

**CURRICULUM VITAE
DR. ADAM WHITTLE**

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Work: Spatial Dynamics Lab,
School of Architecture, Planning &
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University College Dublin,
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RESEARCH INTERESTS:

Economic Geography, Sustainable Cities, Science and Innovation Policy, Big Data, Network Dynamics, Quantitative Methodologies, Data Visualisation, Data Mining, GIS, Industry 4.0 and AI.

EDUCATION:

2014-2018

Ph.D Economic Geography, *University College Dublin.*

Dissertation Titled: “The Evolution of Technological Knowledge: Technological Relatedness in the Irish Knowledge Space.”

Supervised by Dr. Dieter F. Kogler

Examiners: Prof. Rickard Eriksson (external) Dr. Jos Elkind (internal)

2012-2013

MA Geopolitics and Global Economy, *University College Dublin.*

Dissertation Titled: “The Growth of Tiger Economies since the 1960’s from an Evolutionary Economic Geography Perspective Critically Focusing on Knowledge Based Economies. A Study of Ireland and Singapore.”

Supervised by Dr. Dieter F. Kogler and Dr. Julian Mercille.

2009-2012

Bachelor of Arts, Geography and English, *University College Dublin.*

My chief interests focused on the growth rates of ‘Tiger Economies’ from 1960-2000. This research focused on key theories in economic geography, including: proximity, knowledge spillovers, path dependency, regional development and knowledge creation.

PUBLICATIONS:

- **Whittle, A.** (2019a) ‘Local and Nonlocal Knowledge Typologies: Technological Complexity in the Irish Knowledge Space’, *European Planning Studies*, 27 (4), pp. 661-677.
- **Whittle, A.** (2019b) ‘Operationalizing the Knowledge Space: Theory, Methods and Insights for Smart Specialization’, *Regional Studies, Regional Science*, forthcoming.
- **Whittle, A.** and Kogler, D. (2019) ‘Related to What? Reviewing the Literature on Technological Relatedness, where we are now and Where can we go’, *Papers in Regional Science* [Resubmitted following minor revisions].
- Kogler, D. and **Whittle, A.** (2018) ‘The Geography of Knowledge Creation: Technological Relatedness and Regional Smart Specialization Strategies’. In: Paasi, A., Harrison, J. and Jones, M. (eds.), *Handbook on the Geographies of Regions and Territories*, Edward Elgar: London.

PUBLICATIONS IN PROGRESS:

- **Whittle, A.**, Changjun, L. and Rocchetta, S. (2019) ‘Unpacking Regional Resilience: The Role of Technological Flexibility and Global Pipelines’. *Expected Outlet and timeframe – European Union and Regional Studies, June 2019.*
- **Whittle, A.**, Balázs, L. and Kogler D. (2019) ‘Understanding Regional Branching Using Inventor Collaboration Networks’. *Expected Outlet and timeframe – Economic Geography, September 2019.*

- Rocchetta, S. Changjun, L., **Whittle, A.** and Kogler, D. (2019) ‘Technological Lifecycles and Knowledge Recombination: An Evolutionary Perspective’. *Expected Outlet and Timeframe – Research Policy*, September 2019.

OTHER PUBLICATIONS:

- **Whittle, A.** (2018) ‘The Evolution of Technological Knowledge: Technological Relatedness in the Irish Knowledge Space’, *PhD Thesis*, University College Dublin, Ireland.
- **Whittle, A.** (2014) ‘Employability, Progression and Development. A Study on Professional Development for Woman in Ireland’s Knowledge-Based Economy’, *Forfás*.
- **Whittle, A.** (2013) ‘Report on the Role of Women in Ireland’s Knowledge-Based Economy, Sectorial Analysis and Recommendations’, *Forfás*.

PROFESSIONAL EXPERIENCE & SPECIAL PROJECTS :

October 2018 – October 2020 *Postdoctoral Research Fellow, Spatial Dynamics Lab – University College Dublin. Project Title “Science Technology Space”*

Post-doctoral fellowship position under the research direction of Dr. Dieter F. Kogler. This is a two-year postdoctoral position as part of a four-year government funded Science Foundation Ireland (SFI) project entitled Science Technology Space (SciTechSpace). The primary objective of this position is to examine the relationship between scientific and technological knowledge for regional development. In pursuit of these goals, I have disambiguated, geocoded and matched *scientific Web of Science* data provided by Clarivate Analytics with *technological PATSTAT* data and Science Foundation Ireland funding data. The metrics derived from these databases will provide significant insights on how the properties of regional knowledge influence the evolution of local technological trajectories and economic prosperity. Related to the above, I have expanded by professional network and began collaborating with Dr. Balázs Lengyel (Agglomeration and Social Networks Research Group), Prof. Ron Boschma (Utrecht University), Dr. Changjun Lee (...), Dr. Peter Kedron (Arizona State University) and Prof. Rickard Eriksson (UMEÅ University). These collaborations will serve as the basis for my future research endeavours as well as grant applications.

