Faculty of Health Sciences
School of Pharmacy and Pharmaceutical Sciences

Ussher Assistant Professor in Pharmaceutical Chemistry of Nanocarrier Drug Delivery Systems

Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Trinity College Dublin.
A history of driving the future.
I was ready to start my own lab and pursue answers to the big scientific questions that I had. I knew I had to be based in a university that was internationally recognised and had a good reputation.
It is part of Trinity's strategy to recruit excellent academics in areas where the University has proven strengths.

There are opportunities right across our field of expertise, which span from science to engineering and from medicine to arts and humanities. It is Trinity's objective to attract new talents from around the world to further its position of excellence.

This is the second time that Trinity has created a distinct set of professorships with the Ussher name to foster early career academics. The latest wave of professorships reflects the success of the first programme. The professorships are named after Archbishop James Ussher, who is often referred to as Trinity’s first scholar and who was pioneering and meticulous in his research. They are intended to honour his rigour as a scholar.

At least ten of the new positions will be assigned to our research centres focused on nanotechnologies, biomedical sciences and neurosciences. Opportunities are also available within traditional departments in science and in the arts and humanities, which are all heavily engaged in innovative research. For example, researchers in our arts and humanities institute, the Trinity Long Room Hub, are currently digitizing and contextualizing important historical archives held in our Old Library, and making them available as an online public resource.

Substantial mentoring and development support will be available to each of the Ussher Assistant Professors through Trinity’s Early Career Mentoring Programme and all of the Ussher Assistant Professors will be encouraged to avail of the resources of the new Teaching, Learning and Research Academy.

Trinity has a mission to promote excellence in research and education – the University sees these two as interdependent, mutually sustaining and driven by a spirit of innovation.

Trinity believes that students and researchers from every discipline benefit from being exposed to the innovation and entrepreneurship culture that we are building through initiatives like our new Trinity Business School. Interdisciplinarity and cross-fertilisation are intrinsic to Trinity’s mission, as is internationalization – creating forty new positions across all disciplines and recruiting from around the world honours all our commitments.

Trinity has a strong tradition of industrial engagement – in the form of industry research grants which represent 25% of the University’s operating budget. One of Trinity’s most recent collaborations, signed in early September 2015, is with Intel, and it covers talent, research, student mentoring and career development with structured programmes for our PhD students. With Intel, Trinity will be identifying new areas of development and providing a strategic framework for investment and recruitment.

Industrial engagement gives Trinity scientists opportunities to work on applied industry projects. For example in the field of the Internet of Things with the CONNECT Centre, and on an e-learning and adaptive simulation project, ADAPT.

The Ussher Assistant Professors will be joining this vibrant community and helping to grow the University, and to develop bodies of world-ranking research.
Post Summary

The School of Pharmacy and Pharmaceutical Sciences wishes to appoint an **Ussher Assistant Professor in Pharmaceutical Chemistry of Nanocarrier Drug Delivery Systems**. Applications are sought from candidates at an early stage in their career and with proven potential for research excellence in the fields of pharmaceutical/medicinal chemistry and drug delivery/pharmaceutics.

Post Specification

(Comp: 031310)

<table>
<thead>
<tr>
<th><strong>Post Title</strong></th>
<th>Ussher Assistant Professor in Pharmaceutical Chemistry of Nanocarrier Drug Delivery Systems</th>
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<tbody>
<tr>
<td><strong>Post Status</strong></td>
<td>5-Year Contract with a view to permanency</td>
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<tr>
<td><strong>Department/Faculty</strong></td>
<td>School of Pharmacy and Pharmaceutical Sciences, Faculty of Health Sciences, Trinity College Dublin, the University of Dublin, Dublin 2</td>
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<tr>
<td><strong>Location</strong></td>
<td>Panoz Institute and Trinity Biomedical Sciences Institute, Trinity College Dublin, the University of Dublin, College Green, Dublin 2, Ireland</td>
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<td><strong>Reports to</strong></td>
<td>Head of School of Pharmacy and Pharmaceutical Sciences</td>
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<td><strong>Salary</strong></td>
<td>Appointment will be made to the maximum of the 8th point of the New Assistant Professor Merged Salary Scale (range €32,450 - €46,615 per annum)</td>
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<tr>
<td><strong>Closing Date</strong></td>
<td>12 Noon GMT on Monday 11th January 2016</td>
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Candidates are expected to have experience of undertaking research related to biopharmaceuticals and nanoscale systems for delivery. The appointee will be of such a calibre that he or she can expect success in applying for Horizon 2020 European research funding.

