ZACHARY JOHN CHRISTMAN

curriculum vitae 2 December 2016

Department of Geography and Environment School of Earth and Environment (as of 7/1/2016) College of Humanities and Social Sciences (through 6/30/2016) Rowan University

Work: 315B Robinson Hall 201 Mullica Hill Road Glassboro, NJ 08028 Home: 609 Montrose Street Philadelphia, PA 19147

(856) 256-4810 (office, direct) (856) 256-4670 (fax, department) (225) 570-1157 (mobile) christmanz@rowan.edu http://zachxman.com

Education

| 2010 | Ph.D., Geography, Clark University Graduate School of Geography, Worcester, MA |
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| 2010 | M.A., Geography, Clark University Graduate School of Geography, Worcester, MA |
| 2001, 2002 | Post-baccalaureate coursework in Archaeology and Geographic Information Systems University of Pennsylvania, College of General Studies, Philadelphia, PA |
| 2001 | Bachelor of Arts <i>cum laude</i> with distinction in Anthropology; Fine Arts Minor University of Pennsylvania, College of Arts and Sciences, Philadelphia, PA |

Professional Appointments

| 2012-present | Assistant Professor, Department of Geography and Environment, School of Earth and Environment [formerly part of College of Humanities and Social Sciences], Rowan University, Glassboro, New Jersey |
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| 2011-2012 | Visiting Assistant Professor, Department of Geography Middlebury College, Middlebury, Vermont |
| 2010-2011 | Postdoctoral Research Associate, <i>Environmental Disturbance in the Greater Yucatán</i> Rutgers, The State University of New Jersey, Piscataway, New Jersey |

Publications

Peer-reviewed Publications (underlined if a directly mentored student, as member of thesis committee)

2016 Christman, Z., J. Rogan, J. Ronald Eastman, and B. L. Turner II. 2016. Distinguishing Land Change from Natural Variability and Uncertainty in Central Mexico with MODIS EVI, TRMM Precipitation, and MODIS LST Data. *Remote Sensing* 8:478. doi:10.3390/4s8060478

| 2016 | Christman, Z. , R. Pruchno, E. Cromley, M. Wilson-Genderson, I. Mir. 2016. A Spatial Analysis of BMI in Community-Dwelling Older Men and Women. <i>International Journal of Aging and Human Development</i> . in March 2016. |
|------|--|
| 2016 | Heid, A. R., Christman, Z ., Pruchno, R., Cartwright, F. P., & Wilson Genderson, M. 2016. Vulnerable, but why? Posttraumatic stress disorder in older adults exposed to hurricane Sandy. <i>Disaster Medicine and Public Health Preparedness. DOI:</i> 10.1017/dmp.2016.15 |
| 2015 | <u>Mardero, S.</u> , B. Schmook, C. Radel, Z. Christman , D. Lawrence, E. Nickl, J. Rogan, and L. Schneider. 2015. Smallholders' adaptations to droughts and climatic variability in southeastern Mexico. <i>Environmental Hazards</i> 14(4):1-8. http://dx.doi.org/10.1080/17477891.2015.1058741 |
| 2015 | Christman, Z. , J. Rogan, J. R. Eastman, and B. L. Turner II. Quantifying uncertainty and confusion in land change analyses with coarse resolution data: A case study from central Mexico using MODIS data. <i>GIScience and Remote Sensing</i> , 52(5):543-570. http://dx.doi.org/10.1080/15481603.2015.1067859 |
| 2015 | Christman, Z. , H. Pearsall, B. Schmook, <u>S. Mardero</u> . 2015. Diversification and Adaptive Capacity across Scales in an Emerging Post-Frontier Landscape of the Usumacinta Valley, Chiapas, Mexico. <i>International Forestry Review</i> : 17(1). |
| 2015 | Cromley, E. K., M. Wilson-Genderson, Z. Christman , R. A. Pruchno. 2015. Colocation of Older Adults with Successful Aging Based on Objective and Subjective Measures. <i>Applied Geography</i> 56:13-20. |
| 2014 | Ramírez-Delgado, J. P., Z. Christman, B. Schmook. 2014. Deforestation and fragmentation of seasonal tropical forests in the southern Yucatán, Mexico (1990-2006). <i>Geocarto International</i> 29(8): 822-841. |
| 2013 | <u>Cuba, N.</u> , J. Rogan, Z. Christman , C. Williams, L. Schneider, D. Lawrence, and M. Millones. 2013. Modelling dry season deciduousness in Mexican Yucatán forest using MODIS EVI data (2000-2011). <i>GIScience & Remote Sensing</i> 50(1): 26-49. |
| 2012 | Pearsall, H., and Z. Christman. 2012. Tree-lined lanes or vacant lots? Evaluating non-stationarity between urban greenness and social structure in Philadelphia, Pennsylvania, USA, with geographically weighted regression. <i>Applied Geography</i> 35(1-2): 257-264. |
| 2012 | Monzón Alvarado, C. M., S. Cortina-Villar, B. Schmook, A. Flamenco, Z. Christman , L. Arriola. 2012. Land-use Decision-making after large-scale forest fires: Analyzing fires as a driver of deforestation in Laguna del Tigre National Park, Guatemala. <i>Applied Geography</i> 35(1-2): 43-52. |
| 2012 | Márdero Jiménez, S. S., E. C. Nickl, B. Schmook, L. Schneider, J. Rogan, Z. Christman , D. Lawrence. 2012. Sequías en el Sur de la Península de Yucatán: Análisis de la variabilidad anual y estacional de la precipitación. <i>Investigaciones</i> <i>Geográficas</i> 78: 19-33. |
| 2012 | Christman, Z ., and J. Rogan. 2012. Error propagation in raster data integration: impacts on landscape composition and configuration. <i>Photogrammetric Engineering and Remote Sensing</i> 78(6):617-624. |

