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To Whom It May Concern,

I am writing with great pleasure to recommend **Ms. Sumaira Gulzar** (Passport No. **CB4713311**), who worked under my supervision for six months at the **Queen Square Institute of Neurology, University College London (UCL)**, where she was engaged in her doctoral research project titled: **“Genetic Analysis of Cerebrovascular Accident in Young Patients”**. During her time in our lab, **Ms. Sumaira Gulzar** consistently demonstrated that she is an exceptional young researcher. She possesses a sharp intellect, a strong work ethic, and a genuine passion for scientific inquiry. Sumaira made meaningful contributions to ongoing research projects, while simultaneously advancing her own doctoral work with impressive independence, focus, and precision.

Her technical skills are comprehensive and well-developed. She gained hands-on experience in advanced molecular biology and genetic analysis techniques, including:

- Primer designing and PCR optimization
- Gel electrophoresis and Sanger sequencing
- Exome sequencing
- Genotyping array analysis using GenomeStudio and PLINK
- Application of cutting-edge bioinformatics tools such as *PolyPhen-2*, *SNPs&GO*, *PHD-SNP*, *P-Mut*, *Mutation Taster*, *I-Mutant 3.0*, *MUpro*, *DynaMut2*, *HOPE server*, and *Franklin*
- Protein modeling using Swiss-Model
- Molecular docking for structural and functional analysis of variants
- Scientific research writing, variant interpretation, and data management

Sumaira actively participated in several high-level seminars including:

- Multiple System Atrophy and Neurodegeneration
- Phenome-wide Association Studies (PheWAS) and Tandem Repeats in Human Disease
- Gene & Cell Therapy Innovations
- Mitochondrial Phenotypes Across Neurodegenerative Diseases
- Creating the Right Mindset for Your Team (professional development)

Additionally, she successfully completed several academic and research-oriented training sessions, including:

- Introduction to EndNote
- Introduction to PubMed
- Literature Searching Strategies
- Writing Data Management Plans

What distinguishes Sumaira is not only her technical acumen but also her critical thinking, collaborative spirit, and adaptability. She worked well both independently and as part of a team, showing initiative and enthusiasm in tackling complex research questions. Her communication skills, both written and verbal, are excellent, and she consistently demonstrated the ability to present data clearly and persuasively.

I am confident that Sumaira will excel in any academic or professional research environment she chooses to pursue. She brings with her a solid foundation in genetics and molecular biology, and a commitment to scientific excellence. I strongly support her application for employment and believe she will be a valuable asset to any research team or scientific institution. Please feel free to contact me should you require further information.

Yours sincerely,



Henry Houlden,
Professor of Neurology and Neurogenetics