

DIANA MITSOVA, Ph.D.

Professor and Chair, John DeGrove Eminent Scholar in Growth Management and Development, Department of Urban and Regional Planning, Florida Atlantic University

Florida Atlantic University

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Employment History

- 08/2023- *Professor and Chair, John DeGrove Eminent Scholar in Growth Management and Development, Interim Undergraduate Program Coordinator, Department of Urban and Regional Planning, Florida Atlantic University*
- 08/2021- *Professor and John DeGrove Eminent Scholar in Growth Management and Development, VPT Lab Director, Department of Urban and Regional Planning, Florida Atlantic University*
- 10/2020- *Associate Professor and John DeGrove Eminent Scholar in Growth Management and Development, VPT Lab Director, Department of Urban and Regional Planning, Florida Atlantic University*
- 01/2016- *Associate Professor and Director, Visual Planning Technology (VPT) Lab, School of Urban and Regional Planning, Florida Atlantic University*
- 10/2018- *Affiliate Associate Professor in Geosciences, Florida Atlantic University*
- 08/2014–08/2021 *Associate Professor, School of Urban & Regional Planning, School of Urban and Regional Planning, Florida Atlantic University*
- 08/2008-05/2014 *Assistant Professor, School of Urban & Regional Planning, School of Urban and Regional Planning, Florida Atlantic University*
- 9/2004-6/2008 *Graduate Research Assistant, University of Cincinnati*
- 7/2003-6/2004 *Program Director I / Research Analyst, State of Indiana, Indianapolis*
- 8/2001-5/2003 *Graduate Research Assistant, Center for Urban Policy and the Environment, Indianapolis*

Education

Doctor of Philosophy (Regional Development Planning), School of Planning, University of Cincinnati, 2008.

Master of Public Affairs, School of Public and Environmental Affairs (SPEA), Indiana University-Purdue University Indianapolis, 2003 (concentration: environmental planning and policy analysis)

Scholarship/ Research/ Creative Activity

BOOKS

Mitsova, Diana & Esnard, Ann-Margaret. 2019. [*Geospatial Applications for Climate Adaptation Planning*](#). New York, NY & Abingdon, UK: Routledge /Taylor & Francis.

BOOKS (forthcoming)

Huber, J., Jones, R., Mitsova, D. and C. Polsky. *Salty Urbanism: A Design Manual to Address Sea Level Rise and Climate Change for Urban Areas in the Coastal Zone*, Florida Sea Grant

ARTICLES (* indicates student co-author)

