

Christopher Steven Marcum

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Research Interests

aging and the life course — family — health — social networks — time use

Education

Ph.D. Sociology, University of California – Irvine, 2011

Dissertation Title: Social Time: Variations in Social Interaction Across the Life Course

Dissertation Committee: Carter T. Butts, Andrew Noymer, Joy Pixley (Chair), and Judith Treas

M.A. Demographic and Social Analysis, University of California – Irvine, 2007

Thesis Title: Trends in Euthanasia Attitudes, 1970–2004. Cohort Turnover or Cohort Change?

Readers: Susan K. Brown, Andrew Noymer, Joy Pixley, and Judith Treas

B.A. Sociology, University of Arizona, 2004, *Magna Cum Laude* Faculty Advisor: Charles Ragin

Employment History

Staff Scientist - Methodologist	Present
National Institutes of Health	Bethesda, Maryland
NIA Postdoctoral Fellow	2011-2012
Rand Corporation	Santa Monica, California
Research Assistant	2007-2011
Networks, Computation, and Social Dynamics	University of California, Irvine
Lecturer	2009-2010
School of Policy, Planning, and Development	University of Southern California
Demographic Consultant	2007
Citadel Law Firm	Irvine, California
Teaching Assistant	2005-2006
School of Social Sciences	University of California, Irvine
Curatorial Assistant	2000-2005
Arizona Historical Society	Tucson, Arizona

Publications

Christopher Steven Marcum, Jielu Lin, and Laura M Koehly (in press). “Growing-up and Coming Out: Are 4-cycles present in hetero/gay hook-up networks?” *Network Science*

Christopher Steven Marcum, Anna V Wilkinson, and Laura M Koehly (forthcoming). “The Effect of Hurricane Ike on Personal Network Tie Activation as Response and Recovery Unfolded.” In A.J. Faas and Eric Jones, eds., *Social Network Analysis of Disaster Response, Recovery, and Adaptation*, chapter 8. Elsevier

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Emily J Smith, **Christopher Steven Marcum**, Adam Boessen, Zachary W Almquist, John R Hipp, Nicholas N Nagle, and Carter T Butts (2015). “The relationship of age to personal network size, relational multiplexity, and proximity to alters in the western United States.” *The Journals of Gerontology: Social Sciences*, 70(1):pp. 91–99. doi:10.1093/geronb/gbu142. PMID: 25324292

Benjamin Cornwell, **Christopher Steven Marcum**, and Merrill Silverstein (2015). “The Social Network Approach in Gerontological Research.” *The Journals of Gerontology: Social Sciences*, 70(1):pp. 87–90. doi:10.1093/geronb/gbu157. PMID: 25399011

Christopher Steven Marcum and Carter T Butts (2015). “Creating Sequence Statistics for Egocentric Relational Events Models using informR.” *Journal of Statistical Software*, 64(5):pp. 1–34

Mark Tranmer, **Christopher Steven Marcum**, F Blake Morton, Darren P Croft, and Selvino R de Kort (2015). “Using the relational event model (REM) to investigate the temporal dynamics of animal social networks.” *Animal Behaviour*, 101:pp. 99–105. doi:10.1016/j.anbehav.2014.12.005

Christopher Steven Marcum and Laura M Koehly (2015). “Inter-Generational Contact from a Network Perspective.” *Advances in Life Course Research*, 24(2):pp. 10–20. doi:10.1016/j.alcr.2015.04.001. PMID: 26047986

Christopher Steven Marcum and Judith Treas (2013). “The Intergenerational Social Contract Revisited: Cross-National Perspectives.” In Merrill Silverstein and Roseann Giarusso, eds., *Kinship and Cohort in an Aging Society: From Generation to Generation*, chapter 14, pp. 293–313. Baltimore: Johns Hopkins University Press

Raffaele Vardavas and **Christopher Steven Marcum** (2013). “Modeling Influenza Vaccination Behavior via Inductive Reasoning Games.” In Alberto d’Onofrio and Piero Manfredi, eds., *Modeling the Interplay between Human Behavior and Spread of Infectious Disease*, Behavioral Epidemiology, pp. 203–227. New York: Springer

Christopher Steven Marcum (2013). “Age Differences in Daily Social Activities.” *Research on Aging*, 35:pp. 612–640. doi:10.1177/0164027512453468. PMID: 25190898