January 2019 – June 2019 *Visiting Research Fellow, Agglomeration and Social Networks Research Group (ANET) – Hungarian Academy of Science.*

As part of my postdoctoral position, I am required to undertake a number of short-term research visits for data collection, preparation and analysis purposes. Currently I am visiting the Agglomeration and Social Network Research Institute (ANET) in Budapest. The purpose of this research visit is to work with Dr. Balázs Lengyel, the head of the ANET laboratory and a specialist on innovation network studies, and to gain econometric and statistical know-how which is required to convert on the overall aims and objectives of the project into key deliverables. The specific research paper that will result from these research visits, and which will be a direct output of the SciTechSpace project is: “Understanding Regional Diversification using Inventor Collaboration Networks”. This paper has already been accepted at numerous international conferences and will be the *keynote presentation* at the Regional Studies Associations’ North America Conference in McGill University in September 2019.

January 2019 – present *Economic Consultancy for the Three Regional Assemblies and the Department of Jobs Enterprise and Innovation (DJEI).*

Based on my research to date, I provide ongoing socio-economic advice to both the Three Regional Assemblies and the Department of Jobs Enterprise and Innovation. The thematic nature of this consultation is principally in relation to the *Regional Spatial and Economic Strategies* and the recently proposed *National Planning Framework: Ireland 2040*.

June 2019 – August 2019

Visiting Research Fellow, Department of Geography and Economic History – UMEÅ, Sweden.

This research visit is to further a collaborative research project involving, the University College Dublin, the Agglomeration and Social Networks Research Group, UMEÅ University and Arizona State University. The principle objective of this collaborative project is to secure *European Cooperation in Science and Technology (COST)* funding. As it stands, each of the partner universities has an established research centre in their respective field. COST would enable these research centres to become interconnected in terms of exploring synergies which will open up new paths of study that will likely have far-reaching policy implications.

February 2017 - October 2017

Visiting Research Fellow at the School of Social and Human Geography, Utrecht University.

During my Ph.D and to further expand my professional network I spent two semesters as a visiting researcher at the School of Social and Human Geography, Utrecht University. Whilst there I worked under the direct supervision of Dr. Pierre-Alexandre Balland, Prof Koen Frenken and Prof. Ron Boschma all of whom are leading experts in economic geography. I investigated the role of economic complexity in Irish regions and whether more complex knowledge was generated by local or foreign firms. The research findings have since been published in *European Planning Studies*.

September 2013 - March 2014

Economic Policy Analyst – Forfás (under the auspices of the Department of Jobs, Enterprise and Innovation).

Before it was dissolved in August 2014, Forfás was the national policy advisory board for enterprise, trade, science, technology and innovation in Ireland. Before starting my Ph.D and given my areas of expertise I was employed as an economic policy analyst within the Science Technology and Innovation division with a particular focus on: regional development, big data and industrial competitiveness. In addition, I undertook secondary analysis on the '2014 Prioritisation Action Group' and the role of woman in the workforce.

GRANTS AND AWARDS:

- 2018 – 2020. Science Foundation Ireland, Postdoctoral Research Fellow Level 1, University College Dublin, **€74,446**.
- 2017 – 2018. Graduate Research Innovation Fund (GRIF), University College Dublin, **€500**.
- 2016 – 2017. Graduate Research Innovation Fund (GRIF), University College Dublin, **€800**.
- 2016 – 2017. Graduate Research Innovation Fund (GRIF), University College Dublin, **€500**.
- 2015 – 2016. Graduate Research Innovation Fund (GRIF), University College Dublin, **€900**.
- 2015 – 2016. Regional Studies Association (RSA). Conference fee waiver to attend the 2nd North America Conference, Cities and Regions: Managing Growth and Change, £215 (**€275**).
- 2014 – 2018. Irish Research Council, Government of Ireland Postgraduate Scholarship for Science Policy and Innovation. **€75,000**
- 2014-2018. Scholarship for Teaching Assistantship, University College of Dublin School of Geography, Planning & Environmental Policy, annual fee waiver (at the EU fee rate of **€5,400** p.a.) and an annual stipend to the sum of **€2,500**.
- 2012/2013. SUSI, Student Universal Support Ireland, **€2,000**.
- 2011/2012. Higher Education Access Route HEAR. Funded by Dublin City Council. **€2,000**.
- 2010/2011. Higher Education Access Route HEAR. Funded by Dublin City Council. **€1,500**.

