has served/serving as **Editorial Board Member** (6); **Reviewer for various International and National journals** (including BMJ open, Journal of inherited metabolic disease, American Journal of Medical Genetics, Journal of child Neurology,
- Nodal office for AFP surveillance since 2000; Member of the AIIMS committees on Polio virus containment; Strengthening of emergency services; Staff council
- **Member of the NOC Expert Committee of CARA (Central Adoption Resource Authority)**

Professor Sheffali Gulati has been instrumental in transforming the care of children with neurodevelopmental disorders. She has pioneered DM Pediatric Neurology program in South Asia and is doing extensive research. Her contributions in the field of epilepsy, autism, and neuromotor impairments are unmatched and she has touched many a lives by her efforts. With the development of website and mobile apps, she continues to take these efforts to a new level where the parents and physicians in far flung areas of the country can also have access to the best possible recommendation for care.

Center of Excellence and Advanced Research for Childhood Neurodevelopmental Disorders is a stepping stone to take Academics, Clinical Care and Research in Paediatric Neurology to greater heights both at

- Core member of **Indo-Canadian Autism Network** 2019 on wards
- Only Asian for Elicitation Procedure for Clinical significant CARS 2 scoring March 2020
- Member **ICMR Task Force**: IEM, AFP, children in difficult circumstances
- Member of **MClexpert** group for drafting DM (Pediatric Neurology curriculum), Teacher qualifications
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Center of Excellence and Advanced Research for Childhood Neurodevelopmental Disorders is a stepping stone to take Academics, Clinical Care and Research in Paediatric Neurology to greater heights both at National and International level. The translational research envisaged is unique and First of its kind in South Asia.

Sheffali Gulati
30/8/2024

डॉ. शेफाली गुलाटी / Dr. Sheffali Gulati
आचार्य / Professor
सहाय प्रभारी, बाल तंत्रिका विभाग
Faculty I/C, Child Neurology Division
बालरोग चिकित्सा विभाग / Dept. of Pediatrics
अ भा आ सं. नई दिल्ली / A.I.I.M.S., New Delhi-29