

CURRICULUM VITAE
DR. RINKU ROY CHOWDHURY
Updated April, 2017

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RESEARCH SPECIALIZATIONS AND INTERESTS

Land Change Science, Cultural and Political Ecology, Remote Sensing and Geographic Information Systems, Spatial modeling, Vulnerability, Urban Social-Ecological Systems, Food and Farming Systems, Landscape and Conservation Ecology, South Florida, Latin America, South Asia

ACADEMIC TRAINING

- Ph.D., 2003. Geography. Graduate School of Geography, Clark University. Dissertation Title: *Livelihoods in the balance: The institutional and ecological conditions of smallholder land use in the Calakmul-southern Yucatán region, Mexico*. Dissertation advisor: Dr. B. L. Turner II.
- M.S., 1996. Conservation Ecology and Sustainable Development. Institute of Ecology, University of Georgia. M.S. thesis title: *Socioeconomic and locational factors influencing land use change in Macon county, North Carolina*. Thesis advisor: Dr. G. Arthaud.
- B.A. (magna cum laude), 1994. Wellesley College. Majors: Computer Science, Environmental Science. Major advisors: Dr. R. Shull (Computer Science), Dr. N. Rodenhouse and Dr. M. Thompson (Environmental Science).

PROFESSIONAL EMPLOYMENT

- *Associate Professor, Graduate School of Geography, Clark University, 2015 – Present*
- *Associate Professor, Department of Geography, Indiana University, 2014 – 2015*
- *Assistant Professor, Department of Geography, Indiana University, 2008 – 2014*
- *Visiting Assistant Professor, Department of Geography, Indiana University, May – August 2008*
- *Assistant Professor, Department of Geography and Regional Studies, University of Miami, August 2003 – May 2008.*

- *Doctoral dissertation research, Clark University, August 1999 – July 2003.*
Field research and analysis of institution-environment interactions and landscape change in southern Mexico, supported by NASA fellowship and NSF dissertation grant.
- *Research Assistant, NASA LCLUC-SYPR project, Clark University, January 1997 – July 1999.*
Development of remote sensing classification methodology, Landsat TM-derived classification and change detection of land use/cover in the southern Yucatán. Development of spatially explicit, empirical models of land use change.
- *Teaching Assistant, Issues in Global Society, International Studies Stream, Clark University, August – December 1996.*
Researched student internship opportunities.
- *Research Assistant, Coweeta Long-Term Ecological Research (LTER) Project, Institute of Ecology, University of Georgia, August 1994 – August 1996.*
Research integrating socioeconomic dimensions with LTER agenda, statistical models of socioeconomic factors driving land use change in the region of the Coweeta watershed.
- *Teaching assistant, Forest Ecology, Warnell School of Forest Resources, University of Georgia, January 1995 – March 1995.*
Assisted in lecture and field lab sessions teaching principles of forest ecology.
- *Research Assistant, Department of Biology, Wellesley College, September 1992 – May 1994.*
Simulation models of zooplankton population dynamics under climate change and eutrophication scenarios.
- *Special Assistant, Information Technology Services, Wellesley College, September 1991 – August 1992.*
Software training and documentation; computer consulting for faculty, staff and students.

HONORS AND AWARDS

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| 2013 | Campus Catalyst Sustainability Award for Excellence in Research, Indiana University |
| 2013 | Outstanding Junior Faculty Award, Indiana University |
| 2013 | Trustees Teaching Award, Indiana University |
| 2010 | Nominated for National Teaching/Mentorship Award by the Delta Gamma Foundation (Theta Chapter) |
| 2005 | Scholarly and Creative Activities Award, College of Arts and Sciences, University of Miami |
| 2002 | Horton-Hallowell Fellowship, Wellesley College |
| 1999-2002 | NASA Earth System Science Fellowship |
| 1998 | Outstanding Research Fellow Award, Clark University |
| 1994 | Elizabeth F. Fischer Fellowship, Wellesley College |

EXTERNALLY FUNDED RESEARCH ACTIVITIES

- 2017- National Science Foundation (01/01/2017–12/31/2020). PI P.M. Groffman (Research Foundation CUNY - Advanced Science Research Center), and Co-PIs (in alphabetical order of last name): M. Avolio (University of Maryland College Park), J.M. Cavender-Bares (University of Minnesota-Twin Cities), J. Morgan Grove (USDA Forest Service), S.J. Hall (Arizona State University), J.B. Heffernan (Duke University), S.E. Hobbie (University of Minnesota-Twin Cities), K.L. Larson (Arizona State University), S. Lerman (Research Foundation CUNY - Advanced Science Research Center), J. Morse (Portland State University), C. Neill (Woods Hole Marine Biological Laboratory), K.C. Nelson (University of Minnesota-Twin Cities), D.E. Pataki (University of Utah), R. Roy Chowdhury (Clark University) and T. Trammell (University of Delaware). *Collaborative Research: MSA-FRA: Alternative Ecological Futures for the American Residential Macrosystem*. [Total \$3,216,952; Clark University component \$339,546].
- 2015- National Science Foundation (07/01/2015–06/30/2020). PIs C. Redman, M. Chester, N. Grimm, P. Timon McPhearson, T. Munoz-Erickson (Arizona State University). *Urban resilience to climate change-driven extreme events*. [Total \$8,499,692; Award #SES-1444755; Clark University Component \$434,517]. RRC role: Collaborating Scientist, City of Miami Co-lead, Vulnerability Analysis Lead.
- 2013- National Science Foundation (09/01/2013–08/31/2018). PI R. Chazdon. *CNH-RCN: Tropical Reforestation Network: Building a Socioecological Understanding of Tropical Reforestation*. RRC Role: Core Participant.
- 2012- National Science Foundation (12/01/2012–11/30/2018). PIs E.E. Gaiser, M. Heithaus, R. Jaffe, L.A. Ogden, R.M. Price (Florida International University). *LTER: FCE III - Coastal Oligotrophic Ecosystems Research*. [Total \$5,879,998; Award #DEB-1237517; Indiana University Component \$220,736]. RRC role: Collaborating Scientist and Working Group co-lead.
- 2012 National Science Foundation (08/15/2012–12/15/2012). PIs E. Gaiser, L.A. Ogden, M. Heithaus, R.M. Price and R. Jaffe (Florida International University). *FCE LTER II: Coastal Oligotrophic Ecosystems Research*. [\$5,531,151; Award #DEB-0620409]. Subcontract from Florida International University to Indiana University, for Roy Chowdhury's research on *Spatial configuration and water demand implications of land uses in southern Miami-Dade County, Florida*. [\$31,052]. RRC role: Collaborating Scientist and Working Group co-lead.
- 2012- National Aeronautics and Space Administration (01/02/2012–12/31/2014). PI M. Simard (Jet Propulsion Lab), and Co-PIs Rinku Roy Chowdhury (Indiana University), Temilola Fatoyinbo (NASA Goddard Space Flight Center), and V. Rivera-Monroy (Louisiana State University and A&M College). *Vulnerability assessment of mangrove forests in the Americas*. [Total \$897,500; Indiana University Component \$240,036].
- 2011- National Science Foundation (07/01/2011–06/30/2015). PI P.M. Groffman (Cary Institute of Ecosystem Studies), and Co-PIs (in alphabetical order of last name): J.M. Cavender-Bares (University of Minnesota-Twin Cities), J.M. Grove (USDA Forest

Service), S.J. Hall (Arizona State University), J.B. Heffernan (Florida International University), S.E. Hobbie (University of Minnesota-Twin Cities), K.L. Larson (Arizona State University), C. Neill (Woods Hole Marine Biological Laboratory), K.C. Nelson (University of Minnesota-Twin Cities), L.A. Ogden (Florida International University), D.E. Pataki (University of California-Irvine), C. Polsky (Clark University) and R. Roy Chowdhury (Indiana University). *Collaborative Research: Ecological Homogenization of Urban America*. [Total \$3,216,952; Indiana University component \$181,666]

