Frank van der Wouden, PhD

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The Jockey Club Tower, Centennial Campus
Pokfulam Road, Hong Kong

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Academic Positions

University of Hong Kong - Department of Geography

(2019 - present)

Assistant Professor (Tenure Track) in Economic Geography & Innovation Studies

Northwestern Institute on Complex Systems

Northwestern University (2018 - present)

Research Affiliate

Kellogg School of Management

Northwestern University (2018 - 2019)

Management & Organizations Department Postdoctoral Research Scholar

Education

University of California, Los Angeles - Ph.D. in Economic Geography (2013-2018)

Dissertation: "Exploring the Changing Structures of Inventor Collaboration in U.S. cities

between 1836 and 1975"

Committee: David Rigby, Michael Storper, Eric Sheppard and Jacob Foster

Utrecht University - Research M.Sc. in Economic Geography (2012)

Thesis: "The role of Technological Relatedness in Economic Variety on Knowledge Production in U.S.

Cities between 1975 - 2005"

Committee: Ron Boschma, David Rigby, Frank van Oort

University of California, Berkeley - Haas School of Business

Visiting student – Organizational Behavior (2010)

Utrecht University - B.Sc. in Human Geography and Urban Planning (2010)

Thesis: "U.S. Companies in the polder: the effect of U.S. KIBS on spatial concentration and innovation in The Netherlands"

Teaching Experience

Assistant Professor at University of Hong Kong

- GEOG2123: Economic Geography
- GEOG1012: Economic and social development in an urbanizing world
- GEOG3426: Networks and Geography: Introduction to Social Network Analysis

Lecturer (2018 - present) at Kellogg School of Management, Northwestern University

Network Analysis & Data Science with prof. dr. Hyejin Youn

Teaching Fellow (2013-2018) at University of California, Los Angeles

Globalization with prof. dr. Eric Sheppard with prof. dr. David Rigby (x3) Economic Geography with prof. dr. David Rigby People & Earth Ecosystems with prof. dr. Kyle Cavanaugh

Global Economy with prof. dr. John Agnew (x2)

Junior Assistant Professor (September 2012 - September 2013) - Utrecht University

Lecturer: (1) Spatial Economics

(2) Firm and Region

(3) Economic Geography

Supervision Bachelor Theses: 15+ students in Economics & GeoSciences faculties

Research Interests

InnovationEconomic GeographyRegional DevelopmentGeography of InnovationCollaborationInventor NetworksSpatial EconomicsSocial Network AnalysisComplex Systems

Computational Social Science Machine Learning Evolutionary Economics

Publications & Working papers

Peer-reviewed Papers

Van der Wouden, F. (2020), "A History of Collaboration in U.S. Invention: Changing Patterns of Co-invention, Complexity and Geography", Industrial and Corporate Change 29 (3)

Van der Wouden, F. & D.L. Rigby (2019), "Co-inventor Networks and Knowledge Production in Specialized and Diversified Cities", Papers in Regional Science 98 (4)

Van Niftrik & Van der Wouden et al. (2019), "Machine learning algorithm identifies patients at high risk for early complications after intracranial tumor surgery: registry based cohort study", Neurosurgery 85 (4)

Under Review

Van der Wouden, F. & D. Rigby "Inventor Mobility and Productivity: A Long-Run Perspective"

Van der Wouden, F. & G. Carnabuci, H. Youn "Adjacent Possible: Why some knowledge combinations are more likely to drive innovation than others"

Van der Wouden, F. & H. Youn "Impact of geographical distance on acquiring know-how through scientific collaboration"

Policy Recommendations

van Oort, F. & T. de Graaff, H. Koster, H. Olden & F. van der Wouden (2013), "*The city as the Engine of Growth: Theoretical exploration, empirical analysis and policy recommendations for the Randstad*" (Policy recommendations for Ministry of Internal Affairs of The Netherlands)

Working Papers

Van der Wouden, F & Rigby, D., C. Esposito and C. Rosler "The Geography of Novel Knowledge"

Van der Wouden, F. & H. Youn "The Role of Females in Collaboration, Creativity and Innovation"

Cortinovis, N. & F. van der Wouden "Collaboration and Learning in a Creative Industry"

Painter, D & F. van der Wouden, M. Laubichler, H. Youn "Simultaneous Innovation in Medicine"

Van der Wouden, F. & C.H.B. van Niftrik "Outcome Prediction Modeling in Aneurysmal Subarachnoid Hemorrhage using Machine Learning Techniques"

Van der Wouden, F. "Using Machine Learning Techniques to Mine and Process Data in Social

Sciences"

Van der Wouden, F. "What Mechanisms Structure Tie-Formation among U.S. Inventors:

Empirical Evidence from U.S. Patents between 1836-1975"

Data

2018 Co-inventor collaboration for USPTO patents between 1836-1975:

A unique inventor-patent database that identifies all (co-)inventors and their geographical location(s) on more than 3 million USPTO patents between 1836 and 1975, connecting invention of technologies to geographical locations and building networks of collaboration.