This appointment will complement, enhance and synergise with the existing research strengths of our School in pharmaceutical chemistry, nanopharmacology and advanced drug delivery.

The successful candidate will be supported in engaging with other researchers in the School and with our interdisciplinary collaborative research network. They will have access to state-of-the-art laboratories and research equipment in the Panoz Institute and/or Trinity Biomedical Sciences Institute.

The Ussher Assistant Professor will be a full member of the academic staff of the School, and will be expected to contribute to teaching at both the undergraduate and postgraduate level, in the areas of pharmaceutical chemistry, physical pharmacy and drug delivery.

Candidates wishing to discuss the post informally should contact:

Professor Anne Marie Healy, Head of School of Pharmacy and Pharmaceutical Science by e-mail:

✉️ healyam@tcd.ie
Ussher Assistant Professor in Pharmaceutical Chemistry of Nanocarrier Drug Delivery Systems

Role of the Ussher Assistant Professor

The Ussher Assistant Professor will be required to:

**Teaching**

The appointee will be expected to:

» Play an integral part in the delivery of the 5-year integrated Pharmacy degree as well as the taught MSc programme in Pharmaceutical Sciences. S/he will be expected to contribute to modules in the areas of Pharmaceutical Chemistry, Physical Pharmacy and Drug Delivery and to supervise, assess and examine undergraduate and postgraduate students. S/he will be expected to contribute to a new taught postgraduate module on Pharmaceutical and Medical Nanotechnology.

» Ensure that the School’s curricula and pedagogies are enhanced through the adoption of new technologies and new learning paradigms.

» Explore new online technologies to support flexible learning opportunities for students, specifically for the delivery of teaching material relating to the analysis, formulation and regulatory aspects of biotechnology-based pharmaceuticals.

**Research**

The appointee will be expected to:

» Engage in research related to the Pharmaceutical Chemistry of Nanocarrier Drug Delivery Systems and establish and maintain an internationally competitive independent research group.

» Apply for research funding, both nationally and internationally.

» Following due consideration to IP protection, disseminate research findings through leading peer-reviewed international publications (on a sustained basis), as well as at conferences, workshops and meetings.

**Administration**

The appointee will be expected to:

» Undertake such administrative responsibilities as directed by the Head of School that support the School of Pharmacy and Pharmaceutical Sciences and the wider Trinity community.

» Serve on School and University committees.

» Participate in the School’s outreach activities.

How to Apply

Applicants must provide the following information in applying for this position via eRecruitment:

» Cover letter (maximum 1 x A4 Page)

» Full curriculum vitae, your list of publications to include the names and contact details of 3 referees (e-mail address if possible)

» Research plan (summarizing research to be carried out in the next two years and including details for funding to be sought (2 x A4 pages maximum)

» Teaching statement (summarizing teaching experience and approach (2 x A4 pages maximum)

Applications will only be accepted via eRecruitment - https://jobs.tcd.ie

Contact Person: Ann-Marie Farrell, Recruitment Partner,
Tel: +353 1 896 1030
Email: farrela4@tcd.ie

Trinity College Dublin Ussher Assistant Professors 5
Person Specification

Qualifications
The successful candidate must have:

» A doctoral degree in pharmaceutical chemistry, medicinal chemistry, pharmaceutics, pharmaceutical science or other related discipline.

