

Miruna Petrescu-Prahova

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Current Position

2009 - Postdoctoral Research Associate, Department of Statistics and Center for Statistics and the Social Sciences, University of Washington
Project: "Scalable Methods for the Analysis of Networks-Based Data"

Education

2009 Ph.D. in Sociology, Department of Sociology, University of California, Irvine
Dissertation: "*Discrete Exponential Family Models for the Study of Ethnic Residential Segregation*"

2008 M.A. in Sociology, Department of Sociology, University of California, Irvine
Thesis: "*Friendship among Graduate Students: A Social Network Approach*"

2002 M.A. in European Social Policy, University of Bucharest, Romania

2000 B.A. in Social Work and Orthodox Theology, University of Bucharest, Romania

Research Interests

Social Networks
Urban Sociology
Stratification

Quantitative Methodology
Spatial Demography

Publications

2009 Miruna Petrescu-Prahova. "Beyond Schelling: The Role of Attitudes toward In-group and Out-group Members in Ethnic Residential Settlement and Segregation." Working Paper No. 91, Center for Statistics and the Social Sciences, University of Washington

2008 Miruna Petrescu-Prahova and Carter T. Butts. "Emergent Coordinators in the World Trade Center Disaster". *International Journal of Mass Emergencies and Disasters* 28:133-168

2008 Benjamin Lind, Carter T. Butts, Miruna Petrescu-Prahova and Miguel Tirado. 2008. "Brokerage Roles in Disaster Response: Organizational Mediation in the Wake of Hurricane Katrina". *International Journal of Emergency Management* 5:75-99

2007 Katherine Faust and Miruna Petrescu-Prahova. Comment on Mark S. Handcock, Adrian E. Raftery, and Jeremy M. Tantrum. "Model-based clustering for social networks". *Journal of the Royal Statistical Society A* 170:336-337

2007 Miruna Petrescu-Prahova. "Discrete Exponential Family Models for the Study of Ethnic Residential Segregation". In Adrian Bejan and Gilbert Merkx (eds.), *Constructal Theory of Social Dynamics*, Springer

- 2007 Carter T. Butts, Miruna Petrescu-Prahova and B. Remy Cross. "Responder Communication Networks in the World Trade Center Disaster: Implications for Modeling of Communication Within Emergency Settings". *Journal of Mathematical Sociology* 31:121-147
- 2006 Philip N. Cohen and Miruna Petrescu-Prahova. "Gendered Living Arrangements Among Children with Disabilities: Evidence from the 2000 Census." *Journal of Marriage and the Family* 68:630-638
- 2005 Carter T. Butts and Miruna Petrescu-Prahova. "Radio Communication Networks in the World Trade Center Disaster." IMBS Technical Report MBS 05-04, University of California, Irvine.
- 2005 Carter T. Butts, Miruna Petrescu-Prahova, and B. Remy Cross. "Responder Communication Networks in the WTC Disaster: IT Implications." ResCUE Research Highlights Volume, University of California, Irvine.

Work in Progress

- Miruna Petrescu-Prahova. "Residential Segregation Mechanisms: An Analysis of 36 Metropolitan Areas"
- Miruna Petrescu-Prahova. "Estimating Network Structure and Actor Level Indices in the Case of Missing Data."
- Miruna Petrescu-Prahova and Carter T. Butts. "Network Inference with Missing Data: a Performance Comparison of Existing Methods"

Teaching Experience

- Winter 2010 **Instructor**, Center for Statistics and the Social Sciences, University of Washington
"Statistical Analysis of Social Networks" (CS&SS 567/STAT 567)
- 2002-2003, **Teaching Assistant**, Department of Sociology, University of California, Irvine.
- 2007-2008 Courses: Population, Social Stratification, International Sociology, Business Decisions, Probability and Statistics for the Social Sciences

Grant Applications (under review)

- National Institutes of Health Exploratory/Developmental Research Grant Award (R21)
"Unauthorized 1.5 Generation Young Adults and the Transition to Work and Uncertainty" (in collaboration with Roberto G. Gonzales, UW School of Social Work)

Invited Talks

- 2006 Miruna Petrescu-Prahova. "Discrete Exponential Family Models for the Study of Ethnic Residential Segregation". Constructal Theory of Social Dynamics Workshop, Duke University, April 4-5, 2006

Awards and Fellowships

- 2007 UC Regents' Dissertation Fellowship

- 2006 Summer Research Funding from the School of Social Sciences, University of California Irvine
- 2006 Participant, GIS and Population Science Workshop, Center for Spatially Integrated Social Science, University of California, Santa Barbara, July 10-21
- 2005 Best Paper Award for “Emergency Phase Networks During the World Trade Center Disaster” (with Carter T. Butts and Remy Cross), Third Joint US-Japan Conference on Mathematical Sociology, Sapporo, Japan
- 2005 Summer Research Funding from the School of Social Sciences, University of California Irvine
- 2004 Summer Research Funding from the School of Social Sciences, University of California Irvine
- 2004 A. Kimball Romney Outstanding Graduate Student Paper Award for “Friendship among Graduate Students: A Social Network Approach,” School of Social Sciences, University of California Irvine
- 2003 P.E.O. International Peace Scholarship
- 2002-2006 Social Science Merit Award, School of Social Sciences, University of California Irvine

