



## Post Specification

<b>Post Title:</b>	RESEARCH FELLOW, (POST-DOCTORAL); TUBERCULOSIS IMMUNOLOGY
<b>Post Status:</b>	Specific Purpose Contract – Full-time
<b>Research Group / Department / School:</b>	<b>CLINICAL MEDICINE, Trinity Translational Medicine Institute, Trinity College Dublin, the University of Dublin</b>
<b>Location:</b>	<b>Trinity Translational Medicine Institute, St. James's Hospital Campus and the Trinity Biomedical Sciences Institute, 152-160 Pearse Street, Dublin</b> Trinity College Dublin, the University of Dublin College Green, Dublin 2, Ireland
<b>Reports to:</b>	Prof. Joseph Keane
<b>Salary:</b>	Appointment will be made on the IUA post doc Research pay scale at a point in line with Government Pay Policy
<b>Hours of Work:</b>	37.5 hours per week
<b>Closing Date:</b>	12 Noon (Irish Standard Time), <b>1<sup>st</sup> September 2019</b>

## **Post Summary**

The TB immunology group, led by Professor Joseph Keane, seeks to appoint a highly motivated TB research leader. The successful candidate must have a PhD and a proven publication track record in immunology research. S/he will be expected to apply for competitive funding within the timeframe of this award.

The main focus of Professor Joseph Keane's research and laboratory studies is the host response to tuberculosis. Further details can be found at <http://people.tcd.ie/josephmk>

Rationale: Tuberculosis (TB) remains a global challenge causing more than one million deaths annually. TB therapy requires a long duration of treatment and the administration of a number of antibiotic drugs to overcome drug resistance. The increasing prevalence of drug-resistant TB demonstrates that current treatments are inadequate. There is an urgent need for novel therapies and vaccines.

We do discovery science research that develops paradigms of improved host defence against this important infection. We discovered how macrophages undergo metabolic switching after infection with Mtb to deal with this infection. We plan to exploit this breakthrough – to design host directed therapies, new vaccines, and improve our understanding of host susceptibility to this disease.

The appointee will work as part of a team of post-doctoral scientists and graduate students led by Professor Keane. The tuberculosis immunology research group uses primary human cells and molecular biology techniques to study macrophage, dendritic cell and T cell responses to *Mycobacterium tuberculosis* infection. Techniques that will be employed by the successful candidate include cell culture (BSL1 and BSL2), ELISA, RT-qPCR, transfection, western blotting, cell exclusion assays, flow cytometry and Seahorse metabolic flux assays.

## **Standard Duties and Responsibilities of the Post**

- Conduct a specified programme of research under the direction and mentorship of Prof. Keane

- Deliver research outputs (individual AND for the research team) and provide input into reports as required for the project management schedule
- Engage in the dissemination of the results of the research in which s/he is engaged, with the support of and under the supervision of Prof. Keane
- Supervise students in the lab; including medical graduates, undertaking PhD work.

### **Funding Information**

This post is funded from the Royal City of Dublin Hospital Trust (RCDH) grant.

### **Person Specification**

The Post-Doctoral Fellow appointed to this post will conduct cellular and molecular research related to TB host defence, assist with the day-to-day running of this project, assist with supervising the research of PhD students, assist with preparing timely reports for RCDH and other appropriate forms of dissemination from this study.

### **Qualifications**

PhD

### **Knowledge & Experience (Essential & Desirable)**

- Previous laboratory experience (essential)
- Excellent data organising skills (essential).
- Knowledge of immunology and/or cellular metabolism (desirable).
- Experience with cell culture and PBMC isolation from human blood (desirable).
- Proven record of clear scientific thinking (evidence of independence desirable).

### **Skills & Competencies**

- Excellent organisation skills (essential)
- Excellent communication skills; excellent level of English (essential)
- Excellent interpersonal and writing skills
- The candidate should be enthusiastic about translational clinical research.

### Further Information for Applicants

URL Link to Area	<a href="http://www.tcd.ie">www.tcd.ie</a>
URL Link to Human Resources	<a href="https://www.tcd.ie/hr/">https://www.tcd.ie/hr/</a>

## **Trinity College Dublin, the University of Dublin**

Trinity is Ireland's premier university, with a proud tradition of excellence stretching back to its foundation in 1592. The oldest university in Ireland, and one of the oldest in Europe, today Trinity sits at the intersection of the past and the future, and is ideally positioned as a major university in the European Union. Our 47-acre campus is located in the heart of Dublin city centre and is home to historic buildings dating from the University's establishment, as well as some of the most cutting-edge teaching and research facilities in Ireland. Students at Trinity benefit from a unique educational experience across a range of disciplines in our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences. The pursuit of excellence through research and scholarship is at the heart of a Trinity education, and our researchers have an outstanding publication record and strong record of grant success.

