CURRICULUM VITAE

Dr. Neha Agrawal
DM (Medical Genetics), DNB (Obstetrics & Gynaecology)
Affiliation:
Assistant Professor
Department of Reproductive Medicine
Dr Ram Manohar Lohia Institute of Medical Sciences,
Lucknow
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Personal details:

- Gender: Female
- Married
- Date of birth: 22-04-1985

During the past 4 years and more, I have been trained in various areas and aspects pertaining to Medical Genetics. I can effectively perform amniocentesis, chorionic villous sampling (CVS), foetal anomaly scan and foetal-autopsy procedures. I have managed Genetic and Haemophilia clinics and wards efficiently, and can thoroughly conduct prenatal and peri-conceptual counselling. In addition, I have exposure to various molecular laboratory techniques like MLPA, cytogenetic microarray, NGS based techniques and possess knowledge of the most commonly used tools and various software used in molecular genetics. I actively participate in various academic activities and programmes of the department.

My special areas of interest are clinical dysmorphism, Fetal Medicine, Reproductive endocrinology, Infertility, diagnosis, counselling and management of genetic disorders, cytogenetic and molecular testing, and genomic research.

Professional goals:

- To create a suitable environment and to develop a sustainable mechanism for education as well as increasing general awareness regarding genetics and genomics.
- To improve and consolidate the existing mechanism in India ensuring timely prevention as well as early diagnosis and treatment of genetic disorders using innovative resource optimization.
- To contribute in genomic research work pertaining to Indian population.

Professional training/ experience:

*A*ssistant Professor Department of Reproductive Medicine, Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow, U.P., India	December 2021- till date
*A*ssistant Professor Department of Medical Genetics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, U.P., India	August 2021- December 2021
DM Medical Genetics Department of Medical Genetics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, U.P., India	August 2018 - August 2021
Senior Resident (Hospital Services)	August 2017 -

Department of Medical Genetics, Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, U.P., India	August 2018
Senior Resident Department of Obstetrics & Gynecology, Hind Institute Of Medical Sciences, Barabanki, U.P. India	Aug 2016 - August 2017
Senior Resident Department of Obstetrics and Gynecology, NDMC Medical College and Hindu Rao Hospital, Delhi, India	August 2015 - Jan 2016
Post-Graduation- Diplomate of National Board (DNB) resident Obstetrics and Gynecology, Batra Hospital & Medical Research Centre, New Delhi, India	April 2012 - March 2015
Junior Resident Department of Medicine, Uttar Pradesh University of Medical Sciences, Saifai, Etawah, Uttar Pradesh, India	March 2011- Feb 2012
Internship M.L.N. Medical College, S.R.N. Hospital, Allahabad, Uttar Pradesh, India	April 2009 – March 2010
Graduation- M.B.B.S. M.L.N. Medical College, Allahabad, Uttar Pradesh, India	July 2004 – March 2009

Registration:

1. Uttar Pradesh Medical Council, India, 58738
2. Member of Indian Academy of Medical Genetics

Thesis and Presentations:

- **<u>THESIS</u>:**
  "*Umbilical cord blood drainage- An effective and safe method for 3rd stage management, A prospective randomized control study"*

- **<u>POSTER PRESENTATIONS</u>:**

1. AOGD 2013,35th Annual conference of AOGD (Association of Obstetricians & Gynecologists of Delhi) – New Delhi, September,2013:
   'Idiopathic thrombocytopenic purpura; a case report.'
2. North Zone Yuva FOGSI-2017:
   'Umbilical cord blood drainage-An effective and safe method for 3rd stage management'
3. Indo-US Symposium on Genetic Neuromuscular Disorders & Sixth Annual Conference of the Society for Indian Academy of Medical Genetics (SIAMGCON 2019):
   '*Phenotypic and Genotypic Spectrum of Patients with Marfan syndrome: A Case Series from a Tertiary Care Centre in Uttar Pradesh.'*
4. International Society for Prenatal Diagnosis – 25th International Conference (ISPD 2021):
   'Novel Compound Heterozygous PLD1 Missense Mutation Causing Autosomal Recessive Tetralogy of Fallot: A Case Report of Twin Brothers from An Indian Family.'
5. International Society for Prenatal Diagnosis – 25th International Conference (ISPD 2021): *'Cytogenetic Microarray in Prenatal Diagnosis in structurally normal and abnormal foetuses: A three-year experience as a second-tier diagnostic test'*
6. 5th Biennial Conference on Primary Immunodeficiency Diseases, SGPGI, Lucknow:
   'T cell immunodeficiency, congenital alopecia and nail dystrophy in an Indian child with a novel FOXN1 gene mutation.'