| 2012 | Brenner, J. C., Z. Christman , J. Rogan. 2012. Segmentation of Landsat Thematic Mapper Imagery Improves Buffelgrass (<i>Pennisetum ciliare</i>) Pasture Mapping in the Sonoran Desert of Mexico. <i>Applied Geography</i> 34:569-575. | |
|------------------------|--|--|
| 2012 | Neeti, N., J. Rogan, Z. Christman , J. R. Eastman, M. Millones, L. Schneider, E. Nickl, B. Schmook, B. L. Turner II, and B. Ghimire. 2012. "Mapping seasonal trends in vegetation using AVHRR-NDVI time series in the Yucatán Peninsula, Mexico." <i>Remote Sensing Letters</i> 3(5):443-452. | |
| 2011 | Rogan, J., L. Schneider, Z. Christman , M. Millones, D. Lawrence, B. Schmook. 2011. Hurricane Disturbance Mapping using MODIS EVI Data in the South-Eastern Yucatán, Mexico. <i>Remote Sensing Letters</i> . 2(3):259-267 | |
| 2010 | Rogan, J., N. Bumbarger, D. Kulakowski, Z.J. Christman , D.M. Runfola, S.D. Blanchard. 2010. Improving forest type discrimination with mixed lifeform classes using fuzzy classification thresholds informed by field observations. <i>Canadian Journal of Remote Sensing</i> 36(6):699-708. | |
| Book Chapters | | |
| 2014 | <u>Márdero, S.</u> , B. Schmook, Z. Christman , E. Nickl, L. Schneider, J. Rogan, D. Lawrence. 2014. "Precipitation Variability and Adaptation Strategies in the Southern Yucatán Peninsula, Mexico: Integrating Local Knowledge with Quantitative Analysis." Chapter 13 in Leal Filho, W., S. Caeiro, and U. M. Azeiteiro. <i>International</i> <i>Perspectives on Climate Change: Latin America and Beyond.</i> Springer, New York. http://www.springer.com/economics/environmental/book/978-3-319-04488-0 | |
| 2011 | Christman, Z. 2011. "From the U.S. Global Change Research Act (1990) to the Climate Change Science Program," chapter 5 in Kasperson, Roger, and Mimi Berberian. 2011. <i>Integrating Science and Policy—Vulnerability and Resilience in Global Environmental Change</i> . Earthscan, London. pp 131-150. | |
| Encyclopedia Art | ticles | |
| 2012 | Christman, Z. 2012. "Mexico", in Philander, S. George, and Golson, J. Geoffrey. <i>Encyclopedia of Global Warming and Climate Change</i> , Second Edition. Sage, London. | |
| Conference Proceedings | | |
| 2014 | Christman, Z. , H. Pearsall, B. Schmook, S. Mardero. 2014. "Land use dynamics of deforestation and afforestation across the Usumacinta Valley, Chiapas, Mexico." Case study for <i>Second Global Land Project Open Science Meeting 2014, Berlin, Germany, March 19-21</i> , Published March 16, 2014 in GLOBE (http://globe.umbc.edu), <i>doi:10.7933/K1H12ZXH</i> | |
| 2010 | Christman, Z., J. Rogan. 2010. "Raster data transformation for land change analyses: Combined impacts of reprojecting and rescaling categorical maps on landscape composition and configuration." In Tate, N. and P. Fisher (eds.) 2010. <i>Accuracy</i> 2010—Proceedings of the Ninth International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences. 20-23 July, 2010. Leicester, UK. | |
| Book Reviews | | |