- 2011- National Aeronautics and Space Administration (01/01/2011-12/31/2013). PI F. Rahman (Indiana University) and Co-PIs Rinku Roy Chowdhury (Indiana University), D. Donato (USDA Forest Service) and B. Kaufmann (USDA Forest Service). *Carbon Dynamics, Land Cover Change, and Vulnerability of the World's Largest Coastal Mangrove Ecosystem to Climate Change*. [\$678,375]
- 2008 K. Larson, M. Grove, C. Polsky and R. Roy Chowdhury. *Socioecological dynamics of residential landscapes*. Cross-LTER site research workshop in February 2009. National Science Foundation LTER program [\$17,805, part of NSF Grant No. DEB-0423704 Central Arizona Phoenix (CAP) LTER, Start Date: 11/11/1997 - Expiration Date: 11/30/2010]
- 2008 R. Roy Chowdhury, L. Ogden and H. Gladwin. *Cartographies of exemption: The political ecology of zoning and land use in south Florida*. National Science Foundation LTER program [\$19,999, part of NSF Grant No. DBI-0620409 Florida-Coastal Everglades (FCE) LTER, 12/01/2006-11/30/2012]
- 1999- R. Roy Chowdhury. *Conservation in the southern Yucatán peninsular region,*
2002 *Mexico: Linking landscape ecology and social institutions*. National Aeronautics and Space Administration Earth Systems Science Fellowship [\$66,000]
- 1999 R. Roy Chowdhury. *Landscape ecology and institutions of conservation in the southern Yucatán, Mexico*. National Science Foundation (Geography and Regional Science) Dissertation Improvement Grant [\$10,000]

INTRAMURAL RESEARCH FUNDING

- 2010- Sustainability Research Development Grant (with Co-PI M. Perkins, entitled “Management and Ecosystem Composition in Mexico’s Agroforestry Systems”), Indiana University Office of Sustainability, College of Arts and Sciences, School for Public and Environmental Affairs, Center for Research on Energy & the Environment [\$10,000]
- 2009 C. Tucker, C. Barbour, R. Roy Chowdhury and B. Schulz. *Building sustainable food knowledge and practices: An interdisciplinary seminar series*. Multidisciplinary Ventures and Seminars Fund, Indiana University [\$5,400]

- 2007 R. Roy Chowdhury. *Forest loss, fragmentation and connectivity in the Calakmul-Sian Ka'an Connector, MesoAmerican Biological Corridor, Mexico*. J. W. McLamore Awards committee, University of Miami [\$9,300]
- 2006 T. Ardren and R. Roy Chowdhury. *Environment and tourism in Latin America* (Interdisciplinary Research Group). Center for Latin American Studies, University of Miami [\$1,000]
- 2005 R. Roy Chowdhury. *A comparative analysis of land cover and change in the Biosphere Reserves of Calakmul, Campeche and Alamos, Sonora, Mexico*. J. W. McLamore Awards committee, University of Miami [\$9,300]
- 2004 D. O. Fuller and R. Roy Chowdhury. *Remote sensing and its emerging impact on forest policy in Indonesia*. Center for Ecosystem Science and Policy, University of Miami [\$24,000]
- 2004 R. Roy Chowdhury. *Neoliberal policy and environmental institutions: Smallholders, communities and forest fragmentation in southern Mexico*. J. W. McLamore Awards committee, University of Miami [\$9,300]
- 2002 R. Roy Chowdhury. *Conservation in the southern Yucatán peninsular region, Mexico: Linking landscape ecology and social institutions*. Wellesley College Horton-Hallowell Fellowship [\$10,000]
- 1999 R. Roy Chowdhury. Pruser-Holzhauer Graduate Pre-Dissertation Grant, Clark University [\$500]

PUBLICATIONS

Edited Journal Issues

Roy Chowdhury, R. (ed.). 2012. *Environmental Kuznets Curves and Environment-Development Research*. Applied Geography. <http://www.sciencedirect.com/science/journal/01436228/32/1>

Fuller, D.O. and **R. Roy Chowdhury** (eds.). 2006. *Monitoring and modeling tropical deforestation*. Singapore Journal of Tropical Geography. <http://onlinelibrary.wiley.com.ezproxy.lib.indiana.edu/doi/10.1111/sjtg.2006.27.issue-1/issuetoc>

Refereed Journal Articles

Locke, D.H., S.M. Landry, J.M. Grove and R. Roy Chowdhury. 2016. What's scale got to do with it? Models for urban tree canopy. *Journal of Urban Ecology* 2(1): 1–16.

Hall, S.J., J. Learned, B. Ruddell, K.L. Larson, J. Cavender-Bares, N.D. Bettez, P.M. Groffman, J.M. Grove, J.B. Heffernan, S.E. Hobbie, K. Larson, J.L. Morse, C. Neill, K.C. Nelson, J. O'Neil-Dunne, L.A. Ogden, D.E. Pataki, W.D. Pearse, C. Polsky, **R. Roy Chowdhury**, M.K. Steele and T.

Trammell. 2016. Convergence of microclimate in residential landscapes across diverse cities in the United States. *Landscape Ecology* 31(1): 101-117.

Peter H. Verburg, Neville Crossman, Erle C. Ellis, Andreas Heinemann, Patrick Hostert, Ole Mertz, Harini Nagendra, Thomas Sikor, Karl-Heinz Erb, Nancy Golubiewski, Ricardo Grau, Morgan Grove, Souleymane Konaté, Patrick Meyfroidt, Dawn C. Parker, **Rinku Roy Chowdhury**, Hideaki Shibata, Allison Thomson, Lin Zhen. 2015. Land system science and sustainable development of the earth system: A global land project perspective. *Anthropocene* 12:29-41. <http://dx.doi.org/10.1016/j.ancene.2015.09.004>.

Groffman, P., J. Grove, C. Polsky, N. Bettez, J. Morse, J. Cavender-Bares, S. Hall, J. Heffernan, S. Hobbie, K. Larson, C. Neill, K. Nelson, L. Ogden, J. O'Neil-Dunne, D. Pataki, **R. Roy Chowdhury**, D. Locke. 2016. Satisfaction, water and fertilizer use in the American residential macrosystem. *Environmental Research Letters* 11(3), <http://dx.doi.org/10.1088/1748-9326/11/3/034004>.

B. L. Turner II, J. Geoghegan, D. Lawrence, C. Radel, B. Schmook, C. Vance. S. Manson, E. Keys, D. Foster, P. Klepeis, H. Vester, J. Rogan, **R. Roy Chowdhury**, L. Schneider, R. Dickson, Y. Ogneva-Himmelberger and S. Calmé. 2016. Land system science and the social-environmental system: the case of the Southern Yucatán Peninsular Region Project. *Current Opinion in Environmental Sustainability* 19: 18-29.

Sisser, J.M., K.C. Nelson, K.L. Larson, L.A. Ogden, C. Polsky and **R. Roy Chowdhury**. 2016. Lawn enforcement: How municipal policies and neighborhood norms influence homeowner residential landscape management. *Landscape and Urban Planning* 150: 16–25.

(Authors in alphabetical order of last name after lead Gaiser) Gaiser, E.E., E.P. Anderson, E. Castañeda-Moya, L. Collado-Vides, J.W. Fourqurean, M.R. Heithaus, R. Jaffé, D. Lagomasino, N.J. Oehm, R.M. Price, V.H. Rivera-Monroy, **R. Roy Chowdhury**, and T.G. Troxler. 2015. New perspectives on an iconic landscape from comparative international long-term ecological research. *Ecosphere* 6(10):181. <http://dx.doi.org/10.1890/ES14-00388.1>.

(Authors in alphabetical order of last name after four leads) Larson, K.L., K.C. Nelson, S.R. Samples, S.J. Hall, N. Bettez, J. Cavender-Bares, P.M. Groffman, M. Grove, J.B. Heffernan, S.E. Hobbie, J. Learned, J.L. Morse, C. Neill, L.A. Ogden, J. O'Neil-Dunne, D.E. Pataki, C. Polsky, **R. Roy Chowdhury**, M. Steele and T.L.E. Trammell. 2016. Ecosystem services in managing residential landscapes: Priorities, value dimensions, and cross-regional patterns. *Urban Ecosystems* 19(1):95-113. DOI 10.1007/s11252-015-0477-1

McGowan, K.A., F. Westley, E.D.G. Fraser, P.A. Loring, K.C. Weathers, F. Avelino, J. Sendzimir, **R. Roy Chowdhury**, and M.L. Moore. 2014. The research journey: travels across the idiomatic and axiomatic toward a better understanding of complexity. *Ecology and Society* 19(3): 37. <http://dx.doi.org/10.5751/ES-06518-190337>

(Authors in alphabetical order of last name after leads Steele and Heffernan) M. K. Steele, J. B. Heffernan, N. Bettez, J. Cavender-Bares, P.M. Groffman, M. Grove, S. Hall, S. E. Hobbie, K. Larson, J. L. Morse, C. Neill, K.C. Nelson, J. O'Neil-Dunne, L. Ogden, D.E. Pataki, C. Polsky, **R.**

Roy Chowdhury. 2014. Convergent surface water distributions in U.S. cities. *Ecosystems* 10.1007/s10021-014-9751-y.

