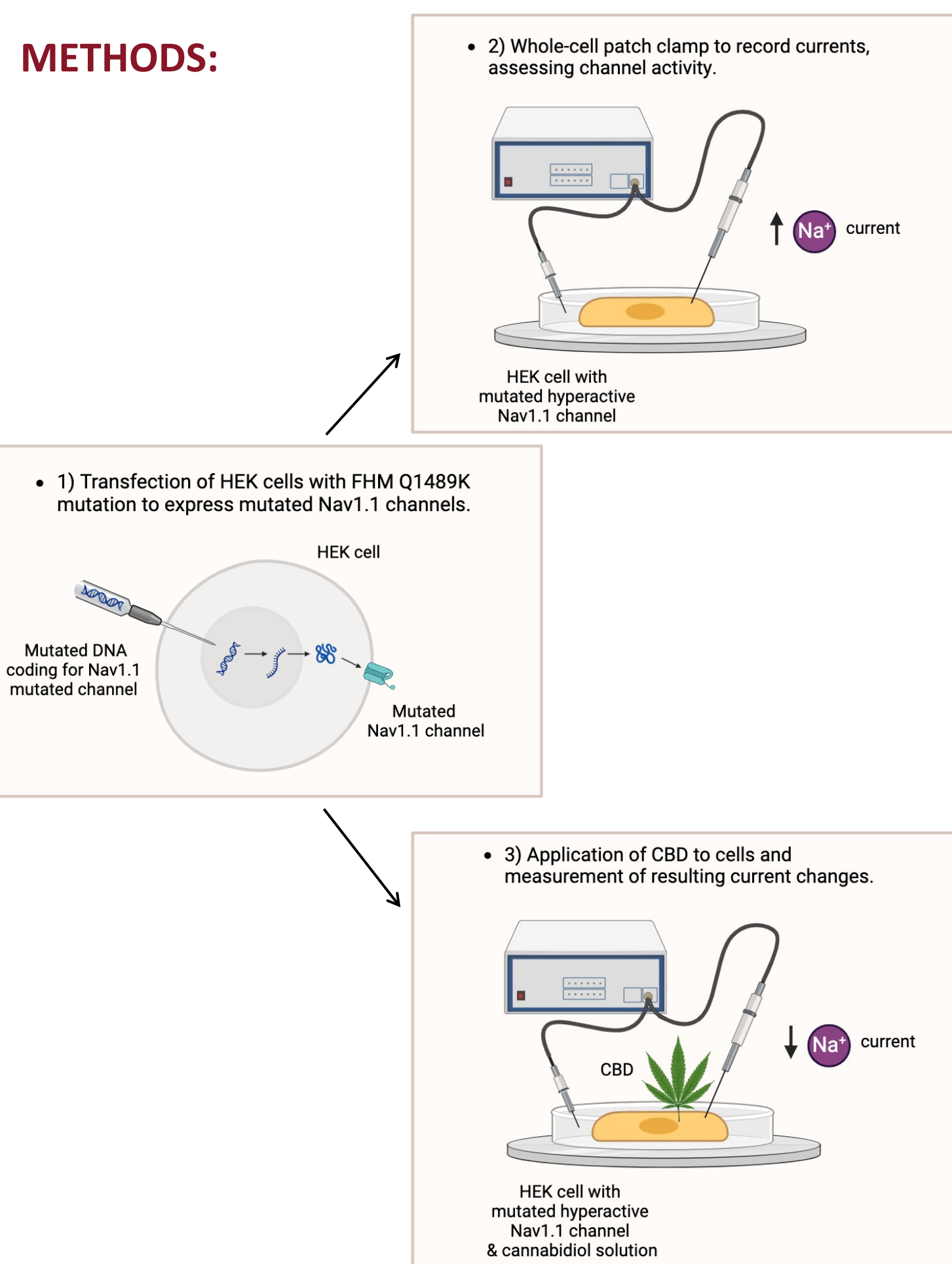


# CANNABIDIOL AS A POTENTIAL TREATMENT FOR FAMILIAL HEMIPLEGIC MIGRAINES

## BACKGROUND:

- Voltage-gated sodium channels (Nav1.1): key in action potentials (in brain); dysfunction leads to diseases like Familial Hemiplegic Migraine (FHM).