1. Cresswell, K*, Mitsova, D., Liu, W, Fadiman, M., Hindle, T. (2023). [Urban heat island vulnerability in Southeast Florida: Integrating physical exposure, sensitivity, and adaptive capacity indicators](#), *ISPRS Int. J. Geo-Inf.*, 12(6), 242; <https://doi.org/10.3390/ijgi12060242> (registering DOI)
2. Amer, L., Erkoç, M., Feagin, R., Kameshwar, S., Mach, K., Mitsova, D. (2023) [Measuring Resilience to Sea-Level Rise for Critical Infrastructure Systems: Leveraging Leading Indicators](#), *Journal of Marine Science and Engineering*, *J. Mar. Sci. Eng.*11(7), 1421; <https://doi.org/10.3390/jmse11071421>
3. Besser, L.M., Meyer, O.L., Jones, M.R., Tran, D., Booker, M., Mitsova, D., Peterson, R., Galvin, J.E., Bateman, J.R., Hayden, K.M., Hughes, T.M. (2023). [Neighborhood segregation and cognitive change: Multi-Ethnic Study of Atherosclerosis](#). *Alzheimers & Dementia*, 19(4):1143-1151; doi: 10.1002/alz.12705.
4. Amer, L.; Erkoç, M.; Feagin, R.A.; Kameshwar, S.; Mach, K.J.; Mitsova, D. Operationalizing SLR Resilience with Leading Indicators. *Encyclopedia*. Available online: <https://encyclopedia.pub/entry/47308>
5. Besser, L.M., Pescador Jimenez, M., Reimer, C., Adkins-Jackson, P.A.J., George, K.M., Meyer, O.L., Mitsova, D., and Galvin, J.E. (2023). [Association between neighborhood greenspace and brain health by racialized/ ethnic group: A rapid review](#). *International Journal of Environmental Research and Public Health*, 20(9), 5666; <https://doi.org/10.3390/ijerph20095666>.
6. *Weisner, M.L., Root, T.L., Harris, M.S., Mitsova, D., Liu, W. (2023) [Drinking Water Disparities and Aluminum Concentrations: Assessing Socio-Spatial Dimensions across an Urban Landscape](#), *Social Sciences and Humanities Open (Elsevier)*, 8(1); 100536, <https://doi.org/10.1016/j.ssaho.2023.100536>.
7. Besser, L.M., Meyer, O.L., Streitz, M, Farias, S., Olichney, J., Mitsova, D., and Galvin, J.E. (2023). [Greenspace and social determinants of health across the life course: The Life Course Sociodemographics and Neighborhood Questionnaire \(LSNEQ\)](#). *Health & Place*, 81:103008. doi: 10.1016/j.healthplace.2023.103008).
8. Dumbaugh, E., Stiles, J., Mitsova, D and Saha, D. (2023). [The Most Vulnerable User: Considering the Role of Income, Race, and the Built Environment on Pedestrian Crashes, Injuries, and Deaths](#). *Transportation Research Record*; <https://doi.org/10.1177/03611981231175888>
9. Sapat, A., Mitsova, D., Esnard, A-M, Escaleras, and Sweeting, K. (2023). Subjective Resilience, Adaptive and Coping Capacities: COVID-19 in Hurricane-Prone Areas, *International Journal of Mass Emergencies and Disasters* (accepted)
10. Sapat, A., Mitsova, D., Sweeting, K., Esnard, A.-M., and Escaleras, M. (2023). [COVID-19, and Concurrent Disasters: Administrative Burdens and Household Coping Capacities](#). *Public Administration Review*, 1-19, 1–19. <https://doi.org/10.1111/puar.13637>
11. *Hudspeth, C. Detwiler, K. Mitsova, D. (2023). Home Range Analysis of Cercopithecus Monkeys in Gombe National Park, Tanzania, *FAURJ* (accepted).
12. Besser, L.M., Jimenez, M.P., Meyer, O.L., George, K.M., Adkins-Jackson, P.A., Mitsova, D. and Galvin, J.E. (2022), [Neighborhood greenspace as a social determinant of health and how](#)

