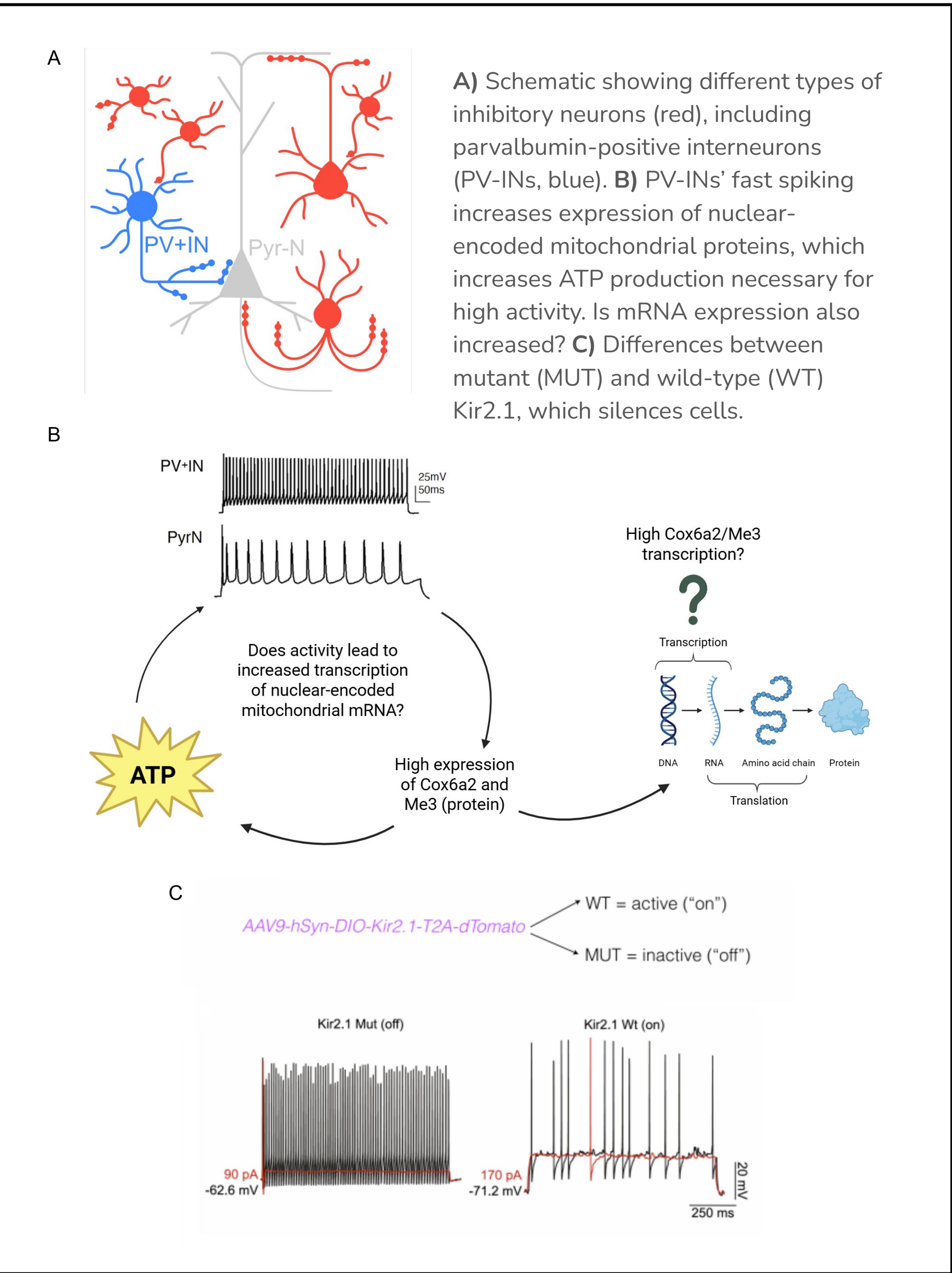


Investigating Activity-Dependent Transcription of Mitochondrial Genes in Parvalbumin-Positive Interneurons

