Short Bio

Anna Krichevsky is a Professor of Neurology at Brigham and Women's Hospital and Harvard Medical School (HMS). She earned her Ph.D. at the Hebrew University of Jerusalem and completed postdoctoral training at HMS, where she conducted pioneering research on microRNA functions and RNA interference in brain physiology and pathology. Her notable achievements include isolating neuronal RNA granules, performing the first successful RNA interference in mammalian neurons, identifying brain-specific miRNAs, developing the first miRNA expression profiling array, and discovering key miRNAs such as oncogenic miR-21 and miR-10b—targets for glioblastoma and other cancers—as well as neuroprotective miRNAs like miR-132.

Her lab focuses on regulatory RNAs, including miRNAs and long non-coding RNAs, in malignant brain tumors and neurodegenerative diseases such as Alzheimer's. She has led the way in identifying miRNA biomarkers for brain tumor diagnostics and monitoring. Current research goals include: 1) discovering additional regulatory RNA drivers of brain pathologies, 2) exploring the biological roles and biomarker potential of extracellular RNA in brain diseases, 3) identifying targetable RNA-associated hubs, and 4) developing RNA-targeting therapies for glioblastoma and neurodegenerative conditions. This groundbreaking work is driving the clinical translation of RNA research into innovative therapies for some of the most complex and unmet needs in human brain pathologies. Dr. Krichevsky is a recipient of multiple awards, including the Sontag Distinguished Scientist award. She has also served on the Board of the Harvard Initiative for RNA Medicine for the past ten years, which she now co-directs.