- FHM caused by Nav1.1 mutations: results in neuronal hyperexcitability and migraines.
- CBD modulates mutated Na<sup>+</sup> channels' activity, reducing hyperexcitability.
- CBD's efficacy on Na<sup>+</sup> channels for FHM symptom relief.

## METHODS:



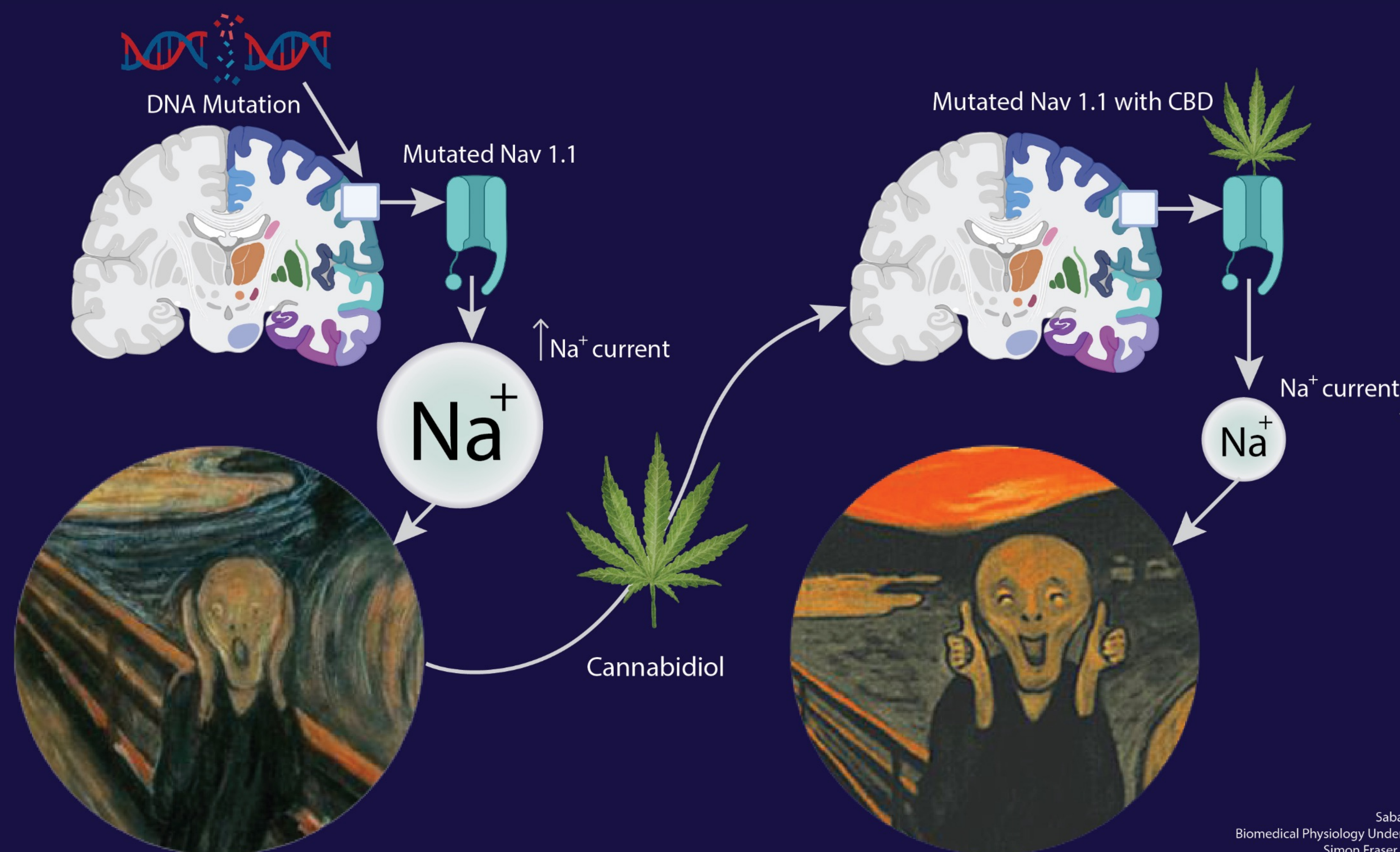
## RESULTS:

