

# The neural substrates of risky rewards and losses in healthy volunteers and patient groups: a PET imaging study

**Nikolina Skandali MD PhD<sup>1,2</sup>, Joonas Majuri MD PhD<sup>\*3,4,5</sup>, Juho Joutsa MD PhD<sup>3,4,6</sup>, Kwangyeol Baek PhD<sup>1</sup>, Eveliina Arponen MSc<sup>4</sup>, Sarita Forsback PhD<sup>4</sup>, Valteri Kaasinen MD PhD<sup>3,4,6</sup>, Valerie Voon MD PhD<sup>\*1,2,7</sup>**

<sup>1</sup>Department of Psychiatry, University of Cambridge, Cambridge, United Kingdom

<sup>2</sup>Cambridgeshire and Peterborough NHS Foundation Trust, Cambridge, United Kingdom

<sup>3</sup>Department of Neurology and Turku Brain and Mind Center, University of Turku, Turku, Finland

<sup>4</sup>Turku PET Centre, University of Turku, Turku, Finland

<sup>5</sup>Department of Neurology, Päijät-Häme Central Hospital, Lahti, Finland

<sup>6</sup>Division of Clinical Neurosciences, Turku University Hospital, Turku, Finland

<sup>7</sup>NIHR Biomedical Research Centre, University of Cambridge, United Kingdom

## Acknowledgements

Nikolina Skandali is supported by an Academic Clinical Fellowship by the University of Cambridge. Joonas Majuri is supported by the Finnish Foundation for Alcohol Studies. Juho Joutsa is supported by the Academy of Finland (grant # 295580), the Finnish Medical Foundation, and the Finnish Foundation for Alcohol Studies. Valteri Kaasinen is supported by the Academy of Finland (grant # 256836), the Finnish Foundation for Alcohol Studies and Turku University Hospital ERVA grants. Valerie Voon is supported by a Medical Research Council Senior Clinical Fellowship (MR/P008747/1). The authors declare no relevant conflicts of interests.

