

VERSION 2

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OPEN ACCESS



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♠ Do, Q. B. et al. (2023) Early deficits in an in vitro striatal microcircuit model carrying the Parkinson's GBA-N370S mutation V.2

Quyen Do^{1,2,3}, Humaira Noor^{1,2,3}, Ricardo Marquez Gomez^{1,2,3}, Kaitlyn M L Cramb^{1,2,3}, Bryan Ng^{1,2}, Ajantha Abbey^{1,2}, Naroa Ibarra-Aizpura^{1,2}, Maria-Claudia Caiazza^{1,2,3}, Parnaz Sharifi^{1,2}, Charmaine Lang^{1,2,3}, Dayne Beccano-Kelly^{1,2}, Jimena Baleriola^{4,5}, Nora Bengoa-Vergniory^{1,2,3,4,5,5}, Richard Wade-Martins^{1,2,3}

¹Oxford Parkinson's Disease Centre and Department of Physiology, Anatomy and Genetics, University of Oxford, South Park Road, Oxford OX1 3QU, United Kingdom;
²Kavli Institute for Neuroscience Discovery, University of Oxford, Dorothy Crowfoot Hodgkin Building, South Park Road, Oxford OX1 3QU, United Kingdom;
³Aligning Science Across Parkinson's (ASAP) Collaborative Research Network, Chevy Chase, MD, 20815, USA;

Team Cragg



Cláudia C. Mendes

ABSTRACT

This collection contains ten protocols detailing methods used in Do, Q. B. *et al.* (2023) *Early deficits in an* in vitro *striatal microcircuit model carrying the Parkinson's GBA-N370S mutation.*

⁴Achucarro Basque Center for Neuroscience, Leioa, Spain;

⁵Ikerbasque - Basque Foundation for Science, Bilbao, Spain



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FILES



SEARCH

Protocol



NAME

Expansion and maintenance of human induced pluripotent stem cells (iPSCs)

VERSION 1

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NAME

Custom open-chamber microfluidic fabrication

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NAME

Differentiation of human Dopamine Neurons (DaNs) from induced pluripotent stem cells (iPSCs)

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Differentiation of human cortical neurons (CNs) from induced pluripotent stem cells (iPSCs) and their coculture with rat astrocytes

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Differentiation of human medium spiny neurons (MSNs) from induced pluripotent stem cells (iPSCs)

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Immunocytochemistry of cultured human Medium Spiny Neurons (MSNs)

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Visualisation and quantification of dendritic spines in cultured human Medium Spiny Neurons (MSNs)

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Whole-cell patch-clamping of cultured human neurons

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Measuring dopamine release in human-derived iPSCs using High-Performance Liquid Chromatography (HPLC) coupled to Electrochemical Detection (ECD)

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Quantification of glutamate released from human induced pluripotent stem cells (iPSC) derived cortical neurons (CNs)

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