(Authors in alphabetical order of last name after lead Groffman) Groffman, P.M., J. Cavender-Bares, N.D. Bettez, J.M. Grove, S.J. Hall, J.B. Heffernan, S.E. Hobbie, K.L. Larson, J.L. Morse, C. Neill, K. Nelson, J. O'Neill-Dunne, L. Ogden, D.E. Pataki, C. Polsky, **R. Roy Chowdhury** and M. Steele. 2014. Ecological homogenization of urban America. *Frontiers in Ecology & Environment* 12(1): 74-81.

(Authors in alphabetical order of last name after four leads) Polsky, C., J. Morgan Grove, C. Knudson, P.M. Groffman, N. Bettez, J. Cavender-Bares, S. Hall, J. Heffernan, S. Hobbie, K. Larson, J. Morse, C. Neill, K. Nelson, L. Ogden, J. O'Neill-Dunne, D. Pataki, **R. Roy Chowdhury** and M. Steele. 2014. Assessing the Homogenization of Urban Land Management with an Application to US Residential Lawncare. *Proceedings of the National Academy of Sciences of the USA* 111(12): 4432-4437.

Onsted, J. and **R. Roy Chowdhury**. 2014. Does zoning matter? A comparative analysis of landscape change in Redland, Florida using cellular automata. *Landscape and Urban Planning* 121: 1-18.

Hetrick, S., **R. Roy Chowdhury**, E. Brondizio and E. Moran. 2013. Spatiotemporal patterns and socioeconomic contexts of vegetative cover in Altamira City, Brazil. *LAND* 2(4): 774-796.

Roy Chowdhury, R. 2012. Revisiting the environmental Kuznets curve: An introduction to the special issue. *Journal of Applied Geography* 32:1-2.

Roy Chowdhury, R. and E.F. Moran. 2012. Turning the curve: A theoretical, methodological and empirical review of Kuznets approaches. *Journal of Applied Geography* 32:3-11.

Roy Chowdhury, R., K. Larson, J.M. Grove, C. Polsky, E. Cook J. Onsted and L. Ogden. 2011. A multi-scalar approach to theorizing socio-ecological dynamics of urban residential landscapes. *Cities and the Environment (CATE)* 4(1): Article 6. Available at: <http://digitalcommons.lmu.edu/cate/vol4/iss1/6>

Hernandez, M., **R. Roy Chowdhury**, L. Fleming and D. Griffith. 2011. Colorectal cancer and socioeconomic status in Miami-Dade County: Neighborhood-level associations before and after the Welfare Reform Act. *Journal of Applied Geography* 31(3):1019-1025.

Roy Chowdhury, R. 2010. Differentiation and concordance in smallholder land use strategies in southern Mexico's conservation frontier. *Proceedings of the National Academy of Sciences of the USA* 107:5780-5785.

C. Radel, B. Schmook and **R. Roy Chowdhury**. 2010. Agricultural livelihood diversification in the southern Yucatán region: Diverging paths with implications for environmental change. *Regional Environmental Change* 10(3): 205-218.

Impoinvil, D.E., J. Keating, C.M. Mbogo, M.D. Potts, **R. Roy Chowdhury** and J.C. Beier. 2008. Abundance of immature Anopheles and culicines (Diptera: Culicidae) in different water body types in the urban environment of Malindi, Kenya. *Journal of Vector Ecology* 33(1): 107-116.

Roy Chowdhury, R. 2007. Household land management and biodiversity: Secondary succession in a forest-agriculture mosaic in southern Mexico. *Ecology and Society* 12(2): 31. [online] URL: <http://www.ecologyandsociety.org/vol12/iss2/art31/>

Impoinvil, D.E., J. Keating, **R. Roy Chowdhury**, R. Duncan, G. Cardenas, S. Ahmad, C. M. Mbogo, J. I. Githure and J. C. Beier. 2007. The association between distance to water pipes and water bodies positive for anopheline mosquitoes (Diptera: Culicidae) in the urban community of Malindi, Kenya. *Journal of Vector Ecology* 32(2): 319-327.

Roy Chowdhury, R. 2006. Driving forces of tropical deforestation: The role of remote sensing and spatial models. *Singapore Journal of Tropical Geography* 27(1): 82-101.

Roy Chowdhury, R. 2006. Landscape change in the Calakmul Biosphere Reserve, Mexico: Modeling the driving forces of smallholder deforestation in land parcels. *Applied Geography* 26(2): 129-152.

Roy Chowdhury, R. and B. L. Turner II. 2006. Reconciling agency and structure in empirical analysis: Smallholder land use in the southern Yucatán, Mexico. *Annals of the Association of American Geographers* 96(2): 302-322.

Keys, E. and **R. Roy Chowdhury**. 2006. Cash crops, smallholder decision making and institutional interactions in a closing frontier, Calakmul, Campeche, Mexico. *Journal of Latin American Geography* 5(2): 75-90.

Fuller, D.O and **R. Roy Chowdhury**. 2006. Monitoring and modelling tropical deforestation: Introduction to the special issue. *Singapore Journal of Tropical Geography* 27(1): 1-3.

Turner II, B. L., S. Cortina-Villar, D. Foster, J. Geoghegan, E. Keys, P. Klepeis, D. Lawrence, P. Macario-Mendoza, S. Manson, Y. Ogneva-Himmelberger, A.B. Plotkin, D. Pérez-Salicrup, **R. Roy Chowdhury**, B. Savitsky, L. Schneider, B. Schmook and C. Vance. 2001. Deforestation in the southern Yucatán peninsular region: an integrative approach. *Forest Ecology and Management* 154(3): 353-370.

Geoghegan, J., S. Cortina-Villar, P. Klepeis, P. Macario-Mendoza, Y. Ogneva-Himmelberger, **R. Roy Chowdhury**, B. L. Turner II and C. Vance. 2001. Modeling tropical deforestation in the southern Yucatán peninsular region: comparing survey and satellite data. *Agriculture, Ecosystems and Environment* 85: 25-46.

Roy Chowdhury, R. 1999. Agroforestry: Systems of diversity or divestiture? *Revista Geográfica* 125: 99-112.

Refereed Book Chapters

Roy Chowdhury, R. 2013. The Intersection of Independent Lies: Land Change Science and Cultural and Political Ecology. Chapter 12 in C. Brannstrom and J. Vadjunec (eds.) *Land Change Science and Political Ecology: Synergies and Divergences*. Routledge. pp 224-240.

Brondizio, E. and **R. Roy Chowdhury**. 2012. Human-Environment Research: Past trends, current challenges and future directions. Chapter 17 in E.S. Brondizio and E. F. Moran (eds.) *Human-Environment Interactions: Current and Future Directions*. Springer Scientific Publishers. pp 391-400.

Brondizio, E. and **R. Roy Chowdhury**. 2010. Spatio-temporal methodologies in Environmental Anthropology: Geographic Information Systems, remote sensing, landscape changes and local knowledge. In Ismael Vaccaro, Eric Alden Smith and Shankar Aswani, eds. *Society and Environment: Methods and Research Design*. Cambridge University Press. pp. 266-298.

Sader, S. A., **R. Roy Chowdhury**, L. C. Schneider and B. L. Turner II. 2004. Forest change and human driving forces in Central America. In Garik Gutman, Anthony Janetos, Christopher Justice, Emilio Moran, John Mustard, Ronald Rindfuss, David Skole, and B. L. Turner II, eds. *Land Change Science: Observing, Monitoring, and Understanding Trajectories of Change on the Earth's Surface*. Dordrecht, NL: Kluwer, pp. 57-96.

Roy Chowdhury, R. and L. C. Schneider. 2004. Land-cover/use in the southern Yucatán peninsular region, Mexico: Classification and change analysis. In B. L. Turner II, J. Geoghegan and D. Foster, eds. *Integrated Land-Change Science and Tropical Deforestation in the Southern Yucatán: Final Frontiers*. Oxford: Clarendon Press/Oxford U.P., pp. 105-141.