KEYNOTE SPEAKER:

- Early-career keynote speaker the Regional Studies Associations' North America Conference - *The Call of the New: Unpacking Innovation, its Spatiality, its Benefits and its Costs*. McGill University, 25th – 27th September 2019, Montreal.

INVITED SPEAKER:

- **Whittle, A.** "Using Big Data to Understand Regional Inventor Networks in Europe", invited speaker organized by the Agglomeration and Social Networks Research Group, Budapest (May 2019).
- **Whittle, A.** "SME and Entrepreneurship Policy in Ireland", roundtable discussion organized by the Organization for Economic Co-operation and Development (*OECD*) (June 2018).
- **Whittle, A.** "Local and Non-Local Knowledge Typologies: Technological Complexity in the Irish Knowledge Space", invited guest seminar speaker for the Department of Human Geography and Planning, Utrecht University, (March 2017).
- **Whittle, A.** "Related to What? Reviewing the Literature on Technological Relatedness. Where we are now and Where can we go?" Invited speaker by the Department of Jobs, Enterprise and Innovation (*DJEI*) (December 2016).
- **Whittle, A.** "The Evolution of Regional Technology Spaces: The Case of Ireland's Knowledge Economies", lecture for the program '*Assessing the Impact of Publicly-Funded Research, Development & Innovation (RD&I)*' organised by Science Foundation Ireland (SFI) and the Department of Finance (November 2015).
- **Whittle, A.** "The Evolution of Regional Knowledge Typologies: The Role of Structural Branching and Knowledge Transfer Mechanisms", invited speaker for a two-day workshop on evolutionary economic geography, co-organized by the Hungarian Regional Science Association and the Regional Committee in Szeged of the Hungarian Academy of Sciences (September 2015).
- **Whittle, A.** "Applying the *Knowledge Space* to examine Knowledge Flows within Irish Firms". Finalist at Higher Education Authority (HEA) and Irish Independent competition for "Does Your Research Make Impact?" (April 2015).

Invited speaker for several guest lectures at both an undergraduate and graduate level on a variety of topics concerning regional sustainable development and the geography of innovation. These lectures were given at the School of Geography, School of Economics, School of Architecture, Planning & Environmental Policy and the Geary Institute UCD.

CONFERENCES AND SEMINARS

In each of these conferences and seminars listed, I presented my own work or research undertaken in collaboration with colleagues and these studies were discussed by leading scholars in the discipline.

2019

- Rethinking Clusters: The Local and Global Scale of Sustainability, May 15th – 17th, Padova, Italy.
- Regional Studies Association – Socio-Spatial Dynamics Summer College: Skills, Mobility and Entrepreneurship, September 3rd – 6th, Sardinia, Italy
- Regional Studies Association – North American Conference: The Call of the New: Unpacking Innovation, its Spatiality, its Benefits and its Costs, September 25th – 27th, Montreal, Canada.
- 7th Central European Conference in Regional Science - Networks, Development and Disparities in Regions, October 9th – 11th, Sopron, Budapest.

2018

- 4th Geography of Innovation Conference, 31st January – 2nd February, Barcelona, Spain.

- Regional Studies Association (Irish Branch) – Urban Centers and Regional Economic Development, August 28th, Dublin.
- Regional Studies Association – Socio-Spatial Dynamics Summer College: Novel Approaches to Sustainable and Inclusive Development, September 4th – 7th, Sardinia, Italy.

2017

- Regional Studies Association (Annual Conference) - the Great Regional Awakening: New Directions, June 4th – 7th, Dublin, Ireland.
- Conference of Irish Geographers, May 4th – 6th, Cork, Ireland.
- DRUID Academy Conference, January 15th – 18th, Odense, Denmark.

2016

- European Regional Studies Association - Cities & Regions: Smart, Sustainable, Inclusive? August 23rd – 26th, Vienna, Austria.
- Regional Studies Association (North American Conference) - Cities and Regions: Managing Growth and Change, June 15th – 17th, Atlanta, United States.
- 48th Conference of Irish Geographers, May 5th – 7th, Dublin, Ireland.
- Regional Studies Association (Annual Conference) - Building Bridges: Cities and Regions in a Transnational World, 3rd – 6th April.

2015

- 47th Conference of Irish Geographers, May 8th – 10th, Belfast, United Kingdom.

