Post Specification

<table>
<thead>
<tr>
<th>Post Title:</th>
<th>Research fellow</th>
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<tbody>
<tr>
<td>Post Status:</td>
<td>Fixed-term Contract, 5 years. Full-time</td>
</tr>
<tr>
<td>Research Group / Department / School:</td>
<td>Lavelle group, School of Biochemistry and Immunology, Trinity Biomedical Sciences Institute, Trinity College Dublin</td>
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<td>Location:</td>
<td>Trinity Biomedical Sciences Institute, Trinity College Dublin, the University of Dublin, College Green, Dublin 2, Ireland</td>
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<td>Reports to:</td>
<td>Professor Ed Lavelle</td>
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<td>Salary:</td>
<td>Appointments will be made on the SFI Postdoctoral Researcher (level 2A) scale (€38,631- €42,200), depending on experience and in line with current Government pay policy. Appointment will be made no higher than point 2A.4.</td>
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<tr>
<td>Hours of work</td>
<td>40 (per week)</td>
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<td>Closing Date:</td>
<td>5pm (GMT), 27th November 2020</td>
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POLYMER NANOPARTICLES AS ADJUVANTS FOR VIRUS AND CANCER VACCINES

Post Summary:
Applications are invited for a fully funded Research fellow position to work on adjuvants to enhance vaccine-induced cellular immune responses in the Lavelle group at the School of Biochemistry and Immunology at Trinity College Dublin, Ireland. Vaccination is the most successful medical intervention to prevent infectious diseases and is emerging as an exciting component of the field of cancer immunotherapy, with prophylactic and therapeutic applications. For most vaccines, adjuvants are a vital component and serve to enhance innate immune responses and thereby induce and direct protective adaptive immunity. However, a lack of adjuvants to drive potent T cell-mediated immunity (CMI) against intracellular pathogens and cancer is an obstacle to further advancement. The Lavelle group and our collaborators have identified novel nanoparticulate adjuvants capable of robust induction of combined CD8+ and T helper 1 (Th1) responses.

Here the research fellow will advance this nanoparticle system and establish its protective efficacy in murine tumour models and viral challenge models. The role of biological sex in adjuvant driven cellular and humoral immunity will be addressed. Furthermore the successful candidate will work on the role of IL-1 family cytokines in positive and negative regulation of adjuvant driven cellular immunity.

Standard Duties and Responsibilities of the Post
The recruited candidate will contribute to the work programme of the funded project. Duties will include working with the team in planning and carrying out experiments, preparing documents for ethical approval, collating, analysing and interpreting data, writing and publishing manuscripts and reviews in peer reviewed journals and presenting data at group, National and international meetings. The candidate will engage closely with our collaborators and participate in training and supervision of undergraduate and postgraduate students.
**Funding Information**
This position is funded by a Science Foundation Ireland Frontiers of the Future award (2020) to Prof Ed Lavelle.

**Person Specification**

**Qualifications**
A PhD in Immunology or a closely related discipline is required.

**Knowledge and Experience (Essential and Desirable)**
The successful candidate will have relevant research experience and a record of publishing high quality papers. The researcher will work closely with other members of a multidisciplinary project team and with international scientific collaborators so strong written and oral communication skills are required. The candidate will be expected to play a senior role in the project so a high degree of motivation and capacity to show leadership is required.

**Skills and Competencies**
The ideal candidate will have research experience in immunology. Expertise in preclinical vaccine work, particularly with animal models and assessment of cellular immunity is desirable. Experience with immunoassays and particularly with flow cytometry would be an advantage,

**Application Procedure**
Applicants should submit a full Curriculum Vitae and cover letter to include the names and contact details of 2-3 referees (including email addresses), to:-

**Name:** Prof. Ed Lavelle,
**Email Address:** lavellee@tcd.ie
Further Information for Applicants

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<tr>
<th>URL Link to Area</th>
<th><a href="http://www.tcd.ie">www.tcd.ie</a></th>
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<td>URL Link to Human Resources</td>
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<tr>
<td>URL Link to School</td>
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Trinity College Dublin, the University of Dublin

Trinity is Ireland’s leading university and is ranked 108th in the world (QS World University Rankings 2020). Founded in 1592, the University is steeped in history with a reputation for excellence in education, research and innovation.

Located on an iconic campus in the heart of Dublin’s city centre, Trinity has 18,000 undergraduate and postgraduate students across our three faculties – Arts, Humanities, and Social Sciences; Engineering, Mathematics and Science; and Health Sciences.

Trinity is ranked as the 17th most international university in the world (Times Higher Education Rankings 2020) and has students and staff from over 120 countries.

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 19 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. Trinity is also home to 5 leading flagship research institutes:

- Trinity Biomedical Sciences Institute (TBSI)
- Trinity College Institute of Neuroscience (TCIN)
- Trinity Translational Medical Institute (TTMI)
- Trinity Long Room Hub Arts and Humanities Research Institute (TLRH)
- Centre for Research on Adaptive Nanostructures and Nanodevices (CRANN)

Trinity is the top-ranked European university for producing entrepreneurs for the past five successive years and Europe’s only representative in the world’s top-50 universities (Pitchbook Universities Report).

Trinity is home to the famous Old Library and to the historic Book of Kells as well as other internationally significant holdings in manuscripts, maps and early printed material. The Trinity Library is a legal deposit library, granting the University the right to claim a copy of every book published in Ireland and the UK. At present, the Library’s holdings span approximately 6.5 million printed items, 400,000 e-books and 150,000 e-journals.

With over 120,000 alumni, Trinity’s tradition of independent intellectual inquiry has produced some of the world’s finest, most original minds including the writers Oscar Wilde and Samuel Beckett (Nobel laureates), the mathematician William Rowan Hamilton and the physicist Ernest Walton (Nobel laureate), the political thinker Edmund Burke, and the former President of Ireland Mary Robinson. This tradition finds expression today in a campus culture of scholarship, innovation, creativity, entrepreneurship and dedication to societal reform.

**Rankings**

Trinity is the top ranked university in Ireland and ranked 108th in the world (QS World University Rankings 2020). Trinity ranks in the top 50 in the world on 4 subjects and in the top 100 in 18 subjects (QS World University Rankings by Subject 2020). Full details are available at: [www.tcd.ie/research/about/rankings](http://www.tcd.ie/research/about/rankings).
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.

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](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

Applicants should submit a full Curriculum Vitae to include the names and contact details of 2-3 referees (including email addresses), to:

Prof. Ed Lavelle
Email Address: lavellee@tcd.ie