-PAPER PUBLICATIONS:

1. International Journal of Oral Health and Medical Research | ISSN 2395-7387 | March-April 2016 | Vol 2 | Issue 6- '*Gossypiboma: A Rare Case Report'*
2. **Agrawal N,** Phadke SR. *Peters-Plus with Anal Atresia and a Novel Frameshift Mutation*. Indian J Pediatr. 2020 Jul 11. doi: 10.1007/s12098-020-03416-7. PMID: 32654102.
3. **Agrawal N,** Srivastava P, Phadke SR. *Desbuquois dysplasia Kim variant: a rare case report syndrome.* Clin Dysmorphol. 2021 Jan;30(1):62-65. doi: 10.1097/MCD.0000000000000356. PMID: 33136656.
4. **Agrawal N**, Mandal K. *Rare case of dual diagnosis in consanguineous family: a case report. Clinical Dysmorphology*. 2021 Jul 1;30(3):164-6.
5. Moirangthem A, Mandal K, Saxena D, Srivastava P, Gambhir PS, **Agrawal N**, Shambhavi A, Nampoothiri S, Phadke SR. *Genetic heterogeneity of disorders with overgrowth and intellectual disability: Experience from a center in North India.* American Journal of Medical Genetics Part A. 2021 May 4.
6. **Agrawal N.** Gene Therapies for Genetic disorders: (GeNeXpress, Genetic Clinic, 2020 oct)
7. **Agrawal N,** Kumar R, Masih S, Srivastava P, Singh P, Jaiswal SK, Moirangthem A, Saxena D, Phadke SR, Mandal K. Molecular analysis of severe hemophilia B in Indian families: Identification of mutational hotspot and novel variants. International Journal of Laboratory Hematology. 2022 Feb;44(1):186-92.
8. **Agrawal N**, Verma G, Saxena D, Kabra M, Gupta N, Mandal K, Moirangthem A, Sheth J, Puri RD, Bijarnia-Mahay S, Kapoor S. Genotype-phenotype spectrum of 130 unrelated Indian families with Mucopolysaccharidosis type II. European Journal of Medical Genetics. 2022 Mar 1;65(3):104447.

- ORAL PAPER PRESENTATION:

1. ISIEM (The Indian Society for Inborn Errors in Metabolism) 2019, Pune, India- '*Experience of Enzyme replacement therapy In Fabry disease'.*
2. Clinical Grand Round (Department of Pathology, SGPGI): *Lysosomal Storage Disorders Rare Disorders- Primarily Diagnosed on Bone Marrow Biopsy*.

- UNDER REVIEW:

1. Utility of morphologic assessment of bone marrow biopsy in diagnosis of lysosomal storage disorders (Indian Journal of Pathology)

Conferences/ CMEs/Symposium/Course/Workshops attended:

1. AOGD 2012,34th Annual conference of AOGD (Association of Obstetricians & Gynecologists of Delhi) – New Delhi, September 2012
2. FOGSI KEY Programme on recurrent pregnancy loss, July 2013
3. AOGD 2013, 35th Annual conference of AOGD (Association of Obstetricians & Gynecologists of Delhi) – New Delhi, September,2013
4. 1st INTERNATIONAL CONFERENCE on reproduction, fertility and surrogacy, May 2014
5. Workshop on IVF-Embryology,1st International Conference on reproduction, fertility and surrogacy, May 2014
6. 17th Practical course & CME in Obstetrics & Gynecology, MAMC, New Delhi, August 2014
7. CME on diagnosis and management of cervical intraepithelial lesions, Hamdard Institute of Medical Sciences and Research, New Delhi, March 2015

8. AOGD 2015, 37th Annual conference of AOGD (Association of Obstetricians & Gynecologists of Delhi) – New Delhi
9. North Zone Yuva FOGSI-2017, Lucknow
10. Participant at the 17th ICMR course on Medical Genetics & Genetic counseling (August 2018) at SGPGIMS, Lucknow.
11. ISIEM (The Indian Society for Inborn Errors in Metabolism) 2019, Pune
12. Participated as Demonstrator in the 18th ICMR (Indian Council of Medical Research) course on Medical Genetics & Genetic counseling (26/08/2019-07/09/2019) at SGPGIMS, Lucknow.
13. Indo-US Symposium on Genetic Neuromuscular Disorders & Sixth Annual Conference of the Society for Indian Academy of Medical Genetics (SIAMGCON 2019).
14. SSIEM inherited metabolic disease training course 2020, New Delhi.
15. Virtual | Human and Mammalian Genetics and Genomics: The 61st McKusick Short Course July 20 to 30, 2020
16. Virtual workshop: MLPA Raw Data Evaluation and Troubleshooting, 17 Feb 2021
17. Hands-On Workshop on Next Generation Sequencing Data Analysis for Clinical Diagnostics at National Genomics Core, CDFD, Hyderabad, 1st to 5th March, 2021
18. Basics of CRISPR/Cas9
19. International Society for Prenatal Diagnosis – 25th International Conference (ISPD 2021)

Main areas of interest:

- Cytogenetics
- Molecular techniques
- Diagnosis, counselling and management of genetic disorders
- Fetal Medicine
- Genomic research
- Clinical dysmorphism

Skill Highlights:

- Highly observant and detail-oriented
- Conceptualizing and devising novel ways to expand the quality of learning and scope of medical education
- Excellent computer and technology skills and knowledge of genetic software
- Superior problem solving and decision-making skills
- Strong verbal and written communication skills
- Resource optimization and management
- Ability to organize and manage tasks with a team-based approach
- Supervise, train and mentor junior staff

Teaching and curriculum development:

- Seminars for faculty/ residents/nursing staff
- Case presentations and Journal clubs
- Tutorials for students and nursing staff