

Post Specification

Post Title:	PhD Candidate Developing a new conceptual framework for novel ecosystem theory using actor network analysis (European Research Council: PhD Researcher 1)	
Post Status:	Full-time (4 years) commencing, in person, September 2021 subject to Government of Ireland recommendations on travel. Candidates will be expected to reside in Ireland for the duration of the PhD study.	
Research Group/School	NovelEco (ERC Project number 101002440) Research Group, School of Natural Sciences, Trinity College Dublin	
Location:	Department of Botany, <u>School of Natural Sciences</u> , and the SFI <u>ADAPT</u> Centre, Trinity College Dublin, the University of Dublin, College Green, Dublin 2, Ireland	
Reports to:	Professor Marcus Collier: Principal Investigator	
Salary:	Fully funded and covers fees (EU and non-EU) and a €21,000 annual stipend	
Hours of Work	Full time	
Closing Date:	18.00CEST, July 9 th , 2021. Shortlisting will be completed during the end of June. Candidates will be invited for interview (using Zoom or by phone) during the week starting July 19 th .	

NovelEco

NovelEco is five-year research project funded by a European Research Council (ERC) Consolidator Award to Professor Marcus Collier (School of Natural Sciences) that officially commenced on June 1st, 2021. The aim of **NovelEco** is explore novel ecosystem theory as a bridging concept and a conduit for rewilding urban society. **NovelEco** is a citizen science project that will measure for the first time the societal attitudes to urban wild spaces (novel ecosystems) by working with citizens to study them and generate data on urban ecosystems. It will engage citizens in co-creating an online instrument to enable ecological data collection within urban novel ecosystems. During data collection the citizen scientists will also record their attitudes to novel ecosystems and reveal whether engagement with them alters their values and perhaps even their environmental behaviour. Comparing these data with the wider community this project will be the first to quantify the social and ecological values of novel ecosystems. **NovelEco** will refine and redefine the novel ecosystem concept and create a new awareness of the transformative potential of urban wild spaces. The **NovelEco** project team will initially consist of the PI, Professor Marcus Collier, three Postdoctoral Researchers,



two PhD candidates, and a Research Team Manager with team members expected to grow during the lifetime of the project. This prestigious international project has an exciting opportunity for two PhD candidates commencing in September 2021.

Post Summary

PhD1: Developing a new conceptual framework for novel ecosystem theory using actor network analysis (working title).

Doctoral candidate 1 (PhD1) will carry out independent research into the transformational aspects of novel ecosystems by studying stakeholder governance structures in wild, unmanaged spaces in cities. The candidate will work with a Postdoctoral Researcher who will be using (for example) a Delphi process as well as other social science approaches to map the actors in the novel ecosystem community (professionals, volunteers, policy-makers, etc.), but the candidate will also carry out their own research into peoples' relationships to unmanaged, anthropogenic (novel) ecosystems in cities. The candidate will also have the opportunity to work within the ADAPT Centre and artificial intelligence-based approached for qualitative data analytics. The candidate will be required to assist in recruiting and liaising with citizen scientists, organising focus group workshops, as well as assisting with public outreach and conferences. This will be ideal for someone with a degree in geography, social science, urban studies, sustainability science.

This position will involve extensive travel for field research in cities in Ireland, the UK, the US and possibly, subject to additional funding, Australia, Malta and Cyprus. PhD candidates are *not* required to teach or to lead on funding proposals, but these activities will be strongly encouraged in order to build your skills as academics and increase your academic employment options. You will assist your supervisor and the **NovelEco** research team with core elements of the project (for example: public engagement, additional research tasks; conference organisation; workshop management, data entry, and publications). Candidates will be mentored by the PI in writing their own research proposals and you will have several opportunities to visit established academic groups in other universities.

PhD1 will produce an independent piece of research in the form of a high-quality PhD thesis (by publication) while *also* fulfilling the research requirements of the **NovelEco** project. They will also assist their supervisor and the Postdoctoral Research team with key research elements of the project (e.g. field work, literature reviewing, conference organisation, research workshop management, publications, public engagement, and citizen science support). TCD doctoral candidates are registered on the 4 year structured Trinity PhD programme and the PhD will be awarded from the School of Natural Sciences. PhD candidates have access to a variety of taught modules, both discipline specific and research skills, that will enhance and support their independent research. Carefully consider your motivation for



embarking on a PhD, the skills/experience that you think make you well suited to a career in research and why you would be a good fit for this project. These points should form the basis of a detailed cover letter (2 pages maximum) expressing your interest in the role. As researchers in the prestigious **NovelEco** project (under supervision and direction of the supervision team), both PhD candidates will carry out field research using diverse methods such as qualitative and quantitative data gathering, citizen engagement, stakeholder interviewing, and social media analysis (machine learning). You will be required to carry out systematic reviews, applications for ethical approval, conducting interviews and hosting workshops, collaborating with citizen scientists and mapping. You will produce a thesis in **academic paper format** and will be expected to have at least **one** peer-reviewed paper approved for publication by their final year. The successful candidate will be core members of the **NovelEco** team which will include three Postdoctoral Researchers and will be supported by a Research Team Manager, and they will be supervised and mentored by the PI of the project.

Qualifications

You will have a **minimum** of 2.1 Honours degree (level 8) and/or a postgraduate qualification (level 9) in the areas of natural sciences and/or restoration ecology, human or environmental geography, environmental studies, anthropology, social science, (environmental) psychology, urban studies, or sustainability science.

