<u>RESUME</u>

Full name: Dani Broitman Identity No. 302422670 Date and place of birth: 19/10/1967 – Rosario, Argentina Marital status: Married +2 Address: Amirim 16, Magal, DN Hefer 38845, Israel

ACADEMIC DEGREES

- **2012** PhD, Urban and Regional Planning Program. Faculty of Architecture and Town Planning, Technion Israel Institute of Technology.
- **2008** M.A., Department of Natural Resources and Environmental Management (cum laude), Haifa University.
- **1995** B.Sc., Mathematics and Computer Science, Tel Aviv University.

ACADEMIC APPOINTMENTS

2016	Assistant professor, Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology.
2015	Adjunct lecturer, Department of Natural Resources and Environmental Management, Haifa University.
2015	Research fellow, The Natural Resources and Environmental Research Center, Haifa University.
2015	Adjunct lecturer, Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology.
2014 - 2016	Postdoctoral researcher in the Faculty of Agriculture, Food and Environment. Hebrew University of Jerusalem.
2012 - 2014	Postdoctoral researcher in the Spatial Economics Department at the Faculty of Economics and Business Administration. Vrije Universiteit (VU) Amsterdam.

PROFESSIONAL EXPERIENCE

2006 – 2009 Project Management Officer of the IT department, Netafim Ltd.

- 2000 2002 Customer Projects Manager, ECtel Ltd.
- 1998 2000 Software Development Engineer, Netafim Ltd.
- 1995 1998: Software Development Engineer, ECI Telecom Ltd.

RESEARCH INTERESTS

- Urban and regional economics
- Economic geography
- ➢ Systems modeling
- Ecological and environmental economics
- ➢ Land use change

TEACHING EXPERIENCE Courses taught (last 3 years)

Quantitative Thinking (graduate compulsory course, 23 students). Assistant teacher (2010 - 2012), adjunct lecturer (2014 - 2016). Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology.

Introduction to Economics for Planners (graduate compulsory course, 22 students). Assistant teacher (2011 - 2012), adjunct lecturer (2014 - 2016). Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology.

Economic considerations in building projects (undergraduate course, 38 students). Assistant teacher (2010 - 2012), adjunct lecturer (2014 - 2016). Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology.

Urban and Regional Economics (graduate compulsory course, 28 students). Assistant teacher (2010 - 2012), Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology. Adjunct lecturer (2015 - 2016), Department of Natural Resources and Environmental Management, Haifa University.

Geographic Information Systems and Geologistics (graduate course). Assistant teacher (2013 - 2014), Graduate School of Economics and Business - VU Amsterdam.

Land Use Change (graduate course). Assistant teacher (2013 – 2014), Graduate School of Economics and Business - VU Amsterdam.

Urban Environment Lab (undergraduate course). Assistant teacher (2014) Amsterdam University College – AUC

Occasional Reviewer for Journals (Various years):

Ocean & Coastal Management Ecological Economics Computers, Environment and Urban Systems

Review of proposal for the 28th International Conference on Efficiency Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS), Pau, France

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- 2010: The European Regional Science Association
- 2009: The Israeli Regional Science Association
- 2007: The Israeli Association for Ecological Economics

FELLOWSHIPS, AWARDS AND HONORS

2013 Best doctoral thesis award, Faculty of Architecture and Town Planning, Technion – Israel Institute of Technology

GRADUATE STUDENTS

Completed MSc theses

Andres Rubio, year of graduation 2013. "Solid waste management pricing scheme in Colombia, solid waste reduction and improvement alternatives". Principal Supervisor Dr. Dani Broitman, Prof. Henri De Groot as Co. Supervisor. Graduate School of Economics and Business (VU Amsterdam).

Julius Kreissig, year of graduation 2013. "Economic valuation of the impact of urban spatial dynamics on ecosystem services". Principal Supervisor Dr. Dani Broitman, Prof. Henri De Groot as Co. Supervisor. Graduate School of Economics and Business (VU Amsterdam).

MSc theses in progress

Merav Tal-Maon, started 2016, expected year of graduation 2017. "Quantifying the Interdependency, Resiliency, Reliability and Vulnerability of Interdependent Systems". Principal supervisor Dr. Mashor Housh. Dr. Dani Broitman as Co. Supervisor.

PUBLICATIONS

M.A. Theses

"Economic analysis of source separation of waste in Israel". Natural Resources and Environmental Management Department, Haifa University (2008).

Ph.D. Theses

"Dynamics of polycentric urban structure". Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology (2012).

