



Nicole M. Fisher, PhD

STAFF SCIENTIST

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Dr. Nicole Fisher assists Choate's life sciences clients by leveraging her expertise in molecular and cellular biology, RNA-based gene regulation, epigenetics, and genome engineering to help with the preparation and prosecution of patent applications, as well as freedom-to-operate analyses.

Prior to joining Choate, Nicole was a postdoctoral research associate at Harvard University, where she investigated small RNA-driven epigenetic inheritance. Her research combined genomic, molecular, and computational approaches to identify and characterize transgenerational epigenetic pathways modulated by nutritional and microbiome feedback.

Nicole received her PhD in Biology from Harvard University. Her doctoral research examined the interplay between environmental inputs, microbiome composition, and heritable gene regulation. To investigate these processes, she used CRISPR/Cas9 genome editing, transcriptomic analyses, quantitative RT-PCR, fluorescence microscopy, mass spectrometry, and paired small RNA and mRNA next-generation sequencing.

Focus Areas

Intellectual Property
IP Counseling

Publications and Presentations

- "Efficient iterative CRISPR/Cas9 editing using *sid-1* co-conversion and feeding RNAi in *Caenorhabditis elegans*," co-first author, G3: Genes/Genomes/Genetics, May 2025
- "Inheritance of *sid-1* epigenetic silencing is modulated by bacterial diet and growth temperature," poster, International *C. elegans* Conference, June 2023
- "Don't put all your epigenetic eggs in one basket," co-author, *Nature Cell Biology*, July 2022

Education & Credentials

- Harvard University, PhD (2024) Biology & AM (2018) Biology
- University of California, Santa Barbara, BA (2016) Developmental Neurobiology, *magna cum laude*