Presentations

- 2009 Miruna Petrescu-Prahova. “Eastern European Fertility Policies in Comparative Perspective: Romania and Hungary”. American Sociological Association Annual Meetings, San Francisco, CA
- 2008 Miruna Petrescu-Prahova. “A Network Analysis of Global International Migration”. 28th Sunbelt Network Conference (INSNA), St. Petersburg, FL
- 2008 Miruna Petrescu-Prahova. “Bridging simulation and inference methods in the study of residential segregation: a case study”. Population Association of America Annual Meetings, New Orleans, LA
- 2007 Miruna Petrescu-Prahova, Carter T. Butts, Christine A. Bevc, Kathleen Tierney. “Brokerage in Emergent Multiorganizational Networks During Disaster Response”. 27th Sunbelt Network Conference (INSNA), Corfu, Greece
- 2007 Miruna Petrescu-Prahova. “Ethnic Preferences and Residential Segregation: A Simulation Study”. Population Association of America Annual Meetings, New York, NY
- 2006 Miruna Petrescu-Prahova and Carter T. Butts. “Emergent Coordinators in the World Trade Center Disaster”. American Sociological Association Annual Meetings, Montreal, QC
- 2006 Miruna Petrescu-Prahova. “Modeling Ethnic Residential Segregation in Urban Environments”. Conference on Spatial Demography, Center for Spatially Integrated Social Science, University of California, Santa Barbara, CA
- 2006 Miruna Petrescu-Prahova and Carter T. Butts. “Network Inference with Missing Data: a Performance Comparison of Existing Methods”. 26th Sunbelt Network Conference (INSNA), Vancouver, BC

- 2005 Philip N. Cohen and Miruna Petrescu-Prahova. "Gendered Living Arrangements Among Children with Disabilities: Evidence from the 2000 Census." American Sociological Association Annual Meetings, Philadelphia, PA
- 2005 Carter T. Butts and Miruna Petrescu-Prahova. "Radio Communication Networks in the World Trade Center Disaster". American Sociological Association Annual Meetings, Philadelphia, PA
- 2005 Miruna Petrescu-Prahova. "Estimating Network Structure and Actor Level Indices in the Case of Missing Data." Third US-Japan Joint Conference on Mathematical Sociology, Sapporo, Japan
- 2005 Miruna Petrescu-Prahova. "Friendship Among Graduate Students: A Social Network Approach." 25th Sunbelt Network Conference (INSNA), Redondo Beach, CA
- 2005 Carter T. Butts, Miruna Petrescu-Prahova, and B. Remy Cross. "Responder Communication Networks During the World Trade Center Disaster." 25th Sunbelt Network Conference (INSNA), Redondo Beach, CA
- 2004 Miruna Petrescu-Prahova, Jeanne A. Batalova. "Sharing Social Space: Social Embeddedness of Economic Actions in a Certified Farmer's Market." American Sociological Association Annual Meetings, San Francisco, CA
- 2004 Philip N. Cohen, Miruna Petrescu-Prahova. "Care Work, Gender Inequality and the State: Children with Disabilities and the Division of Paid Work in Couples." Population Association of America Annual Meetings, Boston, MA

Work Experience

- 2004-2008 **Research Assistant**, Project RESCUE – Responding to Crises and Unexpected Events, California Institute for Telecommunications and Information Technology, University of California, Irvine
- 2000-2002 **Juvenile Probation Counselor, Project Coordinator**, "Family and Child Protection" Foundation, Bucharest, Romania

Training

- 2007 NETHUR School "Research on Neighborhood Effects", OTB Research Institute for Housing, Urban and Mobility Studies, Delft University of Technology, May 15-16
- 2006 GIS and Population Science Workshop, Center for Spatially Integrated Social Science, University of California, Santa Barbara, July 10-21

Tools R, SPSS, SAS

Reviewer

Social Networks
Journal of Mathematical Sociology
Computational and Mathematical Organization Theory

Professional Memberships

American Sociological Association (Sections: *Community and Urban Sociology*; *International Migration*; *Mathematical Sociology*; *Organizations, Occupations and Work*; *Race, Gender and Class*)

International Network for Social Network Analysis

International Sociological Association (Committees: *RC21 – Sociology of Urban and Regional Development*; *RC33 – Logic and Methodology in Sociology*)

Population Association of America

References

Mark S. Hancock

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Carter T. Butts, *Dissertation Committee Chair*

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