Statement of Research Achievements

AWARDS/RECOGNITION:

1. **Received Honour from the Academic Panel of India for Science for Women: Technology and Innovation "SWATI"** (2024).

2. **Prof. G.P. Talwar Young Scientist Award** by the Indian Society for the Study of Reproduction & Fertility (ISSRF) on 13th February (2022).

3. **Dr. Mridula Kamboj Young Scientist Award** by the Indian Society for the Study of Reproduction and Fertility (ISSRF) on 16th February (2020).

4**. International Brain Research Organization (IBRO) Translational** Neuroscience Research Grant in DHAKA, Bangladesh (2017).

5. International Brain Research Organization (IBRO) Neuroscience Research Grant in Malaysia (2013). Research worked on "*Identification of novel marker gene: Brain Sex Differentiation*"

6.Best work presentation Award at the 35th Annual meeting of SRBCE, University of Hyderabad (2017).

7. Siva Gayathri Memorial Award at the Meet of the Society for Biotechnologists, Chennai (2016).

DST Funded Research Fellowship:

1. Awarded Women Scientist, Department of Science and Technology, Ref SR/LS-303/2017 (2018).

2. Awarded Women Scientist, Department of Science and Technology, Ref SR/LS-36/2014 (2014).

The details of the research fellowship projects are as follows:

1. **Regulation of Tyrosine hydroxylase: Implication on catecholamines in normal & neurodegenerative stress.**

- Funding Body & Ref No.: Department of Science and Technology (DST), & Ref. No. SR/WOS- A/LS-303/2017

- Principal Investigator

- Fellowship Amount: Rs. 34 Lakhs 54 Thousand

2. Understanding the impact of transforming growth factors and neurotrophin on the regulation of brain and functions

- Funding Body & Ref No.: Department of Science and Technology (DST) & Ref. No: SR/WOS- A/LS -36/2014

- Principal Investigator

- Fellowship Amount: Rs. 29 Lakhs 20 Thousand

Brief Research Citation

In brief, research focused on understanding the molecular mechanisms involving brain signaling molecules, specifically Glial Cell Line-Derived Neurotrophic Factor (GDNF) via its receptors (GFRα-1,4), Transforming Growth Factor (TGF), and other related essential transcription factors. This research aims to understand how these mechanisms establish gene expression patterns crucial for neuronal development and functions. Research work would explore potential applications in targeting MPTP-neurodegenerative disorders and regenerative approaches to improve overall health outcomes.

Publications and Presentations: "I published a peer-reviewed article in *Journal of* ***Neurotoxicology and Teratology, and Brain Research Bulletin*** **"**demonstrating the neural mechanisms underlying neurodegeneration. "I presented our findings at the International Conference on Molecular Signalling 2024."

Awards and Honors: I received the Prof G.P. Talwar Young Scientist Award for my work and recognized our research with DST a prestigious Research grant and also recognized by International Brain Research Organization (IBRO) twice.