Andrew M Parker, Raffaele Vardavas, **Christopher Steven Marcum**, and Courtney A Gidengil (2013). “Conscious Consideration of Herd Immunity in Influenza Vaccination Decisions.” *American Journal of Preventive Medicine*, 45(1):pp. 118–121. doi:10.1016/j.amepre.2013.02.016. PMID: 23790997

Christopher Steven Marcum, Christine A Bevc, and Carter Tribley Butts (2012). “Mechanisms of Control in Emergent Interorganizational Networks.” *Policy Studies Journal*, 40(3):pp. 516–546. doi:10.1111/j.1541-0072.2012.00463.x

Carter Tribley Butts, Ryan Michael Acton, and **Christopher Steven Marcum** (2012). “Interorganizational Collaboration in the Hurricane Katrina Response.” *Journal of Social Structure*, 13(1):pp. 1–36

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Judith Treas and **Christopher Steven Marcum** (2011). "Diversity and Family Relations in an Aging Society." In Richard A Settersten, Jr. and Jacqueline L Angel, eds., *Handbook of Sociology of Aging*, Commemorating the 30th Anniversary of the ASA Section on Aging and the Life Course, chapter 6. Springer

Invited Book Reviews

Christopher Steven Marcum. Book review of "Aging Across the United States: Matching Needs to States' Differing Opportunities and Services" by Charles Lockhart and Jean Giles-Sims. *Contemporary Sociology*, 2013.

Christopher Steven Marcum. Book review of "Social Networks and Health: Models, Methods, and Applications" by Thomas A. Valente. *Contemporary Sociology*, 2011.

Christopher Steven Marcum. "Individual Gains from Organizational Ties: Small Explains How Institutions Facilitate Social Contact." Book review of "Unexpected Gains: Origins of Network Inequality in Everyday Life" by Mario Luis Small. *Contemporary Sociology*, 2010.

Software

Christopher Steven Marcum. "informR: R Tools for Creating Sequence Statistics." version 1.0. Available for download from CRAN at: <http://www.cran.r-project.org/web/packages/informR/>

Christopher Steven Marcum. "gooJSON: Google JSON Data Interpreter for R." version 1.0. Available for download from CRAN at: <http://www.cran.r-project.org/web/packages/gooJSON/>

Working Papers Under Review

Christopher Steven Marcum. "Yet Another Statistical Analysis of Bob Ross Paintings." Available online at: <http://arXiv:1512.02914>

Laura Koehly and Christopher Steven Marcum "Multiple Relation Measurement for Latent Construct Networks"

Honors and Awards

Recognition

National Institutes of Health NHGRI GREAT Award for Mentorship, 2015

National Institutes of Health Intramural Research LRP Award, 2014

NHGRI Director's Scientific Symposium, Best Plain Language Poster for "*Communication is Key! Understanding How Families at Risk for Cancer Talk About Genetic Testing and Counseling Through Social Networks*", (with Allie Rosen, Laura Koehly, and Donald Hadley), 2013

Smithsonian National Zoo Night of the Living Zoo, Best Costume for "Bob Ross and Happy Tree Painting" (with Kate Leah Marcum), 2013

ASA Section on Aging and the Life Course Best Paper Award by a Graduate Student for "*Age Differences in Daily Social Activities*", 2012

Robert Wood Johnson Foundation Health & Society Scholars 9th Cohort Finalist, 2010

UCI Honorable Mention Public Impact Dissertation Fellowship, 2010

UCI Order of Merit Award for Outstanding Service, 2010

Grant Makers in Aging Fellowship, 2007

Christopher Steven Marcum

Social Science Research Council Pre-dissertation Summer Fellowship, 2007
University of Arizona SBS Outstanding Senior of the Year Runner-Up, 2004
University of Arizona Department of Sociology Outstanding Senior of the Year, 2004
Phi Beta Kappa, American Scholar Honorary, 2004
Alpha Kappa Delta, Sociology Honorary, 2003
Roger Yoshino Undergraduate Sociology Award, 2002, 2003
Golden Key International Honor Society, 2002
University of Maine Scholar, 2000

Funding

National Institutes of Health Intramural Research Program, 2013-Present
National Institute on Aging Postdoctoral Fellowship, 2011-2013
UCI Honorable Mention Public Impact Dissertation Fellowship, 2010
UCI Sociology Department Summer Research Fellowship, 2009
Social Science Research Council Pre-dissertation Summer Fellowship, 2007
UC Regents Research Grant, 2005, 2009
UCI Sociology Department Extracurricular Funding, 2005—2009