Person Specifications

Knowledge, Skills & Experience (Essential):

The successful candidate will have:

- Excellent oral and written academic skills and a commitment to publishing high-quality research,
- A good grounding in qualitative and/or quantitative research methods,
- A self-motivated, enthusiastic and dynamic approach to work,
- Excellent organisation, communication skills and IT skills,
- Excellent communication skills,
- High levels of tenacity, commitment and self-motivation,
- The ability to work both independently and in a team,
- The ability to think independently and to overcome difficulties in research process,
- Excellent time management skills,
- Willingness and ability to travel nationally and internationally as required, and
- English language certification if English is not their first language, the requirement being: IELTS: 7.0+, TOEFL iBT: 100+, TOEFL pBT: 600+, CEF: C1+, or equivalent.



Knowledge, Skills & Experience (Not essential but desirable):

- Evidence of peer reviewed publications or presentations at international conferences,
- Experience in report writing and publication preparation,
- Experience in managing websites and/or social media,
- Experience in undertaking mixed methods research,
- Graphic design or artistic skills for scenario representation,
- Willingness to acquire new skills as required for the implementation of the project, and
- Mapping and GIS experience.

The ideal candidates should:

- Engage in the wider research and scholarly activities of the **NovelEco** research group and contribute to its profile by participating in promotional activity,
- Participate in internal/external networks for the exchange of information and to form relationships for future research collaboration,
- Conduct individual and collaborative research to the highest ethical standards,
- Engage in the dissemination of the results of the research by producing at least three academic papers as lead author,
- Carry out administrative and management work associated with the research,
- Interface confidently with others and remain calm under pressure,
- Have a co-operative and responsive attitude that fosters positive working relationships,
- Work conscientiously often to tight deadlines,
- Record, report and present data in a clear and organised manner,
- Produce well-written, error-free material for inclusion in reports (or sections of reports),
- Show integrity and professionalism in the course of their work,
- Operate effectively and supportively as part of a team,
- Prioritise work to meet deadlines.

Application Procedure

Informal enquiries concerning the post should be addressed to Professor Marcus Collier (marcus.collier@tcd.ie) prior to July 2nd, 2021.



The School of Natural Sciences

The School of Natural Sciences, comprising the Disciplines of Botany, Geography, Geology and Zoology, the Centre for the Environment and the Centre for Centre for Nature+ and Nature-based Solutions Research, is one of the largest schools in the Faculty of Engineering, Mathematics and Science and hosts biological, physical and social scientists. The School currently accommodates 40 academic staff, ca. 14 postdoctoral research fellows and ca. 164 postgraduate students (including 89 research and 75 taught students). The School of Natural Sciences is one of the first in Ireland to hold an Athena SWAN bronze award for addressing issues in gender inequality. The School leads four ERC-funded projects.

The School's taught programmes are varied as the School offers moderatorships (undergraduate degrees) in Earth Sciences, Environmental Sciences, Geography, Geology, Plant Sciences and Zoology and contributes to other moderatorships including Neurosciences, Geography and Politics and to the Two Subject Moderatorship (TSM) programme. The School has also a major commitment to graduate teaching and supervision and currently hosts three taught masters programmes.

URL Link to Area	http://naturalscience.tcd.ie/
URL Link to Human Resources	http://hr.tcd.ie/

Application Information

In order to assist the selection process, candidates should submit their Curriculum Vitae with the names and contact details of <u>two</u> referees and a cover letter.

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 19 hectare 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 <u>18 broad-based multidisciplinary research themes</u> 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 21st 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 21st century.

Ranking Facts

Trinity is the top ranked university in Ireland and ranked 101st in the world (QS World University Rankings 2020). Trinity ranks in the top 50 in the world on 6 subjects and in the top 100 in 20 subjects (QS World University Rankings by Subject 2019). Full details are available at: www.tcd.ie/research/about/rankings.

Why ADAPT?

- Contribute to the ADAPT research agenda that pioneers and combines research in AI
 driven technologies: Natural Language Processing, Video / Text / Image / Speech
 processing, digital engagement & HCI, semantic modeling, personalisation, privacy & data
 governance.
- Work with our interdisciplinary team of leading experts from the complementary fields
 of, Social Sciences, Communications, Commerce / Fintech, Ethics, Law, Health,
 Environment and Sustainability.
- Leverage our success. ADAPT's researchers have signed 43 collaborative research
 projects, 52 licence agreements and oversee 16 active commercialisation funds and 52
 commercialisation awards. ADAPT has won 40 competitive EU research projects and
 obtained €18.5 million in non-exchequer non-commercial funding. Additionally, six
 spinout companies have been formed. ADAPT's researchers have produced over 1,500
 journal and conference publications and nearly 100 PhD students have been trained.

As an **ADAPT** researcher you will have access to a network of 85 global experts and over 250 staff as well as a wide multi-disciplinary ecosystem across 8 leading Irish universities. We can influence and inform your work, share our networks and collaborate with you to increase your impact, and accelerate your career opportunities. Specifically we offer:

- Exposure and free access within a multi-disciplinary ecosystem across 8 leading Irish universities
- Opportunity to build your profile at international conferences and global events
- Fast-track your career through formalised training & development, expert one-on-one supervision and exposure to top AI specialists



The Selection Process in Trinity

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 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 also be aware that even if successful at interview, an appointment to the post is contingent on the securing of an employment permit. This project entails field work inside and outside the EU, so candidates should have a valid passport. A driving licence is not necessary but would be beneficial.

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.

Application Procedure

Candidates should submit a cover letter (2 pages maximum) and a full curriculum vitae including the contact details of 2 referees (including email addresses) to:

Prof. Marcus Collier

marcus.collier@tcd.ie

by 18.00CEST on July 9th 2021.

<u>Two PhD positions are being advertised simultaneously</u>, so in your cover letter you must identify which of the two PhD positions (PhD1 *or* PhD2) that you wish to apply for and identify why you feel you have the qualifications and interests that make you suitable candidates.