Post Specification

<table>
<thead>
<tr>
<th>Post Title:</th>
<th>Post-Doctorate Researcher in Psychiatry</th>
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<tbody>
<tr>
<td>Post Status:</td>
<td>1 year full-time</td>
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<tr>
<td>Department/Faculty:</td>
<td>Department of Psychiatry</td>
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<tr>
<td>Location:</td>
<td>Trinity College Institute of Neuroscience, Lloyd Building</td>
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<tr>
<td>Salary:</td>
<td>€34,974 per annum</td>
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<tr>
<td>Closing Date:</td>
<td>12 Noon on Friday 22\textsuperscript{nd} November</td>
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Post Summary
A post-doc position is available in the Research Group Integrated Neuroimaging, Department of Psychiatry, Trinity College Dublin for the duration of 1 year. The project is within the area of neuroimaging of ADHD.

While this position is based primarily in Trinity College Institute of Neuroscience, Lloyd Building, it may involve some time working at the Adelaide and Meath Hospital, Trinity Health Centre in Tallaght.

Background to the Post
Attention Deficit Hyperactivity Disorder (ADHD) persists into adulthood, however, it is largely unknown which clinical and neuropsychological predictors exist. We are not aware of the functional and microstructural brain changes that remit or persist in diagnosed ADHD patients later on and we do not have any diagnostic markers that could facilitate the diagnosis of the disease in adults. There is therefore an urgent need to investigate the outcome of patients with ADHD and to investigate whether there are functional and microstructural brain changes associated with clinical outcome.

Standard duties of the Post
In this project innovative and state-of-the-art structural and functional neuroimaging modalities (functional MRI, structural MRI, Diffusion Tensor Imaging (DTI)), neuropsychological testing and careful clinical assessments will be applied in order to investigate above mentioned aims in 80 patients with ADHD and 40 healthy controls known from our children GWAS study.

Funding Information
This project is funded by HRB Ireland.

Person Specification

Qualifications
The appointee should have a Ph.D. in the area of neuroscience.
Knowledge & Experience (Essential & Desirable)
The ideal candidate will have experience in neuroimaging analysis. The main part of the work will be the analysis of multimodal imaging data, e.g. the analysis of fMRI data together with DTI data. Moreover, it is the aim to apply methods for connectivity analysis of fMRI data.

Skills & Competencies
Neuroimaging data preprocessing and neuroimaging data analysis. Ideally experience with SPM and FSL.

Department Summary

General Department Information
The research group has its disciplinary background within the Department of Psychiatry. It has close associations with the Trinity College Institute of Neuroscience (TCIN) and Molecular Medicine Ireland. The following research methods and skills are used: Phenomenology, clinical epidemiology, clinical research, treatment trials, cell and molecular biology, population genetics, molecular genetics, genomics, proteomics, structural and functional neuroimaging, neural engineering, neurophysiology, neuropsychology and neurocognition.
Moreover, the research group plays an important role within the Irish Clinical Research Infrastructure and the Dublin Centre for Clinical Research. This network which involves all Irish Universities aims at multicentre project and building a data base for research. The DNA samples collecting in this study could further be used in this broader together with other data on high-risk subjects from other centres in order to conduct whole genome analysis.

The department of psychiatry is an active and expanding Discipline involved in teaching, research and clinical service delivery. As a Discipline, Psychiatry is a medical speciality with a strong scientific basis. It participates in a multidisciplinary approach to caring for people with mental illness using biological, psychological and social interventions.
Full-time members of the Discipline provide clinical services to, and work in partnership with, HSE community mental health services in the South Western region, St. James, Tallaght Hospital, St. Patrick’s hospitals and the Central Mental Hospital, while part-time members work in a wide variety of HSE community adult and child services, forensic services, learning disability, liaison psychiatry, drug dependency and other related services and sub-specialities.

The Discipline is involved in teaching throughout the undergraduate medical curriculum from Human Development and Behavioural Sciences, through Neurosciences and Psychology to Clinical Psychiatry and Biological Psychiatry. Clinical teaching involves partnership with medical and other professional staff at all our associated teaching hospitals and HSE community services. Our postgraduate programs offer a range of degree courses in Psychoanalytical Psychotherapy in adults and children and Cognitive Behavioural Therapy.: The University is associated with The Dublin University Post-Graduate Training Scheme in Psychiatry the largest
training scheme in clinical psychiatry in Ireland. It is jointly managed by the Head of Discipline, and the Clinical Directors of the associated hospitals, Tallaght Hospital, SJH, SPH and the Health Service Executive. Trainees rotate between four base hospitals - Tallaght Hospital, SPH, SJH and NGH. A full range of sub-speciality training rotations takes place during the 3½ year programme. These rotations include Child and Adolescent Psychiatry, Learning Disability, Age-Related, Substance Misuse Rehabilitation, Liaison and Forensic Psychiatry.