| 2010 | Christman, Z. 2010. Holocene book review: The Environment and World History. |
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| | Edited by Edmund Burke III and Kenneth Pomeranz, Berkeley CA: University of |
| | California Press, 2009, 361pp. The Holocene 20: 303-304. |

Publications in Process

Caiazzo, A., J. Rogan; Y. Ogneva-Himmelberger; C. Woodcock; S. Ratick, and Z. Christman. (in review). Pre-dating and post-dating land-cover maps with Landsat and Aster imagery using a Kauth-Thomas Change Index. Submitted revised manuscript to *GIScience and Remote Sensing* in March 2016.

Awards and Honors

| 2013 | ESRI Third-place Award for Best Scientific Paper in Geographic Information Systems |
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| | for "Error Propagation in Raster Data Integration: Impacts on Landscape Composition |
| | and Configuration," PE&RS, 78 (6), 617-624. |
| 2005 | Outstanding Teaching Assistant Award, Clark University |

Grants and Fellowships

Awarded

| 2016Co-Investigator, "Effects of Hurricane Sandy on Functional Limitation Trajectories of Older Adults (NIA RO1 AG 046463)" National Institute on Aging, National Institutes of Health. Rachel Pruchno, Principal Investigator. \$80,746 direct costs2016Co-Investigator, "Impact-Based Decision Making Framework for Community-based Resiliency Planning under Extreme Storm Events" NJ Department of Community Affairs. Rouzbeh Nazari, Principal Investigator. \$800,0522015Tenure Assist Fund, College of Humanities and Social Sciences, Rowan University \$20002014Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,5002014Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,5002014Co-Investigator, Geraldine R. Dodge Foundation. "Continuing Support for New Jersey Municipal Asset Profiler." \$40,0002013Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs.2013Awardee, Rowan University Assistant Professor Travel Fund, \$1,5002013Collaborator, National Geographic Society Committee for Research and Exploration, "Drought or Drowning?: Managing rainfall, surface water, and runoff in | | |
|---|------|--|
| Resiliency Planning under Extreme Storm Events" NJ Department of Community Affairs. Rouzbeh Nazari, Principal Investigator. \$800,0522015Tenure Assist Fund, College of Humanities and Social Sciences, Rowan University \$20002015Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,5002014Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,5002014Co-Investigator, Geraldine R. Dodge Foundation. "Continuing Support for New Jersey Municipal Asset Profiler." \$40,0002014Dr. Francis R. Lax Fund for Faculty Development (Competitive), Rowan University, \$1,0002013Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs.2013Awardee, Rowan University Assistant Professor Travel Fund, \$1,5002013Collaborator, National Geographic Society Committee for Research and Exploration, | 2016 | Older Adults (NIA RO1 AG 046463)" National Institute on Aging, National Institutes |
| \$2000 2015 Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,500 2014 Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,500 2014 Co-Investigator, Geraldine R. Dodge Foundation. "<i>Continuing Support for New Jersey Municipal Asset Profiler</i>." \$40,000 2014 Dr. Francis R. Lax Fund for Faculty Development (Competitive), Rowan University, \$1,000 2013 Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "<i>Social Capital & Resilience of Older People Exposed to Hurricane Sandy</i>," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. 2013 Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 2012 Collaborator, National Geographic Society Committee for Research and Exploration, | 2016 | Resiliency Planning under Extreme Storm Events" NJ Department of Community |
| Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,500 Co-Investigator, Geraldine R. Dodge Foundation. "<i>Continuing Support for New Jersey Municipal Asset Profiler</i>." \$40,000 Dr. Francis R. Lax Fund for Faculty Development (Competitive), Rowan University, \$1,000 Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "<i>Social Capital & Resilience of Older People Exposed to Hurricane Sandy</i>," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 Collaborator, National Geographic Society Committee for Research and Exploration, | 2015 | |
| 2014 Co-Investigator, Geraldine R. Dodge Foundation. "Continuing Support for New Jersey Municipal Asset Profiler." \$40,000 2014 Dr. Francis R. Lax Fund for Faculty Development (Competitive), Rowan University, \$1,000 2013 Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. 2013 Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 2012 Collaborator, National Geographic Society Committee for Research and Exploration, | 2015 | Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,500 |
| Municipal Asset Profiler." \$40,000 2014 Dr. Francis R. Lax Fund for Faculty Development (Competitive), Rowan University, \$1,000 2013 Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. 2013 Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 2012 Collaborator, National Geographic Society Committee for Research and Exploration, | 2014 | Assistant Professor Travel Fund, Faculty Center, Rowan University, \$1,500 |
| \$1,000 2013 Co-Investigator, Competitive Grant from Assistant Secretary for Preparedness and Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. 2013 Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 2012 Collaborator, National Geographic Society Committee for Research and Exploration, | 2014 | |
| Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, \$681,389 total including indirect costs. Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 Collaborator, National Geographic Society Committee for Research and Exploration, | 2014 | |
| 2012 Collaborator, National Geographic Society Committee for Research and Exploration, | 2013 | Response Grants to Support Scientific Research Related to Recovery from Hurricane Sandy, Department of Health and Human Services, "Social Capital & Resilience of Older People Exposed to Hurricane Sandy," Dr. Rachel Pruchno, Rowan School of Osteopathic Medicine, Principal Investigator. Total project \$449,546 direct costs, |
| | 2013 | Awardee, Rowan University Assistant Professor Travel Fund, \$1,500 |
| | 2012 | |