Klepeis, P. and **R. Roy Chowdhury**. 2004. Institutions, policy and land change: Complexity within and beyond the ejido. In B. L. Turner II, J. Geoghegan and D. Foster, eds. *Integrated Land-Change Science and Tropical Deforestation in the Southern Yucatán: Final Frontiers*. Oxford: Clarendon Press/Oxford U.P., pp. 145-169.

Geoghegan, J., L. Pritchard, Jr., Y. Ogneva-Himmelberger, **R. Roy Chowdhury**, S. Sanderson and B. L. Turner II. 1998. "Socializing the pixel" and "pixelizing the social" in land-use/cover change. In D. Liverman, E.F. Moran, R.R. Rindfuss and P.C. Stern, eds. *People and Pixels: Linking Remote Sensing and Social Science*. Committee on the Human Dimensions of Global Environmental Change, National Research Council. National Academy Press, Washington, D.C. pp. 51-69.

Monographs and Other Publications

Roy Chowdhury, R. 2007. Agroforestry. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 19-20.

Roy Chowdhury, R. 2007. Brundtland Report. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 172-173.

Roy Chowdhury, R. 2007. Conservation Biology. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 349-351.

Roy Chowdhury, R. 2007. Ecology. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 516-523.

Roy Chowdhury, R. 2007. Edge Effect. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 541-542.

Roy Chowdhury, R. 2007. Global Environmental Change. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 773-782.

Roy Chowdhury, R. 2007. Intermediate Disturbance Hypothesis. In P. Robbins (ed.) *Encyclopedia of Environment and Society*. London: Sage Publications. pp 941-943.

Roy Chowdhury, R. 2003. *Livelihoods in the balance: The institutional and ecological conditions of smallholder land use in the Calakmul-southern Yucatán region, Mexico*. Doctoral dissertation. Clark University, Worcester, MA.

Roy Chowdhury, R. 1996. *Socioeconomic and locational factors influencing land use change in Macon county, North Carolina*. Master's Thesis. University of Georgia, Athens, GA.

Conference Proceedings

Impoinvil, D.E., R. Duncan, R. Roy Chowdhury, J. Keating, C. Hanson, G. Cardenas and J.C. Beier. 2006. The impact of environmental characteristics and engineered systems on anopheline larval-prevalent water bodies in the urban community of Malindi, Kenya. *American Journal of Tropical Medicine and Hygiene* 75(5): 178-178.

Roy Chowdhury, R. 2004. Land use in the southern Yucatán peninsula, Mexico: Smallholder agency in changing institutional regimes. In Proceedings of the 2004 Annual Meeting of the Latin American Studies Association, Las Vegas, Nevada.

Geoghegan, J., P. Klepeis, Y. Ogneva-Himmelberger, R. Roy Chowdhury, B. L. Turner II and C. Vance. 2000. Spatial Modeling of Tropical Deforestation in the Southern Yucatan Peninsular Region: Comparing Aggregate and Disaggregate Approaches. In Proceedings for 4th International Conference on Integrating GIS and Environmental Modeling (GIS/EM4): Problems, Prospects and Research Needs. Banff, Alberta, Canada.

PROFESSIONAL CONFERENCE/MEETING PRESENTATIONS, POSTERS AND PANELS

2017 Turner II, B.L. and R. Roy Chowdhury. *The parallel trajectories and increasing integration of landscape ecology and land system science*. Annual meeting of the Association of American Geographers, Boston, MA. April 6.

- 2017 Yoder, L. and R. Roy Chowdhury. *Farmer collective action and Everglades water quality*. Annual meeting of the Association of American Geographers, Boston, MA. April 5.
- 2017 R. Roy Chowdhury (organizer and chair). *Panel: Theorizing Land Science*. Annual meeting of the Association of American Geographers, Boston, MA. April 6.
- 2016 Meyfroidt, P. and R. Roy Chowdhury (organizers and co-chairs). World Café - Conceptual Models of Land Systems 1: Middle-range theories in land system science. Open Science Meeting of the Global Land Programme, Beijing, China. October 2016.
- 2016 Yoder, L. and R. Roy Chowdhury. *Bonding and Bridging Social Capital: Tradeoffs and synergies in changing agricultural water management under Everglades restoration*. Open Science Meeting of the Global Land Programme, Beijing, China. October 2016.
- 2016 Roy Chowdhury, R., D. Locke, J.M. Grove, P. Groffman, N. Bettez, D. Bolger, J.M. Cavender-Bares, S.J. Hall, J.B. Heffernan, S.E. Hobbie, K. Larson, C. Neill, K.C. Nelson, J. O'Neill-Dunne, L. Ogden, D.E. Pataki, and C. Polsky. *The homogenization of residential landscapes: A comparative analysis of land cover and landscape structure across diverse cities of the continental USA*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2016 Locke, D., R. Roy Chowdhury, J.M. Grove, J. O'Neil-Dunne, P. Groffman, M. Avolio, M. Wheeler, K. Larson, D. Martin, K. Nelson, L. Ogden, D. Pataki, C. Polsky and J. Rogan. *Landscape mullets in the urban forest: Understanding short and orderly vegetation in front yards and long messy vegetation in back yards across the American residential macrosystem*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2016 Roy Chowdhury, R. Panelist. Geographers respond to "An Ecomodernist Manifesto". Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2014 Roy Chowdhury, R., J.M. Grove, P. Groffman, J.M. Cavender-Bares, S.J. Hall, J.B. Heffernan, S.E. Hobbie, K. Larson, C. Neill, K.C. Nelson, J. O'Neill-Dunne, L. Ogden, D.E. Pataki, and C. Polsky. *Land management and cover in urban residential parcels and neighborhoods: A multi-city comparison from the USA*. Global Land Project Open Science Meeting, March 20, 2014. Berlin, Germany.
- 2013 Roy Chowdhury, R. Paper session chair. *Land Systems Science Symposium: Human Dimensions of Land Systems I*. Annual meeting of the Association of American Geographers, Los Angeles, CA.
- 2013 Roy Chowdhury, R. Session discussant. *Beyond Ecosystem Services I and II: Deciphering the Social Impacts of Conservation Interventions*. Annual meeting of the Association of American Geographers, April 9-13, 2013. Los Angeles, CA.
- 2013 Nelson, K.C., J. Cavender-Bares, S.E. Hobbie, K.L. Larson, L. Ogden, R. Roy Chowdhury, P.M. Groffman, J.M. Grove, J. Heffernan, C. Neill, C. Polsky, S. Hall, N. Bettez, J. Morse, J. O'Neil-Dunne, D. Pataki, and M. Steele. (Poster presentation) *Homogenization of the*

urban landscape: Integrating lawns, yards, biodiversity, and social organization drivers in transition moments. International Symposium on Society & Resource Management, Estes Park, Colorado, June 8, 2013.

- 2013 Roy Chowdhury, R., M. Simard, T. Fatoyinbo, E. Espinoza, V. Rivera-Monroy. *Landscape and Anthropogenic Contexts of Mangrove Structure, Pattern and Change in the Yucatan Peninsula, Mexico.* Annual meeting of the Association of American Geographers, April 9-13, 2013. Los Angeles, CA.
- 2013 Roy Chowdhury, R., N. Sharma, H. Gholizadeh and A.F. Rahman. (Poster presentation) *Trajectories and proximate sources of land use/cover change in the vicinity of the Sundarbans mangroves, Bangladesh.* Annual meeting of the Association of American Geographers, April 9-13, 2013. Los Angeles, CA.
- 2013 Simard, M., T. Fatoyinbo, V. Rivera-Monroy and R. Roy Chowdhury. *Mapping height, biomass and vulnerability of all mangrove forest of the Americas.* Annual meeting of the Association of American Geographers, April 9-13, 2013. Los Angeles, CA.
- 2012 Roy Chowdhury, R., J.M. Grove, J. O'Neill-Dunne, L.A. Ogden, C. Polsky, N. Vaughn, P. Groffman. *The socio-ecological structure of urban residential landscapes in the USA: A comparative study.* EcoSummit, September 30 – October 5, 2012. Columbus, OH.
- 2012 Roy Chowdhury, R. Panelist. *HDGC Plenary: Synergies and divergences between Land Change Science and Political Ecology.* Annual meeting of the Association of American Geographers, February 24-28, 2012. New York, NY.
- 2012 Roy Chowdhury, R. Panelist. *Landscape as framework for integrating physical and social science approaches in human-environment interaction research.* Annual meeting of the Association of American Geographers, February 24-28, 2012. New York, NY.
- 2012 Groffman, P.M., J.M. Grove, S. Hall, K. Larson, C. Polsky, J. Heffernan, L. Ogden, R. Roy Chowdhury, C. Neill, D. Pataki, S. Hobbie, J. Cavender-Bares, K. Nelson, J. O'Neill-Dunne. (Poster presentation) *Ecological homogenization of urban America.* LTER All Scientists Meeting, September 10-13, 2012. Estes Park, CO.
- 2012 C. Polsky, J.M. Grove, C. Knudson, P.M. Groffman, S. Hall, K. Larson, J. Heffernan, L. Ogden, R. Roy Chowdhury, C. Neill, D. Pataki, S. Hobbie, J. Cavender-Bares, K. Nelson, J. O'Neill-Dunne. (Poster presentation) *Homogenization of residential land management practices.* LTER All Scientists Meeting, September 10-13, 2012. Estes Park, CO.
- 2011 Roy Chowdhury, R, A. Decatur, J.M. Grove, E. Harris, K. Larson, D. Martin, J. O'Neill-Dunne, L. Ogden, C. Polsky and N. Vaughn. *Landscape and social ecologies of suburbanization: what is on our residential landscapes?* Annual meeting of the Association of American Geographers, April 12-16, 2011. Seattle, WA.
- 2011 Polsky, C., J.M. Grove, K. Larson, L. Ogden, J. Fraser, E. Harris, D. Martin, R. Garvoille, J. Sayles, R. Roy Chowdhury and N. Vaughn. *Landscape and social ecologies of*