Research interests of the core Discipline focus on Clinical and Molecular Neuroscience with Internationally recognised research groups in Neuropsychiatric Genetics, Neuroimaging and Biomarkers, Molecular Neuroscience, and the Neurosciences or Aging. The department works closely with colleagues at the Trinity College Institute of Molecular Medicine and Institute of Neurosciences and the Discipline of Genetics, and collaborate widely with Irish and International research groups. Part time members are involved in a wide range of basic science and clinical research activities reflecting the broad scope of Psychiatry as a clinical and scientific Discipline.
Trinity College Dublin

Founded in 1592, Trinity College Dublin is the oldest university in Ireland and one of the older universities of Western Europe. On today’s campus, state-of-the-art libraries, laboratories and IT facilities, stand alongside historic buildings on a city-centre 47-acre campus.

Trinity College Dublin offers a unique educational experience across a range of disciplines in the arts, humanities, engineering, science, human, social and health sciences. As Ireland's premier university, the pursuit of excellence through research and scholarship is at the heart of a Trinity education. TCD has an outstanding record of publications in high-impact journals, and a track record in winning research funding which is among the best in the country.

TCD has developed significant strength in a broad range of research areas including the 18 broadly-based multi-disciplinary thematic research areas listed below.

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<tr>
<th>Sustainable Environment</th>
<th>Next Generation Medical Devices</th>
<th>Identities in Transformation</th>
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<tr>
<td>Smart and Sustainable Cities</td>
<td>Creative Technologies – Digital Media, Arts and Entertainment</td>
<td>International Development</td>
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<tr>
<td>Cancer</td>
<td>Neuroscience</td>
<td>Immunology and Infection</td>
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<tr>
<td>Nanoscience</td>
<td>Telecommunications</td>
<td>Creative Arts Practice</td>
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<tr>
<td>Inclusive Society</td>
<td>Mathematics of Complexity</td>
<td>Intelligent Media and Human Communication</td>
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<tr>
<td>Ageing</td>
<td>International Integration</td>
<td>Digital Humanities</td>
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Its current flagship interdisciplinary research institutes are in areas such as biomedical science, arts and humanities, neuroscience, international integration studies, and nanostructures and nanodevices. The construction of Ireland’s first purpose built nanoscience research institute, CRANN, was opened in January 2008, which houses 150 scientists, technicians and graduate students in specialised laboratory facilities.

The building also includes an innovative public venue, the Science Gallery. In 2011, it received the Shorty Award for Best Cultural Institution on Twitter globally and the Irish Web Award for Best Education and Third Level Website. These joined a list of awards that includes European Museum of the Year Award – Special Commendation 2010 and National IT award for best use of technology in education, 2009.

The recently opened Trinity Biomedical Sciences Institute (TBSI) is an unprecedented development for Biomedical Research in Ireland, both in terms of scale and ambition. It
provides a facility for TCD to continue its upward trajectory in both basic and translational research programmes, notably in the areas of Immunology, Cancer and Medical Devices.

The Library of Trinity College is the largest research library in Ireland and is an invaluable resource to scholars. In addition to purchases and donations accrued over four centuries, the College has had 200 years of legal deposit. By this right Trinity can claim a copy of every book published in Ireland the UK. The Library has over 4.25 million books, 22,000 printed periodical titles and access to 60,000 e-journals and 250,000 e-books. The Library’s research resources also include internationally significant holdings in manuscripts (the most famous being the Book of Kells), early printed material and maps. Its collections and services support the College’s research and teaching community of 15,000+ students and academic staff.

Trinity continues to attract intellectually strong students from Ireland and abroad. More than half of its incoming undergraduates have earned in excess of 500 out of a maximum 600 points in the national Leaving Certificate examination. The accessibility of a Trinity education to all students of ability is also very important. Trinity College was the first university in Ireland to reserve 15% of first year undergraduate places for students from non-traditional learning groups – students with a disability, socio-economically disadvantaged students as well as mature students. The College has met its target in this respect. There is also an exciting international mix of its student body where 16% of students are from outside Ireland and 40% of these students are from outside the European Union. TCD students also have an opportunity to study abroad in other leading European universities through Trinity’s partnership agreements.

Students also benefit from a scholar teacher model where they have the opportunity of being taught by world-leading experts in their field. Interdisciplinarity forms a key element in the College strategy in increasing Trinity’s international standing as a research-led university.

Many of Trinity College Dublin’s alumni have helped shape the history of Ireland and Western Europe. They include author, Jonathan Swift, philosopher, George Berkeley, political philosopher, Edmund Burke, wit and dramatist, Oscar Wilde, historian, William Lecky, religious scholar, James Ussher, scientists, John Joly, George Johnstone Stoney, William Rowan Hamilton and physicians, William Stokes and Denis Burkitt.

Two of Trinity College’s alumni have won Nobel prizes – Ernest Walton for Physics in 1951 and Samuel Beckett for Literature in 1968. The first President of Ireland, Douglas Hyde was a graduate as was the first female President of Ireland, Mary Robinson.
Equal Opportunities Policy

Trinity College Dublin is an equal opportunities employer and is committed to the employment policies, procedures and practices which do not discriminate on grounds such as gender, civil status, family status, age, disability, race, religious belief, sexual orientation or membership of the travelling community.

Application Procedure

Candidates should submit a cover letter together with a full curriculum vitae to include the names and contact details of 3 referees (email addresses if possible) to

Prof. Thomas Frodl at thomas.frodl@tcd.ie