| | <i>Precolumbian Chiapas, Mexico,</i> " (with Dr. Charles Golden, Brandeis University, PI, and Dr. Andrew Scherer, Brown University), \$20,000 |
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| 2010 | Collaborator, DigitalGlobe 8-band Research Challenge, " <i>Reef to Rainforest: Assessing Hurricane Impacts to Coastal Vegetation and Coral Reef Habitat in the Yucatán Peninsula using WorldView-2 Multispectral Satellite Data</i> ," (with Dr. John Rogan Clark University, PI, and Dr. Laura Schneider, Rutgers University), in-kind imagery award valued ~\$3,000 |
| 2006-2009 | Fellow, NASA Earth System Sciences Fellowship, "Disaggregating Phenological Variation from Discrete Land-Cover Change in the Rio Lerma-Chapala Watershed, Mexico," (Dr. B. L. Turner II, Clark University [now Arizona State University] Advisor/PI), \$84,000 |
| 2009 fall | Research Assistantship, Clark University Graduate School of Geography |
| 2007 | Co-Investigator, CETL [Center for Excellence in Teaching and Learning] Instructional Development Grant, Clark University (Dr. John Rogan, PI), \$1500 |
| 2007 | Pruser-Holzhauer Graduate Research Fund, Clark University, \$500 |
| 2006 | Geller Foundation Research Award, Marsh Institute, \$1200 |
| 2004-2010 | Travel Grants, Clark University Graduate School of Geography, \$1750 (total) |
| 2003-2010 | Tuition Remission, Clark University Graduate School of Geography |
| 2003-2006 | Teaching Assistantship, Clark University Graduate School of Geography |
| 2001 | Nassau Research Award, University of Pennsylvania, \$300 |

Presentations

| 2016 | "Governmental responses and smallholders' adaptations to climatic variability in southeastern Mexico" co-authored with Silvia Sofia Mardero Jimenez (<i>presenter</i>), Birgit Schmook, Zachary Christman, Claudia Radel. <i>Presented at the European</i> <i>Geosciences Union General Assembly 2016</i> , Vienna, Austria, 17-22 April 2016 |
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| 2015 | "The influence of neighborhood factors on obesity among older residents in New Jersey, USA" Presented and co-authored with Rachel Pruchno, Ellen Cromley, Maureen Wilson-Genderson, Izza Mir. <i>Presented at the Association of American Geographers Annual Meeting</i> , Chicago, Illinois |
| 2014 | "Adaptive Capacity in the Post-Agriculture Frontier: Coping with Changing Economic and Climatic Conditions in the Usumacinta Valley of Chiapas, Mexico" Presented and co-authored with Hamil Pearsall, Birgit Schmook, and Sofia Mardero. <i>Presented at the</i> <i>Association of American Geographers Annual Meeting</i> , Tampa, Florida. |
| 2014 | "Colocation of Older Adults with Successful Aging Based on Objective and Subjective Measures" co-authored with Ellen K. Cromley (<i>presenter</i>), Maureen Wilson- Genderson, Zachary Christman, Rachel A. Pruchno. Presented at the Association of American Geographers Annual Meeting, Tampa, Florida. |
| 2014 | "Land use dynamics of deforestation and afforestation across the Usumacinta Valley, Chiapas, Mexico" accepted selective poster presentation, co-authored with Hamil Pearsall, Birgit Schmook, and Sofia Mardero. Presented at the Open Science Meeting of the Global Land Project. Berlin, Germany. |