Presentations (since 2008)

“The Effect of Age on Perceptions of Social Positions in Personal Acquaintance Networks” with Laura M. Koehly and Jielu Lin. Annual Meeting of the Gerontological Society of America, Orlando, November 2015

“Multiple-Informant Family Health History Assessment: Consistent Perceptions Across Family Members?” with Jielu Lin (presenter), Melanie Myers, and Laura M. Koehly. Annual Meeting of the Gerontological Society of America, Orlando, November 2015

“Biological and Social Relatedness in Seemingly Independent Community-Based Samples.” with Anna Wilkinson and Laura Koehly. Annual Meeting of the International Network for Social Network Analysis, Brighton UK, June 2015

“Temporal Dynamics of Hospital Ward Transfer Networks.” with Jeffrey Lienert (presenter), Laura Koehly and Felix Reed-Tsochas. Annual Meeting of the International Network for Social Network Analysis, Brighton UK, June 2015

“Using the Relational Event Model (rem) to Investigate the Temporal Dynamics of Animal Social Networks.” with Mark Tranmer (presenter), F. Blake Morton, Darren Croft, and Selvino R. de Kort. Annual Meeting of the International Network for Social Network Analysis, Brighton UK, June 2015

“Family Participation, Supportive Staff, and Family Well-being in Alzheimer’s Caregiving” with Sato Ashida (presenter) and Laura Koehly. Annual Meeting of the Gerontological Association of America, Washington D.C., November 2014

“Multiple-Item Measurement for Relational Construct Networks” with Donald Hadley and Laura Koehly. Annual Meeting of the International Network for Social Network Analysis, St. Pete’s Beach, February 2014

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“Who Gives and Who Cares? Identifying Primary Caregivers in Alzheimer’s Disease Patients’ Caregiving Networks” with Sato Ashida and Laura Koehly. Annual Meeting of the Gerontological Association of America, New Orleans, November 2013

“Toward a Segmented Assimilation Model of Complementary and Alternative Medicine Use among U.S. Adults” with Georgiana Bostean and Judith Treas. Annual Meeting of the American Sociological Association, New York, August 2013

“Structural Models of Health Communication in Multi-generational Networks” with Laura Koehly and Anna Wilkinson. Annual Meeting of the International Network for Social Network Analysis, Hamburg, March 2013

“Using Family Health History to Motivate Communal Coping in Families of Mexican Origin” with Laura Koehly (presenter) and Anna Wilkinson. Annual Meeting of the International Network for Social Network Analysis, Hamburg, March 2013

“Age Differences in Daily Social Activities: Leisure and Non-leisure Time Use.” Annual Meeting of the American Sociological Association, Denver, August 2012

“Network Selection for Inductive Reasoning Models of Influenza Vaccination Decisions.” Fifth Japan-North America Mathematical Sociology Conference, Denver, August 2012

“Household Structure and the Daily Social Lives of Older Widows and Widowers.” National Human Genome Research Institute, National Institutes of Health, Bethesda, July 2012 [by invitation]

“The Effects of Audience Composition on the Gendered Performance of Housework” with Daniel Schneider (co-presenter) and Judith Treas. Annual Meeting of the Population Association of America, San Francisco, May 2012

“A Relational Event Model Comparing the Daily Social Lives of Sick and Healthy Elderly Americans Who Live Alone.” Annual Meeting of the International Network for Social Network Analysis, Redondo Beach, March 2012

“The Intergenerational Social Contract Revisited: Cross-national Perspectives” with Judith Treas (presenter). Annual Meeting of the The Gerontological Society of America, Boston, November 2011

“Revisiting the Intergenerational Social Contract in Cross-National Perspective” with Judith Treas (presenter). ECPR: Public Opinion and the Politics of Retrenchment, Iceland, August 2011

“Age Differences in Social Activity Time Budgets.” Annual Meeting of the American Sociological Association, Las Vegas, August 2011

“Age and Life Course Effects on Time Spent with Others in Personal Networks.” The Population, Society, and Inequality Colloquium Series. University of California, Irvine, April 2011 [by invitation]

“Mortality Co-Movement at the National Level: A Quasi-Social Network Analysis” with Andrew Noymer (presenter) and Tanya Jukkala. Annual Meeting of the Population Association of America, Washington D.C., April 2011