Awards and Grants

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2020	Seed Funding Basic Research (PI)	- University of Hong Kong	(144,616 HKD)
2020	Best Research Publication Price (Co-PI)	- Forschungspreis KNZ	(2,000 CHF)
2019	Travel Bursary	- Young Scholars Initiative	(\$200)
2018	Travel Bursary	- Institute for New Economic Thinking	(\$300)
2018	University Fellowship	 UCLA Geography Department 	(\$500)
2017	Graduate Student Grant	- UCLA Center for Economic History	(\$3,000)
2017	Dissertation Year Fellowship	- UCLA Graduate Division	(\$36,325)
2017	Outstanding Teaching Certificate	 UCLA Geography Department 	
2017	Travel Bursary	- Regional Studies Association	(£215)
2016	Graduate Student Grant	- UCLA Center for Economic History	(\$5,000)
2016	Travel Bursary	- Young Economic Geographers Network	(430 CHF)
2016	Travel Bursary	- AAG Economic Geography Specialty G	roup (\$250)
2016	Travel Bursary	- Summer Institute for Economic Geogra	phy (\$1,100)
2015	Haynes Lindley Doctoral Dissertation Fellow	wship (PI) - Haynes Foundation	(\$20,000)
2015	Graduate Summer Research Mentorship Aw	rard - UCLA Graduate Division	(\$6,000)
2013	PhD funding offer	- UCLA Graduate Division	(\$170,000)
2013	University Fellowship	- UCLA Graduate Division	(\$20,000)
2013	Bernhard Fellow	- Prins Bernhard Cultuurfonds	(€5,000)
2013	Fundatie van Renswoude Fellow	- Fundatie van de Vrijvrouwe van Rensw	oude (€6,000)
2013	Marc de Smidt Prize	- Best Master Thesis - Faculty GeoScience	es (€500)
2013	Marc de Smidt Prize	- Best Presentation - Faculty GeoSciences	S

Invited Talks

2019	Seminar	Innovation, Collaboration and Geography	Hong Kong University
2019	Seminar	Inventor Mobility and Productivity	Utrecht University
2019	Workshop	Machine Learning using Individual-level data	Zurich
2018	Seminar	"Historical US Inventor Collaboration"	Utrecht University
2017	Workshop	Relatedness & Regional Development	Harvard Kennedy School
2017	Guest Lecture	"Humans, economics & environment"	UCLA
2016	Key note	The Captains of Industry Conference	The Hague
2016	Guest Lecture	"Evolutionary Economics - new insights"	Utrecht University
2015	Guest Lecture	"Multinational Corporations & Development"	UCLA
2015	Workshop	3rd Geography of Networks	Utrecht University

Selected Presentations

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2019	Article presentation	IC2S2 (Computational Social Science)	Amsterdam	
2019	Article presentation	AAG Annual Meeting	Washington	
2019	Article presentation	Urban and Regional Economic Development	USC	
2018	Article presentation	Complexity and New Economic Thinking	MIT	
2018	Article presentation	AAG Annual Meeting	New Orleans	3/3

2018	Article presentation	Geography of Innovation	Barcelona
2017	Article presentation	DRUID	New York City
2017	Article presentation	Young Economic Geographers Network	Hannover
2017	Article presentation	Regional Studies Association Conferece	Dublin
2017	Article presentation	AAG Annual Meeting	Boston
2016	Article presentation	Young Economic Geographers Network	Bern
2016	Workshop	Summer Institute in Economic Geography	Lexington
2016	Article presentation	AAG Annual Meeting	San Francisco
2016	Article presentation	Geography of Innovation	Toulouse
2015	Article presentation	4th Global Conference on Economic Geography	Oxford
2015	Article presentation	AAG Annual Meeting	Chicago
2014	Article presentation	Geography of Innovation	Utrecht
2013	Article presentation	AAG Annual Meeting	New York City

Other

Volunteering	Representative at Social Science Counsil UCLA	(2014-2015, 12 months part-time)
	Treasurer at Graduate Geography Students Association	(2014-2015, 12 months part-time)
	Introduction Committee at Utrechtsch Studenten Corps	(2009, 6 months full-time)
	AIESEC Ambassador for AIESEC The Netherlands	(2008, 3 months full-time)

Reviewer Research Policy Aca

Journal of Economic Geography

PLOS One

Industry and Innovation

Academy of Management

Scientometrics

Papers in Regional Science

Affiliations American Association of Geographers

Regional Studies Association Economic History Association

California Center for Population Research

Soccer coach for youth between 10-12 years

Languages Dutch (Native) German(Good) R JavaScript

English(Fluent) French (Intermediate) C Python

Software R Python H2O.ai Intersystems Cache

ArcGIS Gephi Adobe Photoshop Adobe InDesign

UciNet STATA MaxQDA HLM

Hobbies Football, (trail) running and skiing

References

David Rigby

Professor of Economic Geography at UCLA Professor of Statistics at UCLA

⊠ rigby@geog.ucla.edu

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Ron Boschma

Professor of Regional Economics at Utrecht University Professor of Innovation Studies at Stavanger University

(2004 - 2006, 6+ hours a week)

⊠ r.a.boschma@uu.nl

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Michael Storper

Professor of Urban Planning at UCLA Professor of Economic Geography at LSE

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Hyejin Youn

Assistant Professor of Management & Organizations Kellogg School of Management

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Northwestern University