| 2014 | "Localized Clustering of BMI in Community Dwelling Older Adults in NJ: A Spatial Analysis." co-authored with Rachel Pruchno (<i>presenter</i>), Maureen Wilson-Genderson, and Izza Mir. <i>Presented at the Gerontological Society of America Annual Scientific Meeting</i> , Denver, Colorado. |
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| 2013 | "Precipitation Variability and Adaptation Strategies in the Southern Yucatan Peninsula, Mexico: Integrating Local Knowledge with Quantitative Analysis" co-authored with Sofia Mardero (<i>presenter</i>), Birgit Schmook, Zachary Christman, Elsa Nickl, Laura Schneider, Ana Karla Perea Blasquez, John Rogan, Deborah Lawrence. <i>Presented at</i> <i>the European and Latin American Conference on Climate Change Management</i> "Opportunities and Challenges for the Modernization of High Education Institutions" Meeting. Antigua, Guatemala. |
| 2013 | "Land use change and hydrologic management in the distant past, recent decades, and potential future scenarios in the Usumacinta Valley, Chiapas, Mexico" Presented and co-authored with Charles Golden, Andrew Scherer, Birgit Schmook, and Hamil Pearsall. <i>Presentation at the 2013 Meeting of the Association of American</i> <i>Geographers.</i> Los Angeles, California |
| 2013 | "Relación entre el cambio de uso del suelo y el manejo del agua en el valle de Usumacinta, Chiapas" [Relation between land use change and water management in the Usumacinta Valley, Chiapas] co-authored with Hamil Pearsall, Birgit Schmook, Charles Golden, Andrew Scherer, and Angelica Navarro (<i>presenter</i>). Presented at the <i>IV Congreso Mexicano de Ecología</i> (Fourth Mexican Ecology Conference), Villahermosa, Tabasco. |
| 2013 | "Efectos de huracán en bosque caducifolios del sur de la Península de Yucatán: Respuestas del paisaje" [Hurricane effects on deciduous forests in the Southern Yucatan: Responses from the landscape] co-authored with Laura Schneider (<i>presenter</i>) and John Rogan. Presented at the <i>IV Congreso Mexicano de Ecología</i> (Fourth Mexican Ecology Conference), Villahermosa, Tabasco. |
| 2012 | "GIS on a need-to-know basis: similarities and differences between educational contexts and outreach workshops" <i>Presentation at the 2012 Meeting of MACURISA</i> [<i>Mid Atlantic Chapter of Urban and Regional Information Systems Association</i>]. Atlantic City, New Jersey. |
| 2012 | "Geographic Information Providers and Crisis Response during Hurricane Irene" co- authored with Hamil Pearsall. <i>Presentation at the 2012 Meeting of the Association of</i> <i>American Geographers</i> . New York, New York. |
| 2012 | "Effect of Hurricanes on fire regimes in semi-deciduous dry forests in Yucatan, Mexico" co-authored with Laura Schneider (<i>presenter</i>), John Rogan, Zachary Christman, Irene Zager, Birgit Schmook, and Miguel Mendez. <i>Presentation at the</i> 2012 Meeting of the Association of American Geographers. New York, New York. |
| 2011 | "Possibility, Uncertainty, and Confusion in Land Change Analyses—a case study from Central Mexico" <i>Presentation at the 2011 Meeting of the Association of American</i> <i>Geographers</i> . Seattle, Washington. |
| | Co-organizer with Kirsten Barrett, 2 sessions with 12 presentations on the theme of "Monitoring landscape-scale disturbance and recovery with remote sensing" at the 2011 Meeting of the Association of American Geographers. Seattle, Washington. |