- suburbanization: Why our landscapes are the way they are.* Annual meeting of the Association of American Geographers, April 12-16, 2011. Seattle, WA.
- 2011 Hetrick, S., R. Roy Chowdhury, E. Brondizio and E. Moran. *Spatial patterns, temporal trends and socioeconomic determinants of vegetative cover in Altamira, Brazil.* Annual meeting of the Association of American Geographers, April 12-16, 2011. Seattle, WA.
- 2011 Roy Chowdhury, R. Panelist. *Using Local Knowledge to Understand Land Use/Land Cover Change at Long Term Ecological Research (LTER) Sites.* Annual meeting of the Association of American Geographers, April 12-16, 2011. Seattle, WA.
- 2010 Roy Chowdhury, R. N. Vaughn and L. Ogden. *Land use and vegetative cover patterns in south Florida's urbanization frontier.* Global Land Project and Urbanization and Global environmental Change Joint Science Meeting, October 15-19, Arizona State University, Tempe, AZ.
- 2010 Roy Chowdhury, R. and E.F. Moran. *Turning the Curve: A critical review of Theoretical, Methodological and Empirical Contributions of Kuznets approaches.* Annual meeting of the Association of American Geographers, April 14-18, 2010. Washington, DC.
- 2010 Keys, E. and R. Roy Chowdhury. *Bid rents and Social Capital.* Annual meeting of the Association of American Geographers, April 14-18, 2010. Washington, DC.
- 2010 Onsted, J. and R. Roy Chowdhury. *Does zoning matter for urban growth calibration and simulation?* Annual meeting of the Association of American Geographers, April 14-18, 2010. Washington, DC.
- 2009 J. Onsted, L. Ogden and R. Roy Chowdhury. Poster presentation. *Zoning and Land Use Change: Dynamic Processes in Southern Florida.* LTER All Scientists Meeting, September 14-16, 2009. Estes Park, CO.
- 2009 Roy Chowdhury, R., L. Ogden and J. Onsted. *Socio-ecological dynamics of residential land conversion, South Florida.* LTER All Scientists Meeting, September 14-16, 2009. Estes Park, CO.
- 2009 Roy Chowdhury, R., L.A. Ogden and J. Onsted. *Characterizing and contextualizing residential land covers in south Florida.* Annual meeting of the Association of American Geographers, March 25, 2009. Las Vegas, NV.
- 2009 Roy Chowdhury, R. Panelist. *Sustainability and Sustainable Democracy.* Conference: Building Sustainable Democracies. January 30-31, 2009. Indiana University, Bloomington, IN.
- 2008 Roy Chowdhury, R., H. Gladwin, L.A. Ogden and J. Onsted. *Cartographies of exemption: The political ecology of land use and zoning in south Florida.* The 14th International Symposium on Society and Resource Management. Burlington, VT.

- 2008 Roy Chowdhury, R. *Adaptation and adaptive capacity: Institutional and ecological change in southern Mexico*. Annual meeting of the Association of American Geographers, Boston, MA.
- 2008 Roy Chowdhury, R. Panelist. *Land change and community adaptation*. Annual meeting of the Association of American Geographers, Boston, MA.
- 2007 Roy Chowdhury, R. and E. Keys. *Bridging theories of landscape ecology and agricultural change*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2007 Roy Chowdhury, R. Panelist. *Poverty and conservation 2 – Recent empirical findings*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2006 Roy Chowdhury, R. *Secondary succession in the southern Yucatán, Mexico: Landscape pattern, social dimensions and smallholder land use portfolios*. Annual meeting of the Association of American Geographers, Chicago, IL.
- 2006 Roy Chowdhury, R. session discussant. *Linking social and ecological systems I: Theory, rationale and necessity for integrating social and ecological systems*. Annual meeting of the Association of American Geographers, Chicago, IL.
- 2006 Roy Chowdhury, R. *Smallholder land use decisions and landscape effects in a forest-agriculture mosaic, southern Yucatán, Mexico*. Annual symposium of the United States Regional Chapter of the International Association for Landscape Ecology, San Diego, CA.
- 2005 Roy Chowdhury, R. *Scales in institutional ecology: Some implications for land change studies*. Annual meeting of the Association of American Geographers, Denver, CO.
- 2005 Roy Chowdhury, R., session discussant. *Understanding land transformations through spatially explicit models*. Annual meeting of the Association of American Geographers, Denver, CO.
- 2005 Roy Chowdhury, R. *Deforestation in the southern Yucatán peninsula, Mexico: The role of remote sensing and land change models*. Annual meeting of the American Society for Photogrammetry and Remote Sensing, Baltimore, MD.
- 2004 Roy Chowdhury, R. *Land use in the southern Yucatán peninsula, Mexico: Smallholder agency in changing institutional regimes*. Annual meeting of the Latin American Studies Association, Las Vegas, NV.
- 2004 Roy Chowdhury, R. and E. Keys. *Institutional change and smallholder land use in Calakmul's ejidos*. Biennial meeting of the International Association for the Study of Common Property, Oaxaca, Mexico.
- 2004 Roy Chowdhury, R. *Regional and local landscape change in the southern Yucatán, Mexico: forests, smallholders and institutions*. Annual Meeting of the Association of American Geographers, Philadelphia, PA.

- 2003 Roy Chowdhury, R. *Land use, landscape and institutional environmental regimes in the southern Yucatan peninsular region, Mexico*. Annual Meeting of the Association of American Geographers, New Orleans, LA.
- 2001 Roy Chowdhury, R. *Land use change, conservation and social movements: Institutional dynamics in the southern Yucatán peninsular region, Mexico*. Open meeting of the Human Dimensions of Global Environmental Change, Oct 6-8, Rio de Janeiro, Brazil.
- 1999 Klepeis, P. and R. Roy Chowdhury. *The use of historical sketch maps in improving results of supervised classification of Landsat TM data*. Annual Meeting of the Annals of the Association of American Geographers, Honolulu, Hawaii.
- 1998 Savitsky, B.G., Y. Ogneva-Himmelberger, and R. Roy Chowdhury. *The use of multi-temporal image classification in modeling land use and land cover change: a case study in the Southern Yucatán Peninsular Region*. Annual Conference of the American Society for Photogrammetric Engineering and Remote Sensing, Tampa, Florida.
- 1998 Roy Chowdhury, R. and Y. Ogneva-Himmelberger. *Landscape and locational indices influencing deforestation in the southern Yucatán peninsular region, Mexico*. Annual Meeting of the Association of American Geographers, Boston, MA.
- 1998 Roy Chowdhury, R. and Y. Ogneva-Himmelberger. *Modeling land-use/cover change in the southern Yucatán peninsular region, Mexico*. Land Use and Cover Change (LUCC) Open Science Meeting, Barcelona, Spain.