Required Knowledge and Experience

Research
Essential
» proven record in research and ability to contribute substantially to the School’s research
» demonstrated research plans which complement the School’s strategic plan
» proven ability or evidence of potential to establish a strong record of research and publication in a relevant field
» an ability to conduct research in a relevant area and to supervise research projects
» knowledge of recent research in the relevant areas
» publication of articles in peer-reviewed journals
» participation in research seminars and conferences

Desirable
» proven ability to attract external research funding

Teaching
Essential
» an ability to provide lectures and practical classes in pharmaceutical chemistry, physical pharmacy and drug delivery/pharmaceutics, to undergraduate and postgraduate students
» an ability to develop and coordinate teaching modules relevant to the School’s Pharmacy (Integrated) Programme and its MSc programme in Pharmaceutical Sciences
» evidence of personal contribution and commitment to excellence in teaching
» excellent communication and interpersonal skills
» experience of supervising undergraduate and postgraduate dissertations
» experience of developing new modules and teaching material
» potential for recruiting and supervising postgraduate research students

Desirable
» experience of using new teaching media
» experience of working collaboratively and effectively in an inter and multidisciplinary environment

Administration
Essential
» potential to co-ordinate, manage and develop modules and courses in a university setting
» an ability to use statistical or other relevant tools to analyse assessment and evaluation programmes, and to write reports
» excellent organisational and administrative skills
» ability to establish targets and goals to support School and University strategies
» a commitment to student care

Desirable
» experience of managing research grants, organising research seminars and other research-related activities

Other essential attributes
» ability to work effectively as member of a team
» honesty and integrity
» good organisational skills
» willingness to contribute to the School, University and to the wider community.
» career driven, enthusiastic and motivated
» a commitment to own professional development.
The School of Pharmacy and Pharmaceutical Sciences

The School of Pharmacy and Pharmaceutical Sciences was established in Trinity College Dublin in 1977. It has world class research and teaching facilities on the main campus, in the Panoz Institute, and has further facilities in the collaborative research space provided by the Trinity Biomedical Sciences Institute (TBSI) and Trinity College Institute of Neuroscience (TCIN), through which Trinity’s leadership position in immunology, bioengineering, cancer and neuroscience is maintained. These facilities drive a step-change in the level and impact of research in these fields.

The main academic focus of the School of Pharmacy and Pharmaceutical Sciences at the undergraduate level is the five-year Integrated Pharmacy Programme. Structured professional placements are a key element of this new programme and occur throughout the five years. The teaching on this programme includes lectures, problem-based learning, small group teaching, laboratory and dispensing practicals, clinical and patient care activities. The programme ensures integration between placement-based learning and College-based learning. Each student undertakes individual research projects, which gives them an opportunity to develop focused research with one-to-one supervision. There is the opportunity to undertake research projects abroad at international partner universities.

The School offers dynamic and successful postgraduate taught programmes in Pharmaceutical Manufacturing Technology, Pharmaceutical Sciences, Community Pharmacy and Hospital Pharmacy. The School is active in CPD (Continuing Professional Development) and was the first School in Trinity to offer modular postgraduate delivery with the Cardiology in Clinical Pharmacy Practice module, which has attracted postgraduate students from across Hospital and Community Pharmacy Practice.

For further information, please visit our website at: www.pharmacy.tcd.ie

The Selection Process in Trinity

- The Selection Committee (Interview Panel) will include members of the Academic community together with an External Assessor who is an expert in the area.
- Applications will be acknowledged by email. If you do not have confirmation of receipt within 1 day of submitting your application online, please get in touch with us 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, Trinity 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.
- Trinity’s selection methods may consist of any or all of the following:
  - Interviews
  - Delivery of a presentation will be required as part of the selection process
  - References - if a candidate is shortlisted, the listed referees on the candidate’s application will be contacted in advance of interview.
- It is the policy of the University to conduct pre-employment medical screening/full pre-employment medicals.
- Information supplied by candidates in their application will be used to shortlist for interview. Candidates who do not adhere to the application requirements may not be considered for shortlisting.
- Applications from non-EEA citizens are welcomed. 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 a work permit.
Equal Opportunities Policy

Trinity College Dublin, the University of 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.