| 2010 | "Vegetative variability in the context of disturbance events: Patterns of landscape change in the Mexican Yucatan Peninsula before, during, and after Hurricane Dean," co-Authored with Laura Schneider. <i>Presentation at the Open Science Meeting of the</i> <i>Global Land Project.</i> Tempe, Arizona. |
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| 2010 | "Raster data transformation for land change analyses: Combined impacts of reprojecting and rescaling categorical maps on landscape composition and configuration" <i>Presentation at Accuracy 2010</i> . Leicester, UK. |
| 2010 | "Noise vs. signal: Modeling natural variability in the context of land change in central Mexico" <i>Presentation at the 2010 Meeting of the Association of American Geographers</i> . Washington, D.C. |
| 2009 | "Rapid Reconnaissance Mapping with MODIS: Hurricane Impacts upon Vegetation in a Sub-Tropical Forested Landscape." <i>Presentation at the 2009 Meeting of the</i> <i>Association of American Geographers.</i> Las Vegas, Nevada. |
| 2008 | "New best practices for data integration across spatial resolutions and geographic frameworks." <i>Presentation at the 2008 IEEE International Geoscience and Remote Sensing Symposium.</i> Boston, Massachusetts. |
| 2008 | "(Solving the) Raster Disaster: New best practices for data integration across spatial resolutions and geographic frameworks." <i>Presentation at the 2008 Meeting of the Association of American Geographers</i> . Boston, Massachusetts. |
| 2007 | "MODIS Operandi: the use and validation of 1km classifications with associated uncertainty information and higher-resolution imagery in land-cover studies." <i>Presentation at the 2007 Meeting of the Association of American Geographers</i> . San Francisco, California. |
| 2007 | "Comparing regional land-cover trends in the Lerma-Chapala watershed, Mexico." <i>Poster presentation at the Spring 2007 NASA LC/LUC Science Team Meeting.</i> College Park, Maryland |
| 2007 | "Assessing Regional Land Cover Change in the Lerma-Chapala-Santiago Watershed through the Use of Satellite Imagery." <i>Poster presentation at the 2007 Meeting of the</i> <i>Association of Tropical Biology and Conservation</i> . Morelia, Michoacan, Mexico. |
| 2006 | "Unpacking the pixels: using MODIS imagery to evaluate land-cover changes across the Rio Lerma-Chapala watershed of Central Mexico." <i>Presentation at the 2006</i> <i>NESTVAL Regional Meeting of the Association of American Geographers</i> . Burlington, Vermont. |
| 2006 | "A comparison of MODIS-based vegetation indices and classified imagery for evaluating land-cover change over broad areas in Central Mexico." <i>Presentation at the</i> 2006 Meeting of the Association of American Geographers. Chicago, Illinois. |
| 2005 | "Land-cover monitoring in Andean South America." co-authored with John Rogan, Timothy Currie, Christopher Lippitt. <i>Presentation at the 2005 American Society of</i> <i>Photogrammetry and Remote Sensing Annual Conference and Technology Exhibition.</i> Baltimore, Maryland. |
| 2003 | "Straightening the Nazca Lines: Digitally Modeling Broad Spaces at a Local Scale." Presentation at the 2003 Society of American Archaeologists Annual Meeting. Milwaukee, Wisconsin. |

Introduction to Mapping and Geographic Information Science 2016 fall [honors]; 2016 spring; 2015 fall; 2015 spring [2]; 2014 fall [2]; 2014 spring [2]; 2013 fall [2]; 2013 spring [2]; 2012 fall [2] Remote Sensing/Air Photograph Interpretation 2016 fall; 2015 fall Remote Sensing of Environment 2016 spring; 2015 spring; 2014 spring; 2013 spring Geospatial Modeling 2014 fall; 2013 fall; 2012 fall Cartography (online) 2014 summer

Teaching Experience (Primary instructor unless otherwise stated; [number] indicates sections taught)

Geospatial Research Clinic (experiential learning/internship course)

2016 fall; 2016 spring; 2015 fall; 2015 summer

Middlebury College, Middlebury, Vermont:

Rowan University, Glassboro, New Jersey

Fundamentals of Geographic Information Science

Lecture: 2012 spring Lab: 2012 spring [2], 2011 fall [1]

Environmental Change in Latin America 2012 spring Environmental Field Methods

2011 fall

El Colegio de la Frontera Sur (ECOSUR), Chetumal, Quintana Roo, Mexico

El Uso de Teledetección y SIG en el Análisis de Cambios en la Cobertura Vegetal (*The Use of Remote Sensing and GIS in the Analysis of Changes in Vegetative Cover*) 2010 fall (co-Instructor with Dr. Birgit Schmook)

Universidad Autónoma del Estado de México, Toluca, Mexico

Uso de Teledetección para Recursos Naturales (Intensive Course in the Use of Remote Sensing for Ecological Applications) 2005 summer

Clark University, Worcester, Massachusetts (as instructor)