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“Spending Time in Personal Networks Across the Life Course.” Interuniversity Center for Social Science Theory and Methodology, University of Groningen, The Netherlands, March 2011 [by invitation]

“Temporality Effects on Copresence in Egocentric Personal Networks.” Annual Meeting of the International Network for Social Network Analysis, St. Pete’s Beach, February 2011

“Homophily and Propinquity in Social Ties, and the Consequences for Neighborhood Cohesion” with John R. Hipp (presenter), Carter T. Butts, Nicholas N. Nagle, Ryan M. Acton, and Adam Boessen. Annual Meeting of the International Network for Social Network Analysis, St. Pete’s Beach, February 2011

“Clique analysis of mortality co-movements: A new life expectancy time series analysis” with Andrew Noymer (presenter) and Tanya Jukkala. IUSSP Seminar on “Lifespan Extension and the Biology of Changing Cause-of-Death Profiles”, Rauschholzhausen, Germany, January 2011 [by invitation]

“The Effect of Health and Social Structure on Age Differences in Personal Networks,” Annual Meeting of the Gerontological Society of America, New Orleans, November 2010

“Life Course Explanations of Social Time Age-Curves,” Annual Meeting of the American Sociological Association, Atlanta, August 2010

“Key Findings from the Improvisation in Emergency Response Project: Linking Cognition, Behavior, and Social Interaction,” with Carter T. Butts, David Mendonça, Gary Webb, et al., Annual Hazards Research and Applications Workshop, Natural Hazards Center, Broomfield, July 2010 [by invitation]

“How is Social Time Distributed Over the Age Pyramid? Demographic Baseline Models of Daily Social Interaction in Personal Networks,” Annual Meeting of the Population Association of America, Dallas, April 2010

“Mechanisms of Control in Emergent Interorganizational Networks,” with Christine A. Bevc and Carter T. Butts, Annual Meeting of the American Sociological Association, San Francisco, August 2009

“Ethnicity and Poverty in Household Structure Formation,” Annual Meeting of the American Sociological Association, San Francisco, August 2009

“Age and Period Effects in Black-White Residential Segregation in 122 US Cities,” with Susan K. Brown, Annual Meeting of the Population Association of America, Detroit, April 2009

“Relating Events to Structure: Evidence from the World Trade Center Police Reports,” with Lorien Jasny (presenter) and Carter Butts. Annual Meeting of the International Network for Social Network Analysis, San Diego, March 2009

“Trends in Euthanasia Attitudes, 1977-2006: Cohort Succession or Attitude Change?,” Annual Meeting of the American Sociology Association, Boston, August 2008

“Organizational Kinship in the Interorganizational Response to Hurricane Katrina,” Sunbelt: International Social Network Association Conference, St. Pete’s Beach, FL, January 2008

Teaching Experience

Graduate Seminars

NIH Lecturer, *Seminar on Statistics and Social Networks*, 2013–Present

USC Lecturer, *Urban Demography and Change*, 2009–2010

Invited Lectures

An Ego-Centric Relational Events Model of Buffet Selection Processes among Overweight Mothers in an Experimental Virtual Reality Setting, SONIC Northwestern by Dr. Noshir Contractor, 2015

A Multi-Item Approach to Network Measurement, with Laura Koehly, Virginia Commonwealth University by Dr. Vicky Shivvy, 2015

Introduction to Bayesian Inference, NIH BSIG Book Club, 2013

Probabilistic Methods of Network Analysis at RAND by Dr. Harold Green, 2012

R+Tcl/Tk: Introducing the `tcltk` R Package, by UCI R Seminar Series, 2009

Invited Reviewer, *Exploring Society through Photography* by Prof. Frank Cancian, 2006–2008

Commodification of the Body in Death by Instr. Carol Glasser, 2007

Workshops Organized

Summer Seminar on Networks and Health, NHGRI/SBRB Summer Internship Program, Bethesda, MD, 2013–Present

Modeling Relational Events in R with `statnet`, with Carter T. Butts, Annual Meetings of the International Network of Social Network Analysts, 2012–Present

Modeling Networks in R with `statnet`, with Carter T. Butts, ARS-Naples, Italy 2011

Thank Goodness for Spreadsheet Software Training, Center for Demographic and Social Analysis, 2006–2008