- [associations with brain health outcomes may differ by race/ethnicity](https://doi.org/10.1002/alz.067227). *Alzheimer's Dement.*, 18 (s11): e067227. <https://doi.org/10.1002/alz.067227>.
13. Besser, L.M., Mitsova, D., Wiese, L., and Williams, C. 2022. [Redlining and neighborhood walking among older adults: The 2017 National Household Travel Survey](#). *American Journal of Preventive Medicine*, 63(6):926-934. doi: 10.1016/j.amepre.2022.06.010.
 14. Bloetscher, F., A. Abbate, J. Huber, W. Liu, D. Meeroff, D. Mitsova, S. Nagarajan, C. Polsky, H. Su, R. Teegavarapu, Z. Xie, Y. Yong, C. Zhang, R. Jones, G. Oglesby, E. Suarez, J. Weaver, M. Hoque, and T. Hindle. (2021). [Establishing a Framework of a Watershed-wide Screening Tool to Support the Development of Watershed-based Flood Protection Plans for Low-lying Coastal Communities](#). *Journal of Infrastructure Policy and Development*, 5(1), 1273.
 15. Bloetscher, F., G. Rojas, A. Abbate, T. Hindle, J. Huber, R. Jones, W. Liu, D. Meeroff, D. Mitsova, S. Nagarajan, G. Oglesby, C. Polsky, H. Su, E. Suarez, R. Teegavarapu, J. Weaver, Z. Xie, Y. Yong, and C. Zhang. (2021). [A Framework for a Subwatershed Scale Screening Tool to Support Development of Resiliency Solutions and Flood Protection Priority Areas in a Low-Lying Coastal Community](#). *Journal of Geoscience and Environment Protection*, 9(10), 180-205; [10.4236/gep.2021.910013](https://doi.org/10.4236/gep.2021.910013)
 16. Besser, L.M., Chang, L.-C., Mitsova, D., Renne, J., Carmichael, O.T., Moulder, K.L., Morris, J.C. and Galvin, J.E. (2021), [Associations between neighborhood greenspaces and cognitive and brain volume measures in cognitively normal older adults](#). *Alzheimer's Dement.*, 17: e054054. Doi: <https://doi.org/10.1002/alz.054054>
 17. Le Meyer, O.L., Besser, L.M., Booker, M., Luu, E., Mitsova, D., Tobias, M., Whitmer, R.A., Farias, S.T., DeCarli, C.S. and Mungas, D.M. (2021), [Neighborhood racial/ethnic segregation and cognition in older adults](#). *Alzheimer's Dementia*, 17(s10): e055745. Doi: <https://doi.org/10.1002/alz.055745>
 18. Sapat, A., Mitsova, D., Esnard, A-M, & Balilaj, A. (2021). [Policy mandates and Organizational Compliance: A Spatial Analysis of the Factors Affecting the Adoption and Implementation of Emergency Power Plans by Nursing Homes](#). *Risk, Hazards & Crisis in Public Policy*; 13(1), 64-93; <https://onlinelibrary.wiley.com/doi/abs/10.1002/rhc3.12238>
 19. Le Meyer, O., Besser, L., Mitsova, D., *Booker, M., *Luu, E., Tobias, M.M., Tomaszewski, S., Mungas, D., DeCarli, C. & Whitmer, R.A. (2021). [Neighborhood Racial/Ethnic Segregation and Cognitive Decline in Older Adults](#), *Social Science and Medicine*; 284:114226; doi: <https://doi.org/10.1016/j.socscimed.2021.114226>
 20. Besser, L., and Mitsova, D. (2021). [Neighborhood green land cover and neighborhood-based walking in US older adults](#). *American Journal of Preventive Medicine*, 61(1); e13-e20; <https://doi.org/10.1016/j.amepre.2021.01.013>; featured in FAU Connections <https://www.fau.edu/newsdesk/articles/green-neighborhoods-study.php>
 21. Mitsova, D., Esnard; A-M, Sapat, A., Lamadrid, A., Escaleras, M., and Velarde-Perez, C. (2020). [Effects of Infrastructure Service Disruptions Following Hurricane Irma: Multilevel Analysis of Post-Disaster Recovery Outcomes](#), *Natural Hazards Review*, 22(1): 04020055.
 22. Mitsova, D., Sapat, A., Esnard, A-M, and Lamadrid, A. (2020). [Evaluating the Impact of Infrastructure Interdependencies on the Emergency Services Sector and Critical Support Functions Using an Expert Opinion Survey](#). *Journal of Infrastructure Systems*, 26(2): 04020015-1 - 04020015-14, doi: [https://ascelibrary.org/doi/10.1061/\(ASCE\)IS.1943-555X.0000548](https://ascelibrary.org/doi/10.1061/(ASCE)IS.1943-555X.0000548).
 23. Zhang, C., Su, H., *Li, T., *Rojas, G., *Hindle, T., Mitsova, D., Teegavarapu, S., Meeroff, D., Xie, Z., Bloetscher, F. and Y. Yong. 2020. Modeling and Mapping High Water Table for a Coastal Region in