CONTRIBUTION TO DISCIPLINE

Member of Organizing Committees of Major Academic Events

2017

Dr. Adam Whittle was the student representative on the organising committee for the 50th Regional Studies Associations Annual Conference in Dublin. This was a joint conference organised by Dr. Dieter Kogler (UCD) and Dr. Martin Sokol (TCD). This largest conference in the history of the RSA with over 600 delegates from over thirty-five countries attending.

2019

Dr. Adam Whittle is on the organising committee for the Regional Studies Associations 2nd Socio-Spatial Dynamics Summer College in Sardinia. This will be a week long interdisciplinary summer school accepting applications from both Ph.D candidates and postdoctoral researchers. At its core, the aim of the summer school twofold. Firstly, the connect young researchers from various (complementary) background which would otherwise not engage in critical discussions. Secondly, to push the frontier of scientific inquiry in one field by incorporating ideas and theories from another. In addition to been on the organising committee **Dr. Adam Whittle** will also deliver a seminar on Big-Data and inventor collaboration networks in Europe.

2021

Dr. Adam Whittle is on the advisory boarder for the 6th Global Conference in Economic Geography. This is the largest and most prestigious economic geography related conference which only takes place once ever four years. Passed on previous conferences in Seoul (2011), Oxford (2015) and Cologne (2018) it is expected that around one thousand delegates will attend. This is a joint conference organised Dr. Dieter Kogler (UCD) and Dr. Pádraig Carmody (UCD)

Referee Activity

Regional Studies, Regional Studies: Regional Science, European Planning Studies, Papers in Regional Science, Industry and Corporate Change, Urban Development Issues, Science and Public Policy.

TEACHING AND ADMINISTRATIVE EXPERIENCE:

Nodes, Knowledge and Networks: School of Architecture, Planning & Environmental Policy, at the University College Dublin.

The most fundamental resource in the modern economy is knowledge and accordingly, the most important process is learning. This is an introductory economic geography module aimed at introducing students from all backgrounds to the increasing importance of interconnectivity for regional development and technological change. Topics covered include location theory, globalisation, institutions and development and inequalities.

Graduate Supervision School of Architecture, Planning & Environmental Policy, at the University College Dublin.

Liam Broghan - MSc in Urban Planning and Design (2019-2020) Thesis Title: *The Relationship Between Residential Density and Traffic Congestion within the Greater Dublin Area.*

Sally O'Sullivan - MSc in Urban Planning and Design (2019-2020) Thesis Title: *Quantifying the potential land released as a result of the higher vacant land tax and exploring whether this will help alleviate the housing and homelessness crisis in Dublin.*

Emmanuel Albuquerque – Ph.D in Economic Geography (2019-2023) Thesis Title: *Essays on the Creation and Diffusion of Scientific Knowledge.*

Gergő Tóth – Ph.D in Economic Geography (2019-2023) Thesis Title: *Essays on Knowledge Networks and Regional Development.*

2015 – 2019 Occasional/Guest Lecturer at the School of Geography

Dr. Adam Whittle has given several lectures at both an undergraduate and graduate level on topics close to his area of specialisation. Undergraduate modules include: Mapping Your World (150 students), People Places Regions (360 students) and Globalization: Regions and the World Economy (80 students). Equally, **Dr. Whittle** has given the quantitative lecture series for the graduate module Research Design and Methods (20+students) for the past four years.

2014 – 2019 Teaching Assistant and Tutor at the School of Geography

Dr. Adam Whittle has extensive experience tutoring and demonstrating on wide variety of geography based modules having continuously been a geography tutor since 2014.

MEMBERSHIP:

- Association of American Geographers, 2016 – present (member)
- Regional Studies Association, 2015 – present (member).
- Geographical Society of Ireland, 2015 – present (member).
- Geography Society at the University College, Dublin 2015 - present (co-founder & graduate representative (2015-2018)).

ADDITIONAL SKILLS:

Information Technology: Fluent in Microsoft Word, Excel, Office and SPSS.

Programming: R, STATA Python and Tableau.

Social Network Analysis: Gephi, UCINET, NETLOGO.

REFERENCES:

Dr. Dieter F. Kogler
University College Dublin
Director of the Spatial
Dynamics Lab and
Associate Professor in
Economic Geography at the
School of Architecture,
Planning & Environmental
Policy.
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Prof. David Rigby
University of California,
Los Angeles (UCLA)
Full Professor in Economic
Geography and Statistics at
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Prof. Ron Boschma ^{a,b}
^a Utrecht University
Full Professor in Regional
Economics and Economic
Geography at the
Department of Human
Geography and Planning.
^b University of Stavanger
Professor in Innovation
Studies at the UiS Business
School.
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