Trinity has developed [18 broad-based multidisciplinary research themes](#) that cut across disciplines and facilitate world-leading research and collaboration within the University and with colleagues around the world. These internationally recognised themes include such diverse areas as Cancer, Immunology, Telecoms, Identities in Transformation, Nanoscience, Neuroscience, and Making Ireland. Researchers from across the University work together in innovative ways to develop new and exciting approaches to their research and explore the frontiers of knowledge in the 21<sup>st</sup> century. In creating these dedicated research themes, Trinity's researchers are able to become a more powerful force on the global stage, successfully competing for large-scale grants and attracting top students and faculty to the University. Trinity is home to Ireland's first purpose-built Nanoscience research institute, CRANN, which opened in January 2008. This state-of-the-art facility houses 150 scientists, technicians, and graduate students in specialised laboratories, fostering creative innovations that have seen Trinity's researchers make significant breakthroughs.

The Trinity Long Room Hub for Arts and Humanities Research Institute is the University's flagship institute for research in the Arts and Humanities, providing a world-class environment for cross-disciplinary collaborative projects. The Long Room Hub provides a central location through which the University's internationally respected Arts and Humanities research can become more visible, demonstrating its relevance for contemporary and future societies.

Researchers from across the University regularly participate in debates on topical issues facing the world today. As well as operating an International Visiting Research Fellowship programme, the Long Room Hub also hosts major EU-funded Digital Humanities projects.

One of the most instantly recognised parts of Trinity's campus is the famous Old Library, home to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps, and early printed material. Trinity's Library is the largest research library in Ireland and is an invaluable resource to Trinity's students and research community. Built up over the four centuries of the University's existence, the Library's collections have benefitted from its status as a Legal Deposit library for the past 200 years, granting Trinity the right to claim a copy of every book published in Ireland and the UK. At present, the Library's holdings span approximately 4.25 million books, 22,000 printed periodical titles, and access to 60,000 e-journals and 250,000 e-books.

Trinity attracts top students from Ireland and abroad and prides itself on the consistently high standard of student admitted to the University every year. These students are drawn to Trinity for the excellence of our research-led teaching and for the quality and prestige a degree from this University confers. Trinity has also pioneered accessibility to education in Ireland, becoming the first university in the country to reserve 15% of its undergraduate places for students from non-traditional learning groups. Trinity is the top-ranked European university for student entrepreneurship and Europe's only representative in the world's top-50 universities.

Our alumni have gone on to shape the history of Ireland and of Western Europe in a wide range of fields. These include such notable figures as Jonathan Swift, Oscar Wilde, William Rowan Hamilton, Edmund Burke, William Stokes, Denis Burkitt, Louise Richardson, Lenny Abrahamson, and Anne Enright. Three of Trinity's graduates have been awarded Nobel prizes: Ernest Walton for Physics in 1951; Samuel Beckett for Literature in 1968; and William Campbell for Physiology / Medicine in 2015. Trinity also counts the first female President of Ireland among its alumni in Mary Robinson, as well as other notable former Presidents Douglas Hyde and Mary McAleese. At Trinity we are justifiably proud of our tradition, and we strive to uphold this excellence as we face the demands of the 21<sup>st</sup> century.

## Ranking Facts

Trinity is the top ranked university in Ireland. Using the QS methodology we are ranked 88th in the world and using the Times Higher Education World University Rankings methodology we are 117<sup>th</sup> in the world.



## Overall

- Trinity is Ireland's No.1 University in the QS World University Ranking, THE World University Ranking and the Academic Ranking of World Universities (Shanghai).
- Trinity is ranked 88th in the World, and 29th in Europe, in the 2017/2018 QS World University Ranking.
- Trinity is ranked in the Top 100 for Graduate Employability in the QS 2017 Rankings.
- Trinity is in the Top 50 most innovative universities in Europe according to Reuters.<sup>1</sup>
- Between 2010 and 2015, Trinity was ranked the top university in Europe for entrepreneurship according to Pitchbook's independent analysis.<sup>2</sup>

<sup>1</sup> <http://www.reuters.com/article/us-innovative-stories-europe-idUSKCN0Z00CT>

<sup>2</sup> <http://pitchbook.com/news/reports/2015-2016-pitchbook-universities-report>

## **Internationalisation**

- Trinity is ranked 52nd in the world in the THE World University Ranking for international outlook.

## **Research Performance**

- Of the 981 institutions included in the THE World University Rankings for 2017, Trinity is in the top 15% internationally for research performance.
- Trinity is ranked in the top 15% internationally by QS for citations.

## **In the QS World University Rankings:**

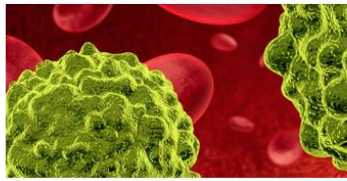
- Trinity featured in the world's elite (Top 200) institutions in 25 of the 28 subjects in which it was evaluated by the QS World University Rankings by Subject in 2015. Of these, Trinity ranked in the top 100 in the world in 14 subjects and in the top 50 in the world in 6 subjects: English Language and Literature; Nursing; Politics and International Studies; History; Biological Sciences; and Modern Languages.
- In three out of the last four years, Trinity has been consistently ranked in the Top 50 worldwide for the following areas: English Language and Literature; Nursing; Modern Languages; and Politics and International Studies.
- In the QS Faculty rankings, Trinity has been consistently ranked in the Top 100 globally for Arts and Humanities over the last four years.