SELECTED INVITED PRESENTATIONS

- 2016 Roy Chowdhury, R. *FCE-LTER III: Hydrology and Water Policy*. Invited Presentation, Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL. March 2016.
- 2015 Roy Chowdhury, R. *FCE-LTER III: Hydrology and Water Policy: The Socio-Hydrological Framework of FCE III Research*. Invited Presentation, Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL. Jan 2015.
- 2014 Roy Chowdhury, R. *FCE-LTER III: Water Policy and Practices Cross-Cutting Theme*. Invited Presentation, Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL. March 2014.
- 2013 Roy Chowdhury, R. *FCE-LTER III: The Legacies Cross-Cutting Theme*. Invited Presentation, Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL. March 11, 2013.
- 2013 Roy Chowdhury, R. *Linking landscape, institutions and local decisions: Examples from urban residential USA*. Invited presentation, Workshop on Long-Term Social-Ecological Research, Arizona State University. Tempe, AZ. Jan 10, 2013.

- 2012 Roy Chowdhury, R. *The Socio-Ecological Structure of Urban Residential Landscapes in the USA: A Comparative Study*. Invited Presentation, Department of Earth Sciences, Indiana University-Purdue University Indianapolis. Indianapolis, IN. November 5, 2012.
- 2012 Roy Chowdhury, R. *Human Dimensions Research in South Florida and the Legacies Cross-Cutting Theme*. Invited Presentation, Florida Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL. March 16, 2012.
- 2011 Roy Chowdhury, R. *The structure of (sub)urban landscapes: Social groups and vegetative patterns in 3 eastern US cities*. Invited Lecture, Center for Urban Environmental Research and Education (CUERE), University of Maryland Baltimore County. Baltimore, MD. November 18, 2011.
- 2011 Roy Chowdhury, R. *Smallholder decision and forest transition: Cultivating conservation in southern Mexico*. Invited Lecture, Center for Latin American and Caribbean Studies, Indiana University. Bloomington, IN. October 28, 2011.
- 2011 Roy Chowdhury, R. *Smallholder decision and forest transition: Cultivating conservation in southern Mexico*. Invited Lecture, Department of Geography, Miami University of Ohio. Oxford, OH. March 25, 2011.
- 2010 Roy Chowdhury, R. *Structure, agency and spatial relations in environmental theory*. Invited Lecture. Center for Ecosystem Science and Policy, University of Miami. Miami, FL. November 17, 2010.
- 2010 Roy Chowdhury, R. *Structure and agency in human-environment relations*. Invited Lecture, Graduate seminar: Research Problems in Geography, Indiana University. Bloomington, IN. November 5, 2010.
- 2010 Roy Chowdhury, R. *Farming food, cultivating conservation: Farmstead production logics in southern Mexico and implications for a forest transition*. Food Studies Seminar Series, Indiana University. Bloomington, IN. January 25, 2010.
- 2009 Roy Chowdhury, R. *Smallholder land management, forest change and environmental history in southern Mexico*. Ecological Anthropology seminar, Indiana University. Bloomington, IN. November 3, 2009.
- 2009 Roy Chowdhury, R. Conference Co-organizer and Participant. The First Annual Millennium Conference: Water, Drought and Ecosystem Services. November 9-12, 2009. Athens, GA.
- 2009 Roy Chowdhury, R. Participant. Florida Coastal Everglades LTER All Scientists Meeting. October 15-16, 2009. Miami, FL.

- 2009 Roy Chowdhury, R. Co-organizer and participant. LTER All Scientists Meeting Workshop: *Recent Advances and Opportunities for Urban Long Term Ecological Research: Theory, Data, and Methods*. September 14-16, 2009. Estes Park, CO.
- 2009 Roy Chowdhury, R. Co-organizer and participant. LTER All Scientists Meeting Workshop: *How Is Urbanization Making America Socially and Ecologically homogenous?* September 14-16, 2009. Estes Park, CO.
- 2009 Roy Chowdhury, R. *Cartographies of exemption: Zoning and Land cover in south Florida*. February 18, 2009. Invited Lecture. School of Geographical Sciences and School of Sustainability, Arizona State University, Tempe, AZ.
- 2008 Roy Chowdhury, R. *Smallholder land management, forest successions and environmental history in southern Mexico*. Workshop in Political Theory and Policy Analysis, Indiana University. Bloomington, IN. Colloquium, Nov 10, 2008.
- 2008 L. Ogden and R. Roy Chowdhury. *FCE-LTER Human Dimensions Research*. Florida-Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL.
- 2007 Roy Chowdhury, R. *Understanding anthropogenic landscape change in the southern Yucatán peninsula, Mexico*. Sierra Club. Miami, FL.
- 2007 Roy Chowdhury, R. *Linking social and ecological systems: Research agendas and methods*. Land Use and Environmental Change Institute (LUECI) and the Department of Geography, University of Florida. Gainesville, FL.
- 2007 Roy Chowdhury, R. *Linking remote sensing with spatial models for land change analysis*. Center for Southeastern Tropical Advanced Remote Sensing (CSTARS) Seminar Series, University of Miami. Coral Gables, FL.
- 2007 L. Ogden, H. Gladwin and R. Roy Chowdhury. *Florida-Coastal Everglades: Social Science Approaches to Changing Landscapes*. Meeting on Developing and Evaluating Social Science Approaches for the Baltimore Ecosystem Study LTER: Local Focus, Global Thinking. Baltimore, MD.
- 2007 L. Ogden, G. Hollander and R. Roy Chowdhury. *FCE-LTER Human Dimensions Research*. Florida-Coastal Everglades Long-Term Ecological Research All Scientists Meeting. Miami, FL.
- 2006 Roy Chowdhury, R. *An analysis of interdisciplinary doctoral programs focused on the environment*. Center for Ecosystem Science and Policy (CESP) Fall Retreat, University of Miami. Coral Gables, FL.
- 2006 Roy Chowdhury, R. *Land change science in the southern Yucatán, Mexico*. Gamma Theta Upsilon (Geography Undergraduate Honor society), University of Miami. Coral Gables, FL.

- 2005 Roy Chowdhury, R. *Analyzing tropical deforestation with GIS and spatial econometric techniques*. Marine and Atmospheric Science Program, Course in Economics of Natural Resources, University of Miami. Coral Gables, FL.
- 2004 Roy Chowdhury, R. *Institutional policy, smallholder land use and ecological change: Integrated land change science in the southern Yucatán, Mexico*. Invited Lecture. Environmental Studies Seminar Series, Florida International University. Miami, FL.
- 2004 Roy Chowdhury, R. *Geographic information technologies in archaeological research*. Invited Lecture. Department of Anthropology, University of Miami. Coral Gables, FL.
- 2003 Roy Chowdhury, R. *Remote sensing and geographic information systems in medical/epidemiological research*. Invited Lecture. Miller School of Medicine, University of Miami. Coral Gables, FL.
- 2002 Turner II, B.L. and R. Roy Chowdhury. *Land cover and land use change in the southern Yucatán peninsular region*. Workshop: Linking Household and Remotely Sensed Data: Methodological and Practical Problems, East-West Center, University of Hawaii. Honolulu, Hawaii.
- 2002 Roy Chowdhury, R. *Conservation institutions and land use change in the southern Yucatán peninsular region*. M.A. GIS program research/speaker series, Clark University. Worcester, MA.
- 1999 Roy Chowdhury, R. *A spatially explicit model of landscape change in the southern Yucatán peninsular region*. M.A. GIS program research/speaker series, Clark University. Worcester, MA.
- 1999 Roy Chowdhury, R. *Remote Sensing for Land Cover Change in the SYPR*. Part 2 of *Advance in Integrated Land Analysis: The LCLUC-SYPR in Four Papers*. Annual Meeting of the Center for Integrated Studies in Global Change, Carnegie Mellon University. Pittsburgh, PA.

OTHER MEETING/WORKSHOP PARTICIPATION

- 2017 Meyfroidt, P. and R. Roy Chowdhury (organizers). *Middle-range theories in land system science*. Global Land Programme Workshop, March 29-31, Luzerne, Switzerland.
- 2017 R. Roy Chowdhury (invited participant). *Council on the Uncertain Human Future*. A New Earth Conversation, Jan 28-29 and Feb 10-11, 2017. Clark University, Worcester MA.
- 2013 Roy Chowdhury, R. Presenter and Discussant for paper authored by Ranjan Ghosh, entitled "*The role of recordkeeping and broadcast in shaping moral incentives: Experimental evidence from illegal sand mining in India*." Ostrom Workshop on Political Theory and Policy Analysis mini-conference, Indiana University. Bloomington, IN. December 16, 2013.