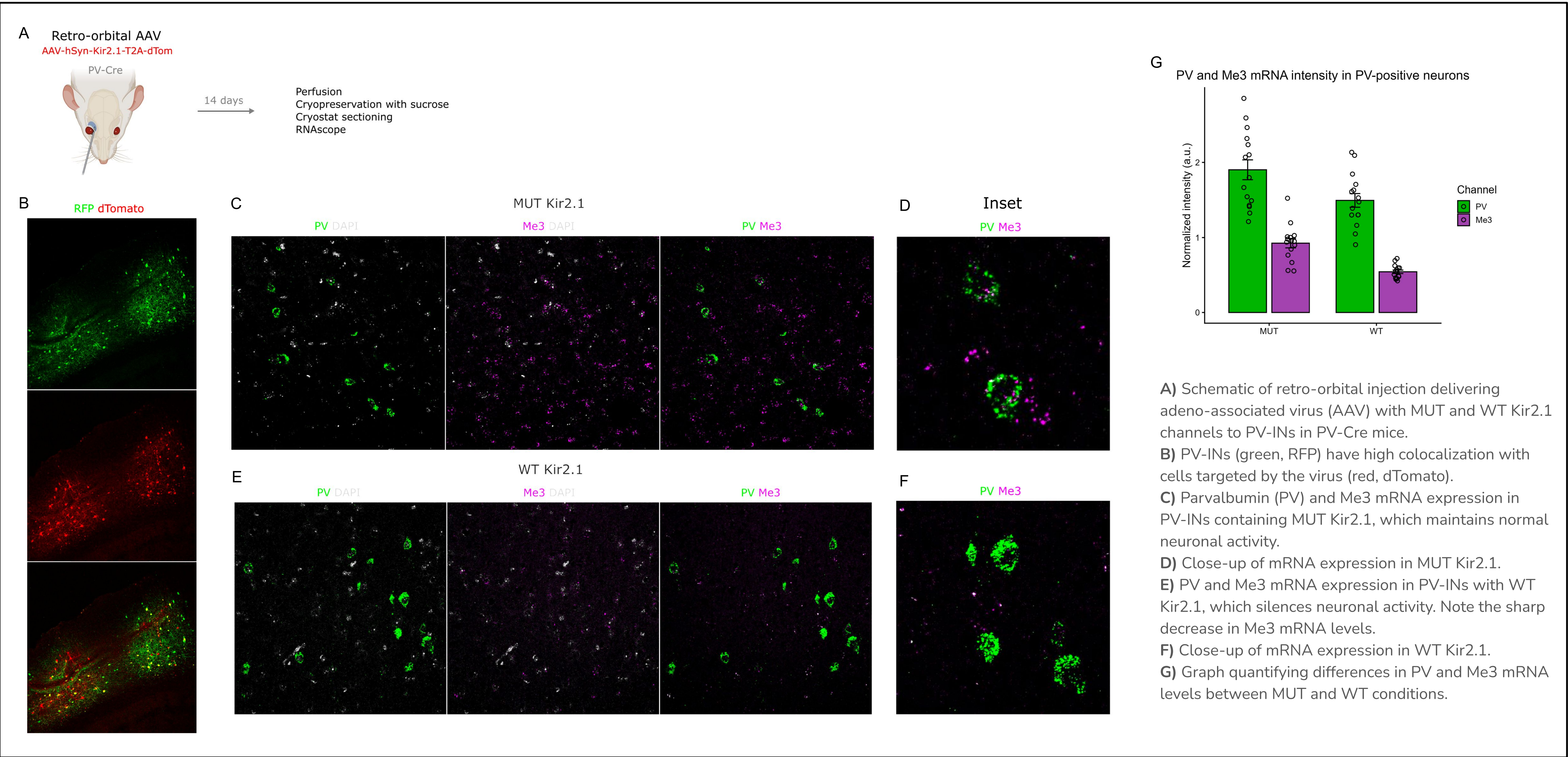
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