Raster Geographic Information Systems

2008 spring

2006 fall (as "Introduction to Geographic Information Systems")

Clark University, Worcester, Massachusetts (as teaching assistant, with primary instructor noted below)

Advanced Topics in Geographic Information Science, Dr. J. Ronald Eastman 2006 spring

Page 8 of 12

Zachary Christman

Curriculum Vitae updated 2 December 2016

Advanced Remote Sensing, Dr. John Rogan 2006 spring, 2004 spring
Landscape Ecology, Dr. John Rogan 2005 fall
Introduction to Environmental Information Systems, Dr. John Rogan 2005 spring
Digital Image Processing, Dr. John Rogan 2004 fall
The World According to Geography, Dr. Colin Polsky 2003 fall
Colleges of Worcester Consortium Program in College Teaching, Worcester, Massachusetts (as student)

Colleges of Worcester Consortium Program in College Teaching 2006-2008

- Seminar in College Teaching
- Teaching with Discussion
- Developing and Teaching an Online Course
- Teaching Geography

Student Advising

| PhD dissertation | | |
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| 2013-present | Sofia Mardero, El Colegio de la Frontera Sur [ECOSUR], Assessor [External Committee Member], PhD. | |
| Master's thesis | | |
| 2015-present | Katie Miller, College of Engineering, Rowan University. Committee Member. Masters of Science in Civil and Environmental Engineering, Anticipated Graduation May 2016. | |
| 2014 | Christopher Seigel, College of Engineering, Rowan University. Committee Member. Masters of Science in Civil and Environmental Engineering, December 2014. | |
| 2012 | Juan Pablo Ramírez Delgado, El Colegio de la Frontera Sur [ECOSUR], Chetumal, Quintana Roo, Mexico. Assessor [External Committee Member], Masters of Sciences in Natural Resources and Rural Development, June 2012. | |
| 2011 | Nicholas Cuba, Clark University, Worcester, Massachusetts. Second Reader, Masters of Arts in Geographic Information Science for Development and Environment [GISDE], Committee Member. September 2011. | |
| Post-Baccalaureate Certificate Program Capstone Projects | | |
| 2015 | Allison Redman, Rowan University, Glassboro, New Jersey. Capstone Research Project, Post-baccalaureate in Cartography and GIS. Advisor. Summer 2015 | |
| Bachelor's Specie | al Projects (At Rowan University, Glassboro, New Jersey, unless otherwise specified) | |
| 2015 | Connor Hornibrook, student-led collaborative Independent Study Project. Advisor/Collaborator. Fall 2015. | |

| 2015 | Shalayna Williams. Geospatial Research Clinic Faculty Collaborative Project in partnership with Rowan School of Osteopathic Medicine ORANJ BOWL Project. Advisor/Director, Fall 2015. |
|------|---|
| 2015 | John McInerney. Geospatial Research Clinic Faculty Collaborative Project in partnership with Rowan School of Osteopathic Medicine ORANJ BOWL Project. Advisor/Director, Fall 2015 |
| 2015 | Charisse Anderson. Geospatial Research Clinic Project in collaboration with Rowan Office of Social Justice, Inclusion, and Conflict Resolution. Advisor. 2015- 2016 |
| 2014 | Christopher Ford. Honors Research Assistantship (selective). Advisor. Spring 2014. |
| 2014 | Patrick Sullivan. Geospatial Research Clinic Research Intership. Advisor. 2013-2014 |
| 2014 | Raymond Inzitari. Geospatial Research Clinic Research Intership. Advisor. 2013-2014 |
| 2014 | Frank Accardo. Geospatial Research Clinic Research Intership. Advisor. 2013-2014 |
| 2014 | Kamille Preto. Geospatial Research Clinic Research Intership. Advisor. 2013-2014 |
| | |

Research Assistants (At Rowan University, Glassboro, New Jersey, unless otherwise specified)

| 2016-present | Charisse Anderson, in Support of "Effects of Hurricane Sandy on Functional Limitation Trajectories of Older Adults" funded by NIA Grant |
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| 2016-present | Thomas DeBaun, in Support of "Effects of Hurricane Sandy on Functional Limitation Trajectories of Older Adults" funded by NIA Grant |
| 2016-present | Robert Kearney, in Support of "Effects of Hurricane Sandy on Functional Limitation Trajectories of Older Adults" funded by NIA Grant |