- CBD reduces excitability in mutated Na<sup>+</sup> channels linked to FHM.
- Suggests CBD's potential as a treatment for sodium channel-related diseases.

## DISCUSSION:

- Implications: CBD may be a viable treatment for FHM and similar conditions.
- Next steps: Clinical trials to verify CBD's therapeutic role.

# CBD lowers excitability in defective sodium channels that cause Familial Hemiplegic Migraine



Familial Hemiplegic Migraines

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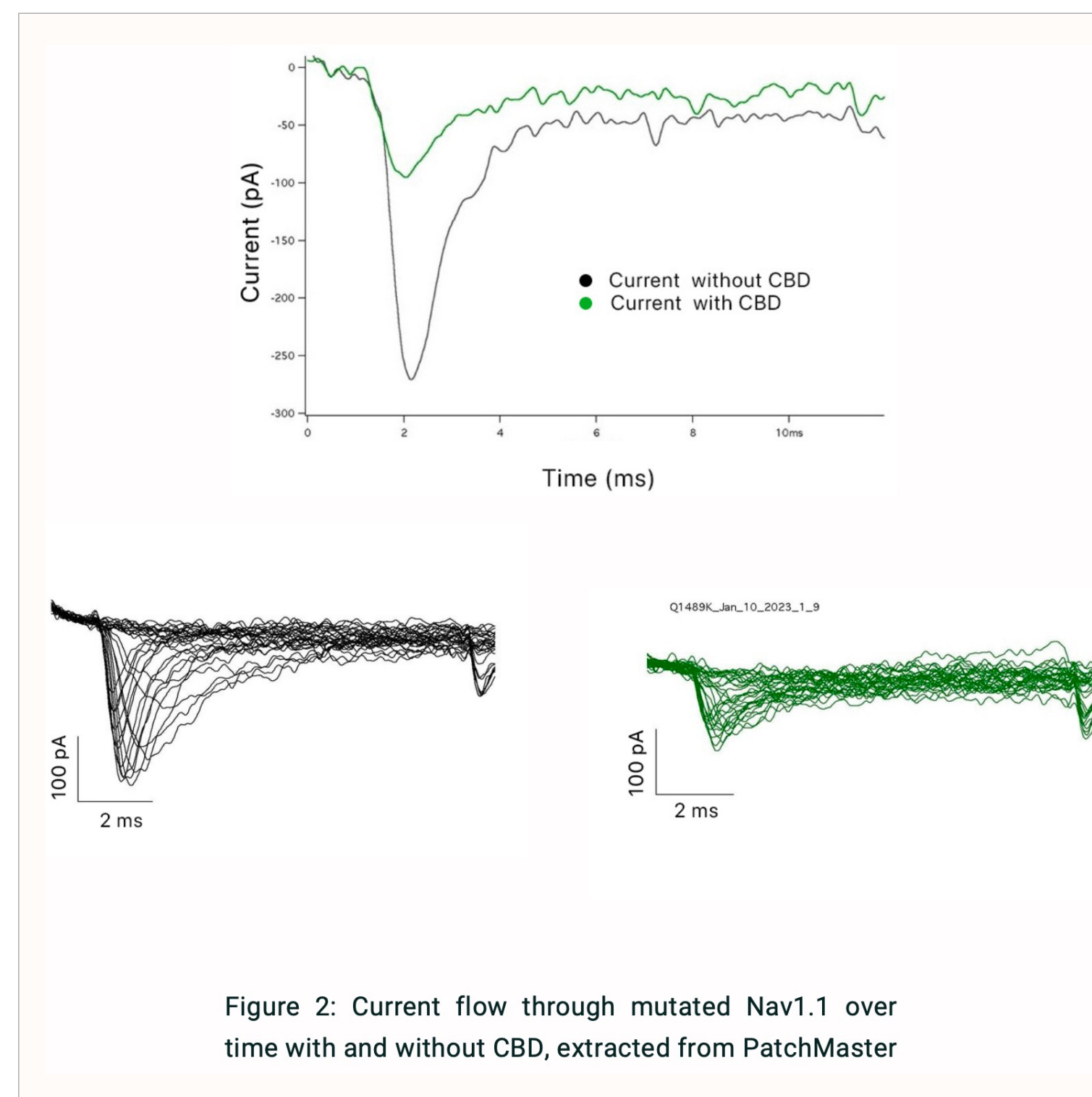
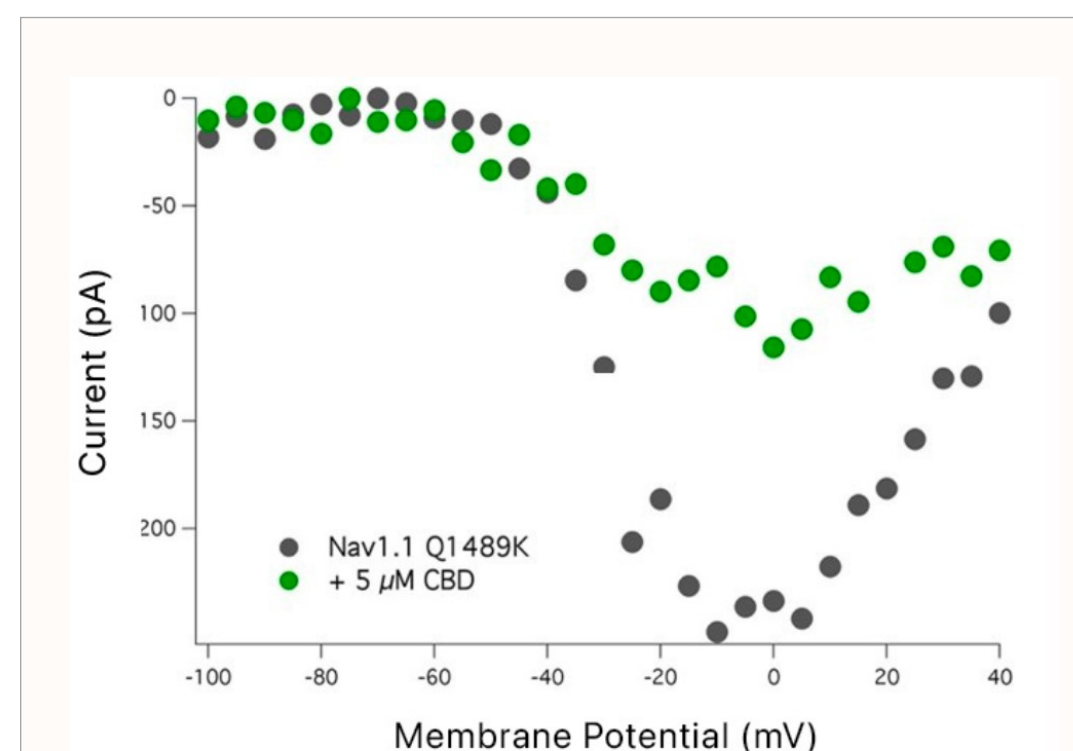
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## FIGURES:



## REFERENCES:

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- [2] Kahlig et al., 2008. PNAS Biological Sciences. <https://doi.org/10.1073/pnas.0711717105>
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