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.
Trinity College Dublin

Trinity College Dublin is Ireland’s leading university on the world stage. Recognised for its transformative research and education conducted at the frontiers of disciplines, Trinity is ranked 78th in the world by the QS World University Rankings 2015.

The pursuit of academic excellence through research and scholarship is at the heart of Trinity’s academic endeavour. Trinity is known for intellectual rigour, excellence, interdisciplinarity, and research-led teaching. Home to Nobel prize-winners such as scientist Ernest Walton, write Samuel Beckett and William C. Campbell, recipient of the 2015 prize in Medicine, Trinity draws visitors from across the world to its historic campus each year, including to the Book of Kells and Science Gallery which capture the university’s connection to both old and new.

Trinity accounts for one-quarter of all spin-out companies from Irish higher education institutions, helping to turn Ireland into an innovation-intensive, high-productivity economy. That culture of innovation and entrepreneurship is a defining characteristic of our campus as we help shape the next generation of job creators and global citizens.

Founded in 1592, Trinity is situated at the nexus of tradition and innovation, offering undergraduate and postgraduate programmes across 24 schools and three faculties: arts, humanities, and social sciences; engineering, mathematics and science; and health sciences.

Spread across 47 acres in Dublin’s city centre, Trinity has a 17,000-strong student body, 3,000 staff and over 107,000 alumni around the world. Of the student body, 16% come from outside Ireland and, of those, 40% are from outside the European Union, making Trinity’s campus cosmopolitan and bustling, with a focus on diversity.

Trinity has developed significant strength in a broad range of research areas, including the 19 broadly based multi-disciplinary thematic research areas. Trinity is home to Ireland’s first purpose-built nanoscience research institute, CRANN, housing 150 scientists, technicians and graduate students in specialised laboratory facilities. Meanwhile, the state-of-the-art Trinity Biomedical Sciences Institute is carrying out breakthrough research in areas such as immunology, cancer and medical devices. Trinity College Institute of Neuroscience (TCIN) leads brain research in Ireland and is the country’s only dedicated neuroscience research institute. TCIN is an interdisciplinary research institute with Principal Investigators from a wide range of disciplines including psychology, physiology, biochemistry, engineering, psychiatry and genetics.

The Library in Trinity is the largest research library in Ireland, with a collection of six million printed items, 500,000 maps, 80,000 electronic journals, and 350,000 electronic books. Some of the world’s most famous scholars are graduates of Trinity, including writer Jonathan Swift, dramatist Oscar Wilde, philosopher George Berkeley, and political philosopher theorist Edmund Burke. Three Trinity graduates have become Presidents of Ireland - Douglas Hyde, Mary Robinson and Mary McAleese.
Trinity’s Global Rankings

Trinity is:

» Recognised internationally as Ireland’s leading university in the QS World University Ranking, the THE World University Ranking and the Academic Ranking of World Universities (Shanghai).

» Ranked 78th in the world and 27th in Europe by the QS World University Rankings 2015.

» Ranked in the top 70 universities in the world in the Times Higher Education Ranking of World Universities 2015 in terms of overall research and in the top 75 universities in the world in terms of citations (research impact).

» Ranked in the top 1% of research institutions in the world in 17 fields - an increase of over 150% from 2004 (Thomson Reuters Essential Science Indicators, September November 2015).

» Ranked in the world’s top 10% universities in terms of International Outlook (Times Higher Education World University Ranking, 2015).