Service

To the Department:

| 2016-present | <i>Committee Member</i> , Associate or Professor-level (presumed Chair) of Department of Geography, Planning, and Sustainability, School of Earth and Environment, Rowan University |
|--------------|---|
| 2014-present | GIS Program Director & Advisor, Bachelor's of Science Degree in Geographic Information Science, Geography and Environment, Rowan University |
| 2014-2015 | <i>Committee Member</i> , GIS Professional Staff hiring committee, Geography and Environment, Rowan University |
| 2014-2015 | <i>Committee Member</i> , Tenure-track hiring committee for Human Geography position, Geography and Environment, Rowan University |
| 2012-2014 | Departmental Representative, American Federation of Teachers, Rowan University |
| 2012-2013 | <i>Committee Member</i> , Tenure-track hiring committee for Human Geography with Environmental Focus position, Geography and Environment, Rowan University |
| 2012 fall | <i>Committee Member</i> , Tenure and Recontracting Document Review, Geography and Environment, Rowan University |

| 2008 fall | <i>Committee Member</i> , Tenure Committee, Graduate School of Geography, Clark University |
|-------------------|---|
| 2006 fall | <i>Committee Member</i> , Tenure-track hiring committee for Earth Systems Science position, Graduate School of Geography, Clark University |
| 2004-2005 | <i>President,</i> Clark University Geographical Society, Graduate School of Geography, Clark University |
| 2003-2010 | <i>Member</i> , Clark University Geographical Society, Graduate School of Geography, Clark University |
| To the University | |
| 2016-present | <i>Chair</i> , Search Committee for Tenure-Track Environmental Science Assistant Professor, Department of Environmental Sciences, School of Earth and Environment, Rowan University |
| 2016-present | <i>Member</i> , Faculty Advisory Board, Thomas N. Bantivoglio Honors Concentration, Rowan University |
| 2015-present | <i>Committee Member</i> , search committee for Dean for College of Humanities and Social Science, Rowan University |
| 2015-present | <i>Committee Member</i> , Ad hoc committee to establish university drone policy, Rowan University |
| 2015-present | <i>Committee Member</i> , Ad hoc committee for "Combining Recreation and Habitat Planning in the Vicinity of Rowan Hall," Rowan University |
| 2015-present | Faculty Liaison, Faculty Center for Excellence in Teaching and Learning |
| 2014-present | <i>Facilitator</i> (Sole Leader), Junior Faculty Learning Community, Faculty Center for Excellence in Teaching and Research, Rowan University, academic years 2014-2015 & 2015-2016 |
| 2014-2015 | Senator, University Senate, Rowan University |
| 2014, 2015 | <i>Committee Member</i> , College of Humanities and Social Sciences Dismissal Appeals ` Committee |
| 2013, 2014 | <i>Guest speaker</i> for new Assistant Professors and Instructors on Tenure and Recontracting, invitation of Dean of College of Humanities and Social Science |
| 2011 | <i>Committee Member</i> , Provost's Task Force on Interdisciplinarity in Curricular Innovation, Middlebury College |
| 2007-2008 | Committee Member, University Health Care Committee, Clark University |
| 2005-2006 | <i>Committee Member</i> , Graduate Studies Committee, Graduate School of Geography, Clark University |
| 2003-2004 | Departmental Representative, Clark University Graduate Student Council |
| To the Profession | & Society |
| 2016-present | Chair, Geographic Information Systems and Science Specialty Group, Association of American Geographers |
| 2015-2016 | <i>Vice-chair</i> , Geographic Information Systems and Science Specialty Group, Association of American Geographers |

Zachary Christman

Curriculum Vitae updated 2 December 2016

| 2014-present | <i>Consultant and Expert Witness</i> , Division of Civil Rights, Office of the Attorney General, State of New Jersey |
|--------------|--|
| 2016-present | Reviewer, Gerontology (1) |
| 2015-present | Reviewer, International Journal of Emergency Services (1) |
| 2015-present | Reviewer, Landscape and Urban Planning (1) |
| 2014-present | Reviewer, Remote Sensing (3) |
| 2013-present | Reviewer, Applied Geography (2) |
| 2011 | Reviewer, Canadian Journal of Remote Sensing (1) |
| 2009-2014 | Reviewer, International Journal of Remote Sensing (18) |
| 2010-present | Member, North American Cartographic Information Society |
| 2008-present | Member, IEEE Geoscience and Remote Sensing Society |
| 2006-present | Member, American Geophysical Union |
| 2005-present | Member, Conference of Latin American Geographers |
| 2004-present | Member, American Society for Photogrammetry and Remote Sensing |
| 2004-present | Member, Association of American Geographers |