## Research Themes



**Ageing**



**Cancer**



**Creative Arts Practice**



**Creative Technologies**



**Digital Engagement**



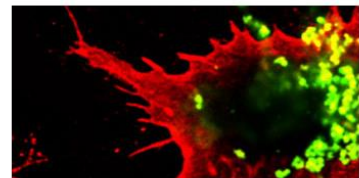
**Digital Humanities**



**Genes & Society**



**Identities in Transformation**



**Immunology, Inflammation & Infection**



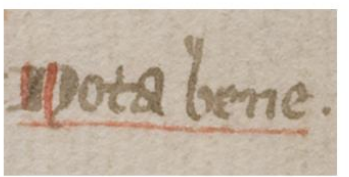
**International Development**



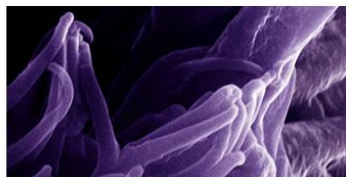
**International Integration**



**Making Ireland**



**Manuscript, Book and Print Cultures**



**Nanoscience**



**Neuroscience**



**Telecommunications**



**Smart Sustainable Planet**



**Next Generation Medical Devices**

## The Selection Process in Trinity

The Selection Committee (Interview Panel) may include members of the Academic and Administrative community together with External Assessor(s) who are expert in the area. Applications will be acknowledged by email. If you do not receive confirmation of receipt within 1 day of submitting your application online, please contact the named Recruitment Partner on the job specification immediately and prior to the closing date/time.

Given the degree of co-ordination and planning to have a Selection Committee available on the specified date, the University regrets that it may not be in a position to offer alternate selection dates. Where candidates are unavailable, reserves may be drawn from a shortlist. Outcomes of interviews are notified in writing to candidates and are issued no later than 5 working days following the selection day.

In some instances the Selection Committee may avail of telephone or video conferencing. The University's selection methods may consist of any or all of the following: Interviews, Presentations, Psychometric Testing, References and Situational Exercises.

It is the policy of the University to conduct pre-employment medical screening/full pre-employment medicals. Information supplied by candidates in their application (Cover Letter and CV) will be used to shortlist for interview.

Applications from non-EEA citizens are welcomed. However, eligibility is determined by the Department of Jobs, Enterprise and Innovation and further information on the Highly Skills Eligible Occupations List is set out in Schedule 3 of the Regulations <https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Highly-Skilled-Eligible-Occupations-List/> and the Ineligible Categories of Employment are set out in Schedule 4 of the Regulations <https://www.djei.ie/en/What-We-Do/Jobs-Workplace-and-Skills/Employment-Permits/Employment-Permit-Eligibility/Ineligible-Categories-of-Employment/>. Non-EEA candidates should note that the onus is on them to secure a visa to travel to Ireland prior to interview. Non-EEA candidates should also be aware that even if successful at interview, an appointment to the post is contingent on the securing of an employment permit.

## **Equal Opportunities Policy**

Trinity is an equal opportunities employer and is committed to 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. On that basis we encourage and welcome talented people from all backgrounds to join our staff community. Trinity's Diversity Statement can be viewed in full at <https://www.tcd.ie/diversity-inclusion/diversity-statement>.

## **Pension Entitlements**

This is a pensionable position and the provisions of the Public Service Superannuation (Miscellaneous Provisions) Act 2004 will apply in relation to retirement age for pension purposes. Details of the relevant Pension Scheme will be provided to the successful applicant.

Applicants should note that they will be required to complete a Pre-Employment Declaration to confirm whether or not they have previously availed of an Irish Public Service Scheme of incentivised early retirement or enhanced redundancy payment. Applicants will also be required to declare any entitlements to a Public Service pension benefit (in payment or preserved) from any other Irish Public Service employment.

Applicants formerly employed by the Irish Public Service that may previously have availed of an Irish Public Service Scheme of Incentivised early retirement or enhanced redundancy payment should ensure that they are not precluded from re-engagement in the Irish Public Service under the terms of such Schemes. Such queries should be directed to an applicant's former Irish Public Service Employer in the first instance.

## Application Procedure

### Application Procedure

Applicants should submit a full Curriculum Vitae to include the names and contact details of 2 referees (including email addresses), to:

**Name:** Dr. Joe Keane

**Email Address:** [josephmk@tcd.ie](mailto:josephmk@tcd.ie)

(Please insert 'Research Fellowship' in the subject line of the email)