- Florida using Lidar DEM Data. *Groundwater* (Wiley), 59(2), 154-307.
<https://ngwa.onlinelibrary.wiley.com/doi/epdf/10.1111/gwat.13041>.
24. *Weisner, M.L., Root, T.L., Harris, M.S., Mitsova, D., and Liu, W. (2020). [The Complexities of Trust between Urban Water Utilities and the Public](#), *Sustainable Water Resources Management* (Springer), 6(50); doi: <https://doi.org/10.1007/s40899-020-00407-6>.
 25. *Davis, J., Mitsova, D., *Briggs, T.C., & Roberts-Briggs, T. (2019). [Post-Hurricane Michael Damage Assessment Using ADCIRC Storm Surge Hindcast, Image Classification, and LiDAR](#). *Shore & Beach*, 87(4), 3-14; <http://doi.org/10.34237/1008741>
 26. *Weisner, M.L., Root, T.L., Harris, M.S., Mitsova, D., and Liu, W. (2020). [Tap water perceptions and socioeconomics: Assessing the dissatisfaction of the poor](#). *Sustainable Production and Consumption*, 21, 269-278, DOI: [10.1016/j.spc.2019.08.008](https://doi.org/10.1016/j.spc.2019.08.008)
 27. Mitsova, D., Escaleras, M., Esnard, A-M, Sapat, A., Lamadrid, A.J. (2019). The Effects of Infrastructure Service Disruptions and Socioeconomic Vulnerability on Hurricane Recovery. *Sustainability*, 11(2), 516-532; doi:3390/su11020516 (Special issue on *Natural Disasters and Economics*).
 28. Mitsova, D. (2019). [Supporting natural hazards management with geospatial technologies](#). In *Oxford Research Encyclopedia of Natural Hazard Science*, Oxford University Press. doi: <http://dx.doi.org/10.1093/acrefore/9780199389407.013.283>.
 29. Mitsova, D., Esnard, A.-M., Sapat, A., & Lai, B.S. (2018). Socioeconomic vulnerability and electric power restoration timelines in Florida: The case of Hurricane Irma. *Natural Hazards*, 94(2), 689-709; <https://doi.org/10.1007/s11069-018-3413-x>. Also available through the NSF website: <https://par.nsf.gov/biblio/10066853>.
 30. Mitsova, D. (2018). Integrative Interdisciplinary Frameworks for Critical Infrastructure Interdependency Analysis, *Risk Analysis*, 41(7): 1111-1117; DOI: <https://doi.org/10.1111/risa.13129>.
 31. Mitsova, D., Bergh, C., Guannel, G., Lusic, C., Renda, M., Byrne, J., Graves, A., *Cresswell, K., *Alhawiti, R., *Goldberg, A. & *Reed, S. (2018). Spatial decision support for nature-based shoreline stabilization options in subtropical estuarine environments, *Journal of Environmental Planning and Management*, 61(14): 2468-2490; doi: <https://doi.org/10.1080/09640568.2017.1398637>.
 32. *Alhawiti, R. & Mitsova, D. (2016). Using LANDSAT-8 data to explore the relationship between urban heat island and urban land uses. *International Journal of Research in Engineering and Technology*, 5(3), 457-466.
 33. Bloetscher, F., Polsky, C. Bolter, K., Mitsova, D., Palbicke Garces, K., King, R., Cosio-Carballo, I., Hamilton, K. (2016). Assessing Potential Impacts of Sea Level Rise on Public Health and Vulnerable Populations in Southeast Florida and Providing a Framework to Improve Outcomes. *Sustainability*, 8(4), 315; doi:10.3390/su8040315.
 34. *Mulcan, A., Mitsova, D., Hindle, T., Hanson, H., Coley, C. (2015). Marine Benthic Habitats and Seabed Suitability Mapping for Potential Ocean Current Energy Siting Offshore Southeast Florida, *Journal of Marine Science and Engineering*, 3, 276-298; doi:10.3390/jmse3020276.
 35. Mitsova, D. (2014). Coupling Land Use Change Modeling with Climate Projections to Estimate Seasonal Variability in Runoff from an Urbanizing Catchment Near Cincinnati, Ohio, *ISPRS International Journal of Geo-Information*, 3, 1256-1277.