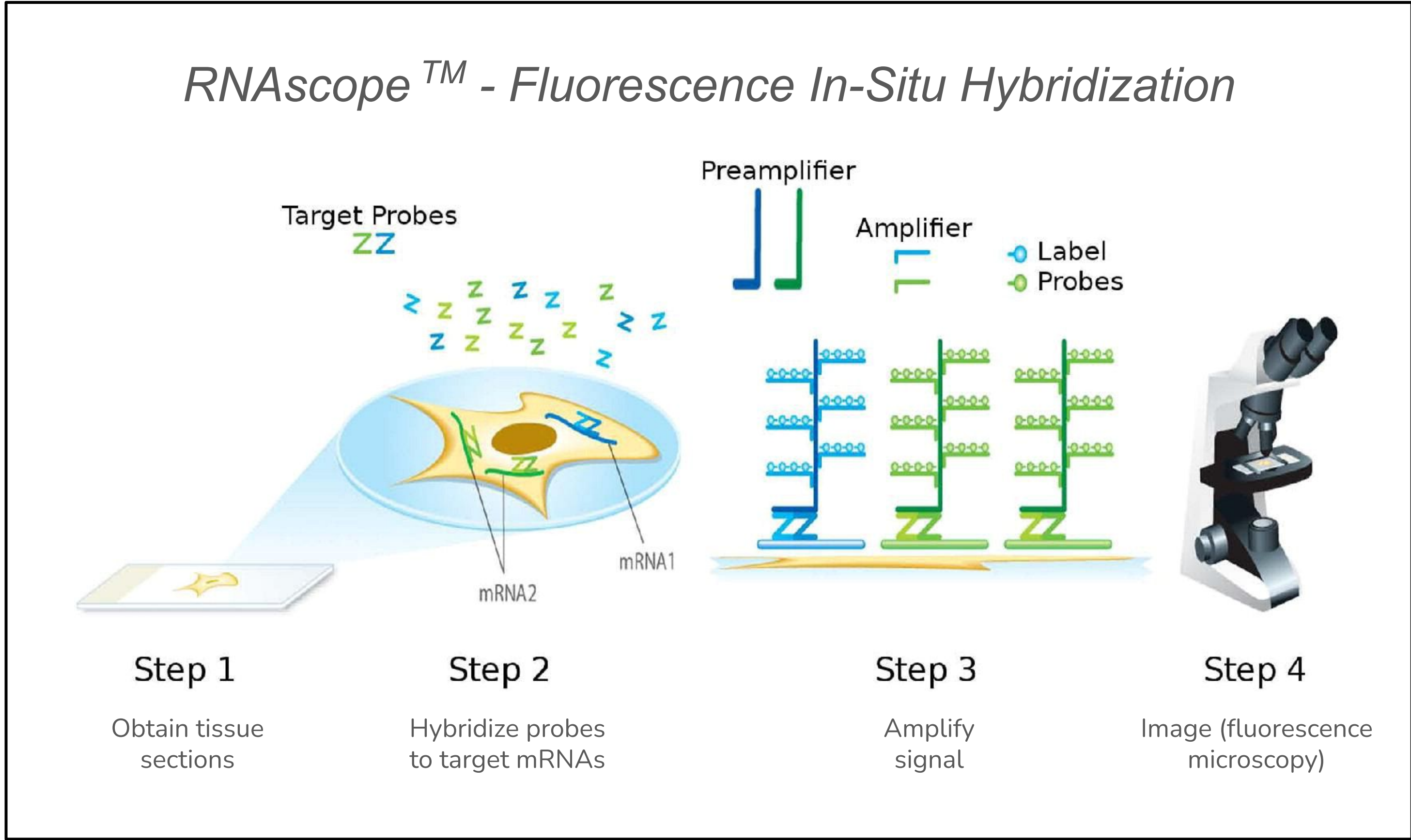
Introduction