- 2013 Roy Chowdhury, R. Participant. *Urbanization, Institutions and Sustainability*. Workshop on Long-Term Social-Ecological Research, Arizona State University. Tempe, AZ. Jan 9-11, 2013.
- 2010 Roy Chowdhury, R. Participant. *From Yardstick to Gyroscope*. Workshop on Methods for Long-Term Social-Ecological Research, Harvard Forest. Petersham, MA. April 27-30, 2010.
- 2010 Roy Chowdhury, R. Discussant. *Land Use and Land Cover Change Research*. Workshop on Human-Environment Interactions, Anthropological Center for Training and Research on Global Environmental Change, Indiana University. Bloomington, IN. February 25-27, 2010.
- 2010 Roy Chowdhury, R. Presenter, Co-Chair. *New Directions in Human-Environment Interaction*. Workshop on Human-Environment Interactions, Anthropological Center for Training and Research on Global Environmental Change, Indiana University. Bloomington, IN. February 25-27, 2010.
- 2009 Roy Chowdhury, R. Co-organizer and participant. LTER Workshop: *Socio-ecological dynamics of residential landscapes: A multi-site collaboration*. February 18-19, 2009. Arizona State University, Tempe, AZ.
- 2008 Roy Chowdhury, R. Invited participant. *Incorporating ecosystem services into decision-making: Developing a vision*. A Conference on Ecosystem Services (ACES): Dynamic systems, science and decisions, Massachusetts Institute of Technology, Cambridge, MA.
- 2003 Semester long training course on college teaching and course development. Worcester Polytechnic Institute, Worcester, MA.
- 2012 Attended session “*Online Teaching and Learning: Administrative Challenges*” organized by Antoinette WinklerPrins. Annual Meeting of the Association of American Geographers, New York, NY.
- 2012 Attended session “*Online Teaching and Learning: Effective Strategies in Teaching Geographical Concepts*” organized by Antoinette WinklerPrins. Annual Meeting of the Association of American Geographers, New York, NY.
- 1999 Geoghegan, J. P. Klepeis, Y. Ogneva-Himmelberger, R. Roy Chowdhury, B. L. Turner II and C. Vance. *Modeling Tropical Deforestation: Comparing Survey and Satellite Data*. International workshop: Current Progress in Quantifying Spatially Explicit Causes and Effects of Land-Use/Cover Change: Examples from Different Parts of the World. Wageningen, the Netherlands.

COURSES AT CLARK UNIVERSITY (2015-present)

| Course# | Title | Terms |
|---------|---|-------------|
| G190 | Introduction to Geographic Information Systems | Fall 2015 |
| G343 | Human Dimensions of Global Environmental Change | Fall 2015 |
| G317 | Directed Research | Fall 2015 |
| G399 | Directed Studies (Agricultural Decision-making & Change in Mexico; Urban socio-ecology, etc.) | Spring 2016 |
| G343 | Human Dimensions of Global Environmental Change | Fall 2015 |

COURSES AT INDIANA UNIVERSITY (2008-present)

| Course# | Title | Terms |
|----------|---|---|
| G338/538 | Introduction to Geographic Information Systems | Fall 2008, Spring 2010, Fall 2010, Spring 2012 |
| G438/539 | Advanced Geographic Information Systems | Spring 2009, Spring 2011, Spring 2012 |
| G461/561 | Human Dimensions of Global Environmental Change | Spring 2009 (as G440-540), Spring 2010, Fall 2011 |
| G478/578 | Global Change, Food and Farming Systems | Fall 2009, Spring 2011, Spring 2013, Fall 2014 |
| G460 | Internship in Geographical Analysis | 1-2 each year |
| G500 | Research Problems in Geography | Fall Sems: 2011-2014 |
| G830 | Directed Readings | 3-4 each year |
| G850 | Directed Research | 3-4 each year |

COURSES AT THE UNIVERSITY OF MIAMI (2003-2008)

| Course# | Title |
|----------------|--|
| GEG199 | Introduction to Geographic Information Systems |
| GEG391/591 | Intermediate Geographic Information Systems |
| GEG515 | Seminar: Human Dimensions of Global Environmental Change |
| GEG545/ECS 302 | Perspectives on Environmental Decisions |
| GEG545/525 | Independent Studies |
| GEG603 | Research Design |

STUDENT RESEARCH COMMITTEES (year indicates student has graduated from program)

Ph.D. Committees Chaired

- Dexter Locke (Geography, Clark University), in progress, “*A New Look at Residential Ecosystems Management: Heterogeneous Practices and the Landscape Mullets Concept*”. Dissertation defended 24 April 2017.
- Carlos Dobler-Morales (Geography, Clark University), in progress, anticipated in the area of agrarian change and resilience in Mexico

- Roopa Krithivasan (Geography, Clark University), in progress, TBA
- Landon Yoder (Geography, Indiana University), in progress, anticipated in the area of institutional dynamics of water management practices in the Everglades Agricultural Area, southern Florida, USA
- Monique Hernandez (Interdepartmental Studies, University of Miami) 2008, *“A Spatial Analysis of Colorectal Cancer in Miami-Dade County”*

Ph.D. Committee Member

- Ben Fash (Geography, Clark University)
- Laura Sauls (Geography, Clark University)
- Bernadette Arakwiye (Geography, Clark University)
- Paul McCord (Geography, Indiana University) 2017
- Chris Knudson (Geography, Clark University) 2016
- Nicholas Giner (Geography, Clark University) 2013
- John Marton (SPEA) 2012
- Daniel Impoinvil (Epidemiology, University of Miami) 2006

Masters Thesis and Paper Committees Chaired or Co-Chaired:

- Dayna Cueva Alegria (Latin American Studies) 2014, *“Engaging the State in Ayacucho, Peru: The role of the state-society boundary configuration in social development and policy change”*
- Nina Hensarling (Latin American Studies and Business Administration) 2013, *“Development in context: A comparative analysis of divergent models in Cajamarca, Peru”*
- Alison Pitt (Latin American Studies) 2012, *“After the Coup: Food Security, Violence, and Militarization in Honduras”*
- Scott Hetrick (Geography) 2011, *“Spatiotemporal patterns and socioeconomic determinants of urban vegetation in Altamira City, Brazil and land cover classification in a complex urban-rural landscape with Quickbird imagery”*
- Edgar Espinoza (Geography, University of Miami, co-chaired with Doug Fuller) 2008, *“Ecotourism markets and land cover dynamics in the Monteverde zone, Costa Rica: Links between economic development and forest transitions”*

PROFESSIONAL SERVICE: NATIONAL/INTERNATIONAL

- 2017- Co-Chair, Global Land Programme. <https://glp.earth/>
- 2014- Member, Scientific Steering Committee, Global Land Project.
2017
- 2017 Roy Chowdhury, R. Panel session organizer. *Theorizing Land Science*. Annual meeting of the American Association of Geographers, April 5-9, 2017. Boston, MA.
- 2013 Roy Chowdhury, R. Paper session chair. *Land Systems Science Symposium: Human Dimensions of Land Systems I*. Annual meeting of the Association of American Geographers, Los Angeles, CA.
- 2010- Member, International Committee, Long-Term Ecological Research Network
present

- 2010- North American Regional Working Group, International Long-Term Ecological Research Network
- 2011 Roy Chowdhury, R. Panel session organizer. *Beyond Yellowstone: The future of conservation III*. Annual meeting of the Association of American Geographers, April 12-16, 2011. Seattle, WA.
- 2010- Chair, Human Dimensions of Global Change (HDGC) Specialty Group, Association of American Geographers
- 2010 Roy Chowdhury, R. Paper session organizer and chair. *Urban Vegetation and Socio-Ecological Contexts: Heterogeneity, Trends and Implications*. Global Land Project and Urbanization and Global environmental Change Joint Science Meeting, October 15-19, Arizona State University, Tempe, AZ.
- 2013- Co-Leader, Hydrology and Water Policy Cross-Cutting Theme, Florida-Coastal Everglades Long-Term Ecological Research (FCE-LTER III) project.
- 2012- Co-Leader, Legacies Cross-Cutting Theme, Florida-Coastal Everglades Long-Term Ecological Research (FCE-LTER III) project.
- 2008- Co-leader, Human Dimensions research group, Florida-Coastal Everglades Long-Term Ecological Research (LTER) project.
- 2008- Councillor, Cultural and Political Ecology (CAPE) Specialty Group, Association of American Geographers.
- 2009 Organizing Committee, ESA Millennium Conference 2009: *Water-Ecosystem Services, Drought and Environmental Justice*. November 9-12, 2009, Athens, GA.
- 2008 Expert judge, Student paper presentation competition, West Lakes Division, Association of American Geographers. Indiana University, Nov. 2008.
- 2007 Roy Chowdhury, R. Paper session organizer. *Social and ecological systems I: Theoretical foundations*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2007 Roy Chowdhury, R. Paper session organizer. *Social and ecological systems II: Theoretical and empirical bridges*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2007 Roy Chowdhury, R. Paper session organizer and chair. *Social and ecological systems III: Empirical approaches*. Annual meeting of the Association of American Geographers, San Francisco, CA.
- 2006- Lead Organizer, Compilation of Interdisciplinary Social Science Curricula on the

- 2007 Environment, Social Sciences Working Group of the Society for Conservation Biology (SSWG-SCB) Curriculum Committee.
- 2006 Roy Chowdhury, R. Paper session organizer and chair. *Linking social and ecological systems III: Livelihoods*. Annual meeting of the Association of American Geographers, Chicago, IL.
- 2006 Roy Chowdhury, R. Paper session chair. *Linking social and ecological systems V: Infrastructure and connectivity*. Annual meeting of the Association of American Geographers, Chicago, IL.
- 2005-2008 Social Sciences Working Group member, Society for Conservation Biology.
- 2004 Roy Chowdhury, R. Paper session organizer and chair. *The contested commons: Understanding landscape, livelihood and institutional transformations in Calakmul, southern Mexico*. Biennial meeting of the International Association for the Study of Common Property, Oaxaca, Mexico.

PROFESSIONAL SERVICE: PROPOSAL REVIEWING

NASA (2012-2014), National Science Foundation (2007, 2009, 2015-16), National Geographic Society (2004, 2007), Swedish Academy of Sciences (2013-14)

PROFESSIONAL SERVICE: BOOK/JOURNAL EDITORIAL BOARDS & REVIEWING

Editorial Board member

Annals of the Association of American Geographers (2011 – present)

Journal of Land Use Science (Jan 2014 – present)

Reviews of Journal Articles and Book Manuscripts

Annals of the Association of American Geographers (2006, 2012, 2013), Biotropica (2008), Ecology and Society (2015, 2008), Environmental and Planning A (2010-2011), Landscape and Urban Planning (2007, 2011), Singapore Journal of Tropical Geography (2006), University of Arizona Press (2005).

PROFESSIONAL SERVICE AND MEMBERSHIPS: UNIVERSITY

Clark University (2015 – present)

- Scientific Steering Committee, George Perkins Marsh Institute
- Faculty steering committee, GISDE program

Indiana University (2008 – 2015)

- Co-chair, IU Office of Sustainability Environmental Quality and Land Use Working Group (Fall 2014-)

- Co-Director, Anthropological Center for Training and Research in Global Environmental Change (Fall 2014-)
- Board of Directors, Social Science Research Commons (Fall 2014-)
- Interim Director, Anthropological Center for Training and Research in Global Environmental Change (Jan-May 2013)
- Ecohydrology faculty search committee (Spring 2013), School of Public and Environmental Affairs
- Core Faculty Member, Human Dimensions of Global Environmental Change program
- Affiliate Faculty Member, Integrated Program in the Environment, Indiana University
- Faculty Advisory Board, Center for the Study of Institutions, Population and Environmental Change
- Faculty Advisory Committee, Workshop in Methods
- Affiliate Faculty Member, The Workshop for Political Theory and Policy Analysis
- Affiliate Faculty Member, Indiana University Network Science Institute
- Affiliate Faculty Member, Center for Latin American and Caribbean Studies
- Affiliate Faculty Member, Food Studies Program
- Affiliate Faculty Member, Dhar India Studies Program
- Affiliate Faculty Member, Center for Research in Energy and the Environment
- Collaborator and contributor, Workshop NSF-STC proposal, 2012
- Collaborator and contributor, CRES IGERT pre-proposal, 2009, 2010
- Collaborator and contributor, Science of Food Studies IGERT pre-proposal, 2010
- GIS Day Planning Committee (2008, 2009)
- Expert judge, student research projects, Indiana Junior Academy of Science research presentation competition (2008)

University of Miami (2003-2008)

- Faculty Advisory Committee and Affiliate Member, Abess Center for Ecosystem Science and Policy, University of Miami
- Doctoral program design committee, Ph.D. program proposal in Ecosystem Science and Policy, University of Miami
- Affiliate Faculty, Center for Latin American Studies, University of Miami
- Governing Board, Observatory on Structures and Institutions of Inequality in Latin America, Center for Latin American Studies (PI M. Blofield, The Ford Foundation [\$300,000]), University of Miami
- Interdisciplinary Research Group, Center for Latin American Studies, University of Miami
- Judge, student research projects, Citizens Board Research and Creativity Forum, University of Miami
- Advisor on project spatial analysis, J. Szapocznik (PI), *Built environment and Hispanic elders' health*. University of Miami. Funded by the National Institute on Aging, 07/01/06 - 04/30/09.
- Advisor on project spatial analysis, J. Szapocznik (PI), *Hispanics, built environment and metabolic syndrome*. University of Miami. Funded by the National Institute of Diabetes and Digestive and Kidney Diseases, 03/15/07 - 02/28/12.
- GIS Day planning

PROFESSIONAL SERVICE: DEPARTMENT

Indiana University (2008 – present)

- Organizer and Chair, Departmental Colloquium Series (2008-2014)
- Electronic Marketing Committee
- Departmental Salary Committee
- Hiring committee, Fiscal Officer
- Undergraduate Program Committee
- GIScience curriculum committee
- New Faculty Search Committees (Physical Geography; Human Geography; Global Environmental Change; Landscape Ecology; Political Geography)

University of Miami (2003-2008)

- Departmental Strategic Plan Committee
- Departmental Travel Budget Guidelines
- New Faculty Hire Committees (Physical Geography; Human-Environmental Geography)
- Departmental GIS Lab Administration and Development (with Doug Fuller)
- GIS jobs/internships advising (undergraduates)

PROFESSIONAL SERVICE: COMMUNITY OUTREACH

- 2012 Coordinate and lead field visit by team of scholars of the Conference of Latin Americanist Geographers, highlighting community agricultural and conservation efforts in ejido communities of Calakmul municipality, Campeche, Mexico. January 8-11, 2012.
- 2010 Interview and discussion of Roy Chowdhury's land use research in southern Mexico profiled in PNAS (2010) article. Bloomington Community Spanish Language Radio Program, Hola Bloomington, Friday, May 7, 2010. Podcast available at <http://wfhb.org/news/holabloomington>
- 2008 Urban tree canopy cover mapping, City of Bloomington, Indiana.
- 2008 Expert judge, student research projects, Indiana Junior Academy of Science research presentation competition
- 2007-present Collaborator. Florida-Coastal Everglades Long-Term Ecological Research Schoolyard (K-12 outreach).
- 2007 Panelist. *India: La proxima potencia mundial?* Univision TV Program Oppenheimer Presenta #159.
- 2005 Biodiversity and soil analysis data dissemination. Calakmul municipality, Campeche, Mexico.

- 2004 Parcel land use/cover cartography dissemination. Calakmul municipality, Campeche, Mexico.
- 2004 Ejido land use/cover cartography dissemination. Ejido councils, Calakmul municipality, Campeche, Mexico.
- 2002 Municipal/reserve land use/cover cartography dissemination. Calakmul Biosphere Reserve Technical Advisory Committee, Campeche, Mexico.
- 2001 Assisted cartographic development. CENECAM-Bosque Modelo Calakmul. Campeche, Mexico
- 2001 Cartographic development. Proposal to municipal government for ecotourism development in the community of Veinte de Noviembre, Calakmul municipality.
- 2000-2006 Participated in various community-based sustainable development workshops. Calakmul municipality, Campeche, Mexico

PROFESSIONAL MEMBERSHIPS

- The Association of American Geographers (AAG)
- International Association for Landscape Ecology (US-IALE)
- Society for Conservation Biology (SCB)
- International Association for Society and Natural Resources (IASNR)

LANGUAGES

- Spanish (fluent speaking, reading, writing)
- Hindi (fluent speaking, reading, writing)
- Bengali (fluent speaking and reading, intermediate writing)

SOFTWARE

- GIS and Remote Sensing:* ERDAS Imagine, ArcGIS, Idrisi
- Systems Modeling:* STELLA
- Statistical:* Various