36. *Mokadi, E., Mitsova, D., and X. Wang. (2013). Projecting the Impact of a Proposed Streetcar Alignment on Urban Core Land Redevelopment – the Case of Cincinnati, Ohio, *Cities: The International Journal of Urban Policy and Planning*, 35, 136-146.
37. Mitsova, D., F. Wissinger, A-M Esnard, R. Shankar, and *Gies, P.. (2013). A Collaborative Geospatial Shoreline Inventory Tool to Guide Coastal Development and Habitat Conservation. *ISPRS International Journal of Geo-Information*, 2, 385-404.
38. Labiosa, W.B., W.M. Forney, A-M. Esnard, Mitsova, D., R. Bernknopf, P. Hearn, D. Hogan, L. Pearlstine, D. Strong, H. Gladwin, and E. Swain. (2013). The South Florida Ecosystem Portfolio Model: An Integrated Multi-criteria Scenario Evaluation Web Tool for Participatory Land-Use Planning in the Face of Sea Level Rise, *Journal of Environmental Modeling and Software*, 41: 210-222, (<http://dx.doi.org/10.1016/j.envsoft.2012.10.012>).
39. Mitsova, D. and A.M. Esnard. (2012). Holding Back the Sea: An Overview of Shore Zone Management and Research Needs. *Journal of Planning Literature*, 27(4): 446 - 459.
40. Mitsova, D., A.M. Esnard, and Y. Li. (2012). Using Enhanced Dasyetric Mapping Techniques to Improve the Spatial Accuracy of Sea Level Rise Vulnerability Assessments, *Journal of Coastal Conservation: Planning and Management*, 16(3): 355-372.
41. Mitsova, D., J. Vos, P. Gardinali, and *Stafeychuk, I. (2011). Variability in Road Runoff Pollution by Polycyclic Aromatic Hydrocarbons (PAHs) in the Urbanized Area Adjacent to Biscayne Bay, Florida, *Journal of Environmental Protection*, 2(10): 1317-1330.
42. Esnard, A.M., A. Sapat, and D. Mitsova. (2011). An Index of Relative Displacement Vulnerability to Hurricanes. *Natural Hazards*, 59(2): 833-859.
43. Mitsova, D., W. Shuster, and X. Wang. (2011). A Cellular Automata Model of Land Cover Change to Integrate Urban Growth with Open Space Conservation. *Landscape and Urban Planning*, 99(2): 141-153. Also available through the EPA website (National Risk Management Research Laboratory): https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=NRMRL&dirEntryId=233228.
44. Mitsova, D. and X. Wang. (2010). A GIS-based Technique for Linking Landscape Characteristics to Nitrogen Export Potential: Implications for Contributing Areas Management, *Journal of Environmental Planning and Management*, 53(7): 863-882.
45. Oner, A.C., Mitsova, D., Prosperi, D. and J. Vos. (2010). Knowledge Globalization in Urban Studies and Planning: A Network Analysis of International Co-authorships, *Journal of Knowledge Globalization*, 3(1): 1-29, posted also at <http://www.lboro.ac.uk/gawc/rb/rb374.html>.
46. Mitsova-Boneva, D. and X. Wang. (2007). Exploring the Variability in Suspended Sediment Yield using BASINS-HSPF and Probabilistic Modeling: Implications for Land Use Planning. *Journal of Environmental Informatics* 9(1): 29-40.

WORKS UNDER REVIEW

1. Lamadrid, A.J., Escaleras, M., Mitsova, D., Esnard, A-M, Sapat, A. 2023. Household Decisions in the Wake of An Extreme Event and Relations to Infrastructure Using Evidence from Hurricane Irma, *Risk Analysis* (under review)

BOOK CHAPTERS

Mitsova, D., C. Polsky, F. Bloetscher, J. Huntington. 2016. Climate Change and Extreme Events: How Health Disparities and Climate Governance Shape the Geography of Public Health Emergencies. In: *Routledge Handbook of Environmental Governance* (A. Sapat, ed.)

OTHER (applied research reports, book reviews, encyclopedia articles)

Mitsova, Diana, Eric Dumbaugh, and Dibakar Saha. 2021. Crash Risk for Low-Income and Minority Populations: An Examination of At-risk Population Segments and Underlying Risk Factors. A final report submitted to the Collaborative Sciences Center for Road Safety (CSCRS), University of North Carolina at Chapel Hill. URL: <https://www.roadsafety.unc.edu/research/projects/2019r31/>

Dumbaugh, Eric, **Diana Mitsova**, and Dibakar Saha. 2021. Pedestrian and Bicyclist Crash Risk In Lower-Income Areas: An Examination of At-Risk Population Segments and Environmental Risk Factors. A final report submitted to the Florida Department of Transportation. URL: <https://rosap.ntl.bts.gov/view/dot/56970>

Mitsova, D. 2016. Suitability Analysis for Living Shorelines Development in Southeast Florida's Estuarine Systems, Technical Report submitted to The Nature Conservancy under grant contract #AWD-000813. URL: https://maps.coastalresilience.org/seflorida/methods/Living_Shorelines_Final_Report_05_06_16.pdf

StoryMap:

<https://tnc.maps.arcgis.com/apps/MapJournal/index.html?appid=4e3c1d738a274ab6aeac1310d165684d>

Palbicke Garces, K., F. Bloetscher, **D. Mitsova**, K. Chung-Bridges, K. Hamilton and K. Bolter. 2016. Health and Sea Level Rise: Impacts on South Florida, Final Report available at <http://flhealthinnovation.org/sea-level-rise-mapping/> (a project funded by Kresge Foundation, grant number 248118).