» Ranked in the top 200 world universities in 25 of the 28 disciplines in which it was evaluated in the 2015 QS World University Rankings by subject including:

  – In the top 50 universities in the world in 5 subjects, one of which is Biological Sciences (at 48th).

Research at Trinity

Trinity’s research leverages areas of multidisciplinary expertise where the University has critical mass of world-class primary investigation. Trinity’s research is across science, engineering, social sciences, medicine and the arts. These research areas address immediate and long-term challenges in society, as well as offering opportunities for economic development.

Research is central to the generation of the new disruptive ideas that will underpin future sustainable businesses. The value created by Trinity is critical for Ireland’s economic and social development, as well as society globally.

Trinity’s research themes are supported by a set of research institutes that provide the infrastructure needed to support multi-disciplinary research as well as engagement with enterprise and social partners working in partnership with Trinity’s 24 schools. Built on the foundations of individual excellence, clustering expertise into multi-disciplinary teams, Trinity has a portfolio of research activity presented as 19 themes www.tcd.ie/research/themes, which have scale, resources and the ability to solve large scale research challenges.

Trinity’s credentials in research and innovation are strong:

» According to Thomson Reuters Essential Science Indicators, in terms of research impact as measured by citations, Trinity ranks among the world’s top 1% of research institutions in 17 STEM and social sciences fields, including immunology, materials science, and molecular biology and genetics.

» Trinity’s researchers have made major contributions to global society. Trinity’s mathematics gave us quaternions which underpin modern spaceflight while our chemists developed the world’s first commercial nicotine patch, in collaboration with Elan Pharmaceuticals.

» Trinity has an outstanding record of publications in high-quality journals and in terms of the impact of its research publications.

» Research expenditure rose by 10% to €87m in 2013/14 reflecting the university’s success in securing new awards over the past number of years, in particular from SFI and the EU. The value of new awards entered into in the year 2013/14 amounted to €67m, bringing the total value of the Research Portfolio to over €480m.

» In the period 2010 to 2015, 102 licences have been granted to industry, Trinity has received 314 disclosures of novel inventions, and 36 new
Trinity campus companies have been formed to commercialize Trinity’s intellectual property.

» In 2008, Trinity created Science Gallery on our Dublin campus, attracting over 1.5 million people to unique exhibitions, from living art experiments to materials science and from the future of the human race to the future of play.

» The Trinity Biomedical Sciences Institute (TBSI) opened in 2011. Among the key highlights so far are:
  – 76 companies working with researchers to develop new products in biomedicine;
  – €36 million raised for interdisciplinary research; and,
  – Three spin-out companies involved in drug discovery and development, and cancer treatment - Opsona Therapeutics, Trino Therapeutics and TriMod.

» Trinity is partnering with the University of California, San Francisco to establish the Global Brain Health Institute (GBHI), which was funded by a €165m gift from Atlantic Philanthropies to address the problem of dementia and ageing related neuro degeneration. GBHI will train the next generation of ageing specialists from around the world and position Trinity as a global leader in ageing and dementia research.

» Trinity also has a growing presence in telecommunication and software research. The CONNECT telecommunications centre addresses network and spectrum optimization while ADAPT specializes in software customization.

Trinity’s Flagship Research Institutes

Trinity’s research institutes provide the infrastructure to support multi-disciplinary research, working in partnership with Trinity’s faculties and schools www.tcd.ie/research/institutes

Trinity’s International Research collaborations

Full details of Trinity’s research and innovation strategies as well as international research collaborations are available at:
www.tcd.ie/research www.tcd.ie/innovation
www.tcd.ie/research/worldleaders/brochure2014
Research in Ireland

Ireland is a country of 4.5 million people with a global diaspora of 70 million more, which has a significant impact on global affairs in terms of culture, business and research. Over the last decade, Ireland has demonstrated a clear commitment to the development of a knowledge-led economy, in good times and bad, with unprecedented investment on a national level in education, science and technology.