Results



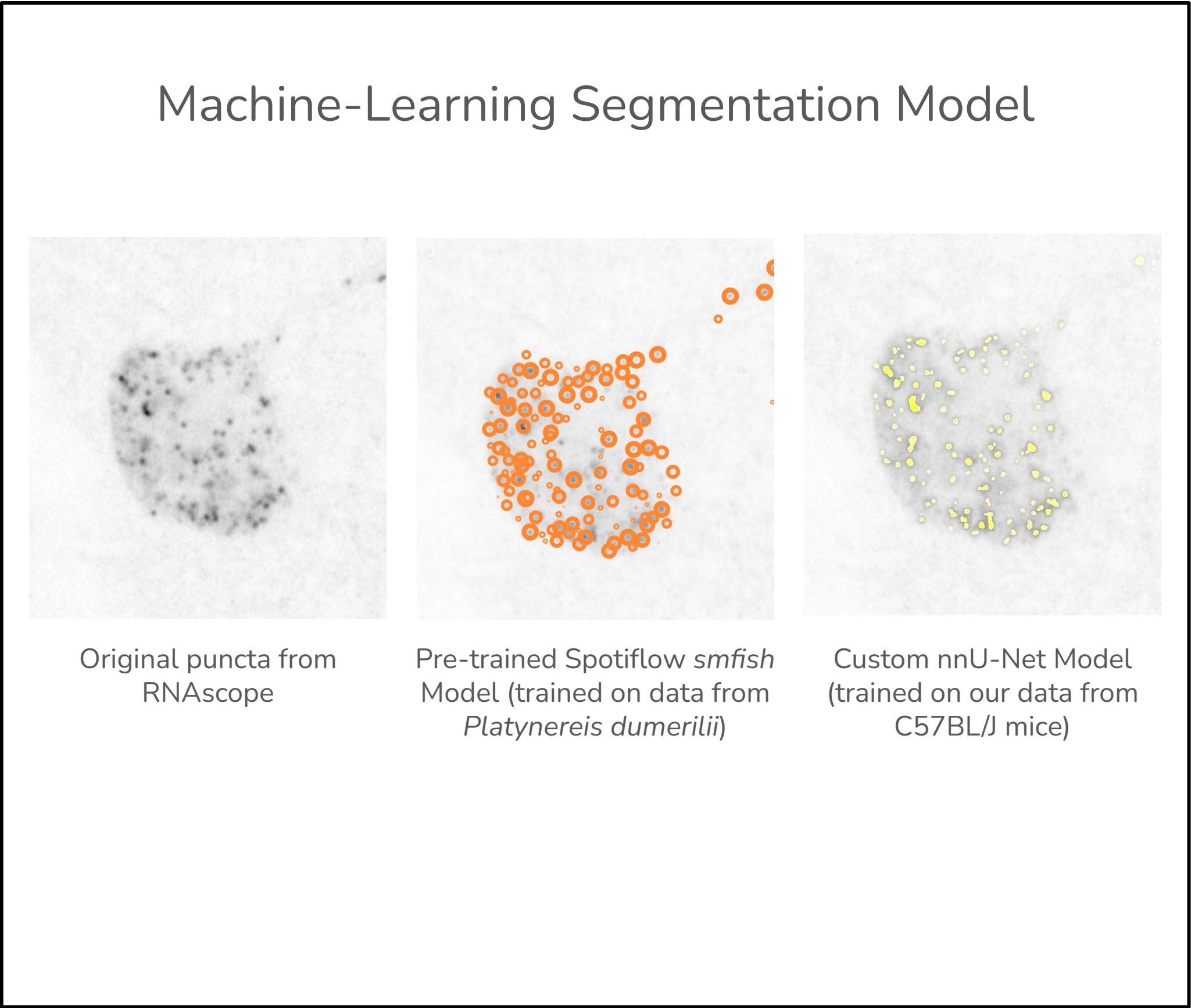
Methods



Discussion

- Preliminary Findings: Me3 mRNA expression in PV-INs seems to be dependent on neuronal activity
- Disrupted PV-IN activity in Alzheimer's disease (AD) (Hijazi et al., 2019) likely affects Me3 transcription, which in turn affects PV-INs' ability to produce ATP and function normally.
- Developing treatments that focus on transcription can be especially effective in restoring PV-IN activity, improving memory and hippocampal network function, and reducing amyloid plaque deposition, ultimately improving AD progression and improving patients' lives (Hijazi et al., 2019).

Next Steps



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References

1. Hijazi, S., Smit, A. B., & Ronald. (2023). Fast-spiking parvalbumin-positive interneurons in brain physiology and alzheimer's disease. *Molecular Psychiatry*, 28. <https://doi.org/10.1038/s41380-023-02168-y>