CHOATE

Neha Koundinya, PhD

Staff Scientist

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Practice Areas

Intellectual Property Protection

Education

Brandeis University
PhD (2024) Molecular and Cell Biology

Brandeis University
MS (2020) Biotechnology

DY Patil University
B.Tech (2018) Biotechnology

Dr. Neha Koundinya assists Choate's life sciences clients by utilizing her background in molecular and cell biology as well as biotechnology to help with the preparation and prosecution of patent applications, as well as freedom-to-operate and patentability analyses.

Industry Experience

Prior to joining Choate, Neha received her PhD from Brandeis University. While there, she worked in Dr. Bruce Goode's Lab doing her doctoral research. This included designing and optimizing biochemical assays for *in vitro* reconstitution of cytoskeletal networks. Her work focused on understanding actin network turnover and she performed single molecule imaging using TIRF microscopy to elucidate the mechanisms. Additionally, Neha also worked as a graduate research assistant in this lab, while pursuing her M.S Biotechnology degree. During this time, her work focused on using mammalian cells to understand how motile cells migrate, by studying the regulation of actin assembly in the leading edge of the cell using confocal microscopy.

Publications and Presentations

- "Crn1 and GMF directly interact and synergize in pruning actin filament branches," first author, *Journal of Biological Chemistry*, March 2025
- "Direct observation of cortactin protecting Arp2/3-actin filament branch junctions from GMF-mediated destabilization," co-author, *European Journal of Cell Biology*, Jan 2024
- "S. cerevisiae coronin and GMF form a complex that binds Arp2/3 and catalyzes debranching," poster presenter, Annual Meeting of the American Society for Cell Biology, Dec 2023
- "Yeast coronin synergizes with GMF to prune actin branches," poster presenter, Annual Meeting of the American Society for Cell Biology, Dec 2022
- "Mammalian and yeast coronins use their 'unique' domains to promote actin filament debranching by distinct mechanisms," poster presenter, Plant and Microbial Cytoskeleton, Gordon Research Conference, Aug 2022
- "WAVE1 and WAVE2 have distinct and overlapping roles in controlling actin assembly at the leading edge," co-author, *Molecular Biology of the Cell*, Sept 2020