This strategy is based on harnessing its unique international success in attracting foreign direct investment, and ensuring that Ireland remains not just a global hub for manufacturing but also increasingly for research, development and innovation.

Ireland has proven to be the most effective gateway for international businesses into Europe. This small offshore island has successfully become a global economic centre with a truly remarkable cluster of world-leading businesses.

- Nine of the top ten global companies in medical technologies have a high volume manufacturing base here and a growing presence in Research and Development.
- Nine of the top ten global pharmaceutical companies are located in Ireland, with seven out of ten pharmaceutical blockbusters produced here.
- The ICT sector in Ireland attracts global investment with seven of the world’s top ten companies operating here. The sector accounts for €50 billion in Irish exports and is continuing to grow.
- Ireland has in recent years become the internet hub for Europe with companies such as Google, Facebook, AOL, PayPal and a host of gaming companies picking Ireland as their European location.
- Strategic clusters of leading global companies in Life Sciences, ICT, Engineering, Services, Digital Media, and Consumer Brands.
- An established reputation as a hub for business process improvement in the region

Ireland’s growing international reputation for research excellence is primarily due to research funded by Science Foundation Ireland (www.sfi.ie). SFI has invested over €1,400 million in research at Irish universities over the last decade. This investment, guided solely by international peer review and research excellence, has taken the form of both individual PI awards and the development of ten Centres for Science, Engineering and Technology. The research investment has led to significant improvements in the quantity and quality of the published output.

Ireland is now ranked in the top 20 countries globally in scientific global rankings and ranks 3rd for immunology and 8th for material science. (Source: Thomson Reuters Essential Science Indicators) The investment has also transformed the competitiveness of Irish universities such as Trinity College Dublin, Ireland’s leading university.

Advantages include:

- A politically stable country and respected regulatory regime.
- A thriving RD&I sector, with strong Government support for productive collaboration between industry and academia.
- A strong legal framework for development, exploitation and protection of Intellectual Property rights.
- Strategic location with easy access to the Europe/Middle East region.
- Excellent IT skills and infrastructure.
- Good telecommunications infrastructure, with state-of-the-art optical networks and international connectivity.
Did you know?
Ireland is…

» Forbes’ Best Country for Business 2013

» First in Europe for completion of higher education. 60% of students go on to higher education.

» Ranked ninth overall (out of 141 countries) in the Global Innovation Index 2012 (Insead).

» Highlighted as one of five up and coming countries in the world to watch for scientific research excellence (Nature)

» In the top 15 countries in scientific global ranking for international scientific citation per paper and higher in specific disciplines
  - First in Immunology
  - Second in Computer Science
  - Second in Microbiology
  - Second in Nanoscience and Nanotechnology
  - Third in Neurosciences and Behaviour
  - Fifth in Materials Science
  - Seventh in Pharmacology and Toxicology
  - Ninth in Molecular Biology and Genetics

» Ireland has a rich history of achievements in Science and Technology and continues to invest in its research and technology capabilities:
  - Robert Boyle – founder of modern chemistry
  - Ernest Walton – split the atom with John Cockcroft
  - Sir William Rowan Hamilton – modern maths and gaming
  - Sir Charles Parsons – engineer
  - Sir Francis Beaufort – devised the Beaufort wind force scale.

Dublin is……

Ranked as the best city in the world for human capital (Economic Intelligence Unit).

Ranked in 34th position (alongside Boston) and is the highest ranking city across the UK and Ireland in the 2015 Mercer Quality of Living rankings.

Popularly renowned as one of Europe’s leading cities for quality of living, tourism and entertainment.

Home to a vibrant tech and startup scene and is the European headquarters for companies such as Google, Facebook, Twitter, IBM, and Microsoft.

Indeed, many of Dublin’s best cultural, historical and entertainment centres are within easy walking distance of Trinity’s gates.