

## Position Information

College/Management Unit	UCD College of Health and Agricultural Sciences
School/Unit	UCD School of Medicine
Post Title	UCD Post-doctoral Research Fellow Level 1
Project	Gene Therapy of Parkinson's Disease
Post Duration	1 year
Reports to / Principal Investigator	Dr Tsanov

## Position Summary

Applications are invited for a 1-year post of a UCD Post-Doctoral Research Fellow Level 1 within UCD School of Medicine. The research investigates Parkinson's disease (PD), the pathogenesis of which involves dominantly-inherited genetic causes. The most frequent locus of mutation is the leucine-rich repeat kinase 2 (LRRK2) and genetic errors or variations within the LRRK2 gene result in enhanced formation of abnormal protein,  $\alpha$ -synuclein. Presently, no treatments are able to stop the progression of PD and the symptomatic therapy affects only the motor deficits. To develop disease-modifying treatment and to address motor and cognitive symptoms we combine gene therapy and optogenetics in rodent models of PD. The project aims to assess the progression of memory impairment compared to the motor symptoms, explore the effect of RNA-based gene therapy on the memory formation and spatial navigation and establish whether septal optogenetic stimulation will induce memory augmentation.

## Applicant Requirements

Applicants must have, or expect to have, PhD degree. Experience with rodent stereotaxic surgery is essential. Candidates will have excellent current knowledge of the literature in the field of neuroscience, experience with intracranial injections and implantations in rodent brain and behavioural training of rodents. The candidates should be able to work with cryostat, perform immunohistology and maintain laboratory equipment.

## Application Details

Applicants should submit the following as a single .pdf document to [marian.tsanov@ucd.ie](mailto:marian.tsanov@ucd.ie) :

1. A cover letter outlining their interest in the project and any relevant experience
2. A detailed CV (including a list of any publications if applicable)
3. The names and contact details of two academic referees

Duration: 1 year

Salary range: €37,874 - €40,221 per annum

Closing date: 17:00hrs (local Irish time) on 25 August 2020.