Refereed papers in professional journals

Published papers in professional journals

- Broitman Dani, Ayalon Ofira, Kan Iddo. "One size fits all? An assessment tool for solid waste management at local and national levels". <u>Waste Management</u> 32: 1979-1988, 2012
- **2. Broitman Dani**, Czamanski Daniel. "Cities in competition, characteristic time and leapfrogging developers". <u>Environment and Planning B</u>, 39(6): 1105-1118, 2012
- **3. Broitman Dani**, Czamanski Daniel. "A model of the emergence of urban subcenters in the face of varying planning policies and developers' characteristics". <u>URISA Journal</u>, 24(1): 25 – 33, 2012
- **4.** Czamanski Daniel, **Broitman Dani**. "Developers' choices under varying characteristic time and competition among municipalities". <u>Annals of Regional Science</u>, 49(3): 733 743, 2012
- 5. Broitman Dani, Koomen Eric. "Regions and housing stock: a decade of urban and peri-urban housing dynamics". <u>Letters in Spatial and Resource Sciences</u>. 8(3): 201 217, 2015
- **6. Broitman Dani**, Czamanski Daniel. "Bursts and avalanches: the dynamics of polycentric urban evolution". <u>Environment and Planning B</u> 42(1): 58 75, 2015
- **7. Broitman Dani**, Koomen Eric. "Residential density change: intensification and urban extension". <u>Computers, Environment and Urban Systems</u> 54: 32 46, 2015
- Zusman Marina, Broitman Dani, Portnov Boris. "Application of the Double Kernel Density Approach to the Multivariate Analysis of Attributeless Event Point Datasets". <u>Letters in Spatial and Resource Sciences</u>. DOI 10.1007/s12076-015-0166-y, 2015
- **9.** Czamanski Daniel, **Broitman Dani**. "The life cycle of cities". Forthcoming in <u>Habitat International</u>

Submitted papers

- **10.** Czamanski Daniel, **Broitman Dani**, "Information and Communication Technology and the spatial evolution of mature cities". Submitted to <u>Socio-Economic Planning Sciences</u>
- **11.** Broitman Dani, Czamanski Daniel, Toger Marina. "The complex interactions between cities and nature". Submitted to <u>Quality Innovation Prosperity</u>

<u>Refereed book chapters</u>

12. Koomen Eric, Dekkers Jasper EC, Broitman Dani. "Analyzing and simulating urban density; Exploring the difference between policy ambitions and actual trends in the Netherlands". Chapter in Thill, J-C (Ed.) <u>Spatial Analysis and Location</u> <u>Modeling in Urban and Regional Systems</u>. Advances in Geographic Information Science Series, Springer, Heidelberg, 2016. http://www.springer.com/earth+sciences+and+geography/geographical+informatio n+systems/book/978-3-642-37895-9

Research reports or Case reports

1- Dekkers Jasper EC, Koomen Eric, **Broitman Dani**. "De verstedelijkingsparadox". <u>Rooilijn</u>, 47:1 22-29, 2014

CONFERENCES

Presentations (giving papers)

Abroad

April 2011	Developers' behavior and polycentric city structure. Regional Science Association Tripartite Workshop. The Resource Centre, London, United Kingdom (04-04-2011)
July 2011	Developer's typologies and city policies: A dynamic model of urban sub-centers emergence. 24th Summer School of the European Regional Science Association, University of Luxembourg, Luxembourg (10-07-2011)
August 2011	Developers' characteristics and the emergence of urban sub-centers under varying characteristic time. 51th European Regional Science Association (ERSA) Congress – Universitat De Barcelona, Barcelona, Spain (31-08-2011)
May 2012	Accessibility Dynamics and Polycentric Urban Evolution. Regional Science Association International (RSAI) 9th World Congress. Special NECTAR session. Regional Business Centre – Timisoara, Romania (12-05-2012)
September 2013	Built-in or build-out: Exploring residential density dynamics in the Netherlands. 53rd European Regional Science Association (ERSA) Congress – University of Palermo, Palermo, Italy (28-09-2013)
October 2013	Crisis, regions and housing stock: A decade of urban and peri-urban dynamics. Regional Science Association Netherlands, Israeli-Dutch workshop – University of Groningen, The Netherlands (04-10-2013)

In Israel

May 2008	Economics, environment and between. Social and environmental week. Oranim Academic College, Israel (18-05-2008)
January 2009	Economic analysis of source separation of waste in Israel. Samuel Neaman Institute and Union of Local Authorities in Israel: Waste experts' workshop. Tel Aviv, Israel (19-01-2009)
May 2009	Economic analysis of source separation of waste in Israel. 37th annual conference of The Israeli Association for Ecology and Environmental Sciences. Rehovot, Israel (13-05-2009)
July 2010	Characteristic Time, Competition among Municipalities, Developers' Behavior and 3D Urban Morphology. The 3rd HU- UCLA-Technion-TAU-UBC Israel Real Estate and Urban Economics Symposium, Jerusalem, Israel (15-07-2010)
November 2010	Characteristic Time and Developers' Behavior – A dynamic model. Israeli Regional Science Association conference. University of Haifa, Israel (28-11-2010)
February 2012	Demand dynamics for CBD accessibility during polycentric evolution. Israeli Regional Science Association conference. Hebrew University, Rehovot, Israel (07-02-2012)

Participation in organizing conferences

In Israel

2011	Cities and Nature Conference. Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology. 3-4 October, 2011. Organization and administrative support.
2010 - 2012	Peri-Urban spatial dynamics workshop, held alternately in the Faculty of Architecture and Town Planning. Technion – Israel Institute of Technology, and the Department of Geography and Human Environment, Tel-Aviv University. Organization and administrative support.