Teaching Assistantships

Sociology, *Sociology Majors Seminar* for Asst. Prof. Katherine Faust, 2006

Sociology, *American Culture Writing Seminar* for Instr. Ben Jester, 2006

Anthropology, *Music as Expressive Culture* for Prof. Robert Garfias, 2006

Reader/Grader, *Social Psychology* for Instr. Georgiana Bostean, 2006

Sociology, *Religious Traditions of Asian Americans* for Instr. Shampa Mazumdar, 2005

Extracurricular Training

Bioethics and Sciences of Aging, 2012

ICR Workshop on New Family Forms, 2012

RAND Summer Institute on Aging, 2010, 2011, 2012

Professional Service

Editorships

Guest Editor, Special Issue on Social Networks, *Journals of Gerontology: Social Sciences*

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NIH and NHGRI Roles

Member, NHGRI Scientific Review Committee, 2016
Participant, Loan Repayment Plan Advisory Focus Group, 2015
Participant, EVS Focus Group for NHGRI Employees, 2015
Floor Team Coordinator, Emergency Occupant Committee, 2014-Present
Advisor, Undiagnosed Disease Program (UDPICS), 2014
Lecturer, SBRB Seminar on Statistics and Social Networks, 2013-Present
Member, Social and Behavioral Research Branch (SBRB) Faculty Committee, 2013-Present
Member, SBRB Postdoctoral Search Committee, 2013-Present
Organizer, SBRB Works-in-Progress Seminar, 2013-Present
Organizer, SBRB Summer Session on Networks and Health, 2013-Present
Poster Judge, Office of Intramural Training, 2013-Present

Professional Association Roles

Member, Publication Awards Committee, ASA Section on Aging and the Life Course, 2014-Present
Member, Editorial Board, *Journals of Gerontology: Social Sciences*, 2013-Present
Chair, "Social Networks and Social Support." GSA regular session, New Orleans, 2013
Judge, "Mathematical Contest in Modeling." COMAP, Redondo Beach, 2012
Discussant, "Social Networks, Social Capital, and Aging." PAA paper session organized by Benjamin Cornwell, San Francisco 2012
Keynote introduction for Judith Treas, Matilda White Riley Distinguished Career lecture, ASA Section on Aging and the Life Course, Las Vegas 2011
Organizer, "Social Relations and Aging." Section on Aging and the Life Course Roundtable at the Annual Meeting of the American Sociological Association, August 2010
Organizer, "Networks and Social Relations." Regular Session of the 2009 Annual Pacific Sociological Association Annual Meeting, San Diego, Spring 2009

Graduate Student Health Insurance Committee (GSHIP)

Appointee, UC-Regents Committee on Graduate Student Health, 2010
Chair, GSHIP Committee, 2008-2011
Appointee, Chancellor's Committee on Graduate Student Health, 2008-2011
Graduate Representative, GSHIP Grievance Advisory Board, 2006-2011
Graduate Representative, GSHIP Committee, 2006-2008

Service to UCI Department of Sociology

Invited Participant, *Networked Systems and Disaster Management* (Professional Meeting) hosted by Wayne State University, 2007
Representative, Sociology Graduate Student Association, Summer 2007
Co-Chair, Sociology Graduate Student Association, Undergraduate Committee, 2006-2007

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Referee Activities

Advances in Life Course Research
American Journal of Sociology
British Journal of Sociology
Consortium for Mathematics and Its Applications
Contemporary Sociology
Health Education Research
Journals of Gerontology: Series B
Network Science
PLOS ONE
Research on Aging
Science
Social Networks
Social Science and Medicine

Extracurricular Service

Volunteer, Feds Feed Families, 2015
Board Member, UUCB Investment and Finance Board, 2012
Volunteer, American Public Media Public Insight Network, 2009
Board Member, Anthill Pub Advisory Board, Winter 2008

Professional Associations

American Sociological Association
Gerontological Society of America
International Network for Social Network Analysis

Technical Skills and Knowledge

Skilled Computer Knowledge — Linux/Unix, R, STATA, Perl, L^AT_EX, html, pHP, bash, MySQL, CSS, Tcl/Tk, subversion, Excel and OpenOffice
Technical Knowledge — survey research methods, lifetable methods, methods of social network analysis, photography

Christopher Steven Marcum

References (in alphabetical order)

Carter T. Butts, Ph.D.
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Nicole Maestas, Ph.D.
Health Care Policy
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Harvard Medical School
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