Koch-Rose, M.S. (*Lead*), **D. Mitsova** (*Lead co-author*), T. Root (*Lead co-author*), J. Restrepo, L. Berry, F. Bloetscher, R. Teegavarapu, J. Vos, N. Hammer. 2011. Florida Water Management and Adaptation in the Face of Climate Change. A White Paper prepared for SUS funded research "A SUS Climate Change Task Force: Science addressing the needs of Florida Agencies, Industry, and Citizenry," in partnership with UF and FSU. Available at <http://floridaclimate.org/whitepapers/>

Mitsova-Boneva, D. 2007. Book Review for the *Journal of Urban Affairs* 29(5): 544-546, for Erie, Steven P. *Beyond Chinatown: The Metropolitan Water District, Growth, and the Environment in Southern California* (Stanford University Press, 2006), available at <http://www.blackwell-synergy.com/toc/juaf/29/5>.

Mitsova-Boneva, D. 2005. Book review. Craswell, Gail. *Writing for Academic Success: A Postgraduate Guide* (London: SAGE Publications, 2005), in *Education Review* (August 2005), available at <http://edrev.asu.edu/brief/index.html>.

Contracts or Grants Received:

EXTERNAL:

Funded:

1. Co-PI, (PI: Lisa Wiese, College of Nursing, with Co-PIs C. Williams, JuYoung Park (FAU), L. Besser (UM), Sheryl Magzamen (ColoradoSPH at CSU), and Diane Cook (WSU)
Project Title: The Role of Air Quality and Built Environment in Social Isolation and Cognitive Function among Rural, Racially/Ethnically Diverse Residents at Risk for Alzheimer's Disease.

Funding Agency: National Institutes of Health (NIH) – R01
Total Amount: \$4,358,572
Grant period: 08/01/2023 - 07/31/2028

2. **Co-PI, Florida Watershed Planning Study Phase II** (with F. Bloetscher, Y. Yong, and D. Meeroff, PIs)
Funding Agency: Federal Emergency Management Agency/ Florida Department of Emergency Management
Total amount: \$2.5M
Grant period: 10/01/2022 – 09/30/2023
3. **Co-PI, NSF SRS-RN: Planning: Integrated and Convergent Sea Level Adaptation for Urban and Rural Systems in the Gulf of Mexico Coastal Region** (with University of Miami, Texas A&M, and Louisiana State University, PI: M. Erkoc)
Funding Agency: National Science Foundation (CNS #2115275)
https://www.nsf.gov/awardsearch/showAward?AWD_ID=2115275&HistoricalAwards=false
Total amount: \$149,569
Grant period: 01/15/2022 – 06/01/2023
https://www.nsf.gov/awardsearch/showAward?AWD_ID=2115275&HistoricalAwards=false
4. **Co-PI, NIA/NIH, (PI: L. Besser), R21: Objectively measured neighborhood greenness in midlife and late life cognitive and brain imaging outcomes for Alzheimer's diseases: The Multi-Ethnic Study of Atherosclerosis.**
Funding Agency: PHS – National Institutes of Health
Total amount: \$378,884 [Collaborative award with the University of Miami and Wake Forest University]
Grant period: 03/01/2022 – 02/29/2024
5. **Co-PI, (PI: L. Besser), Neighborhood segregation and longitudinal change in brain health measures**
Funding Agency: Alzheimer's Association
Total amount: \$149,999 [Collaborative award with the University of Miami and University of California - Davis]
Grant period: 02/01/2022 – 01/31/2025
6. **Co-PI, NSF RAPID: Health, Housing, and Hazards: Subjective Resilience, Intersectional vulnerabilities, and Policy Evolution in Hurricane Prone Counties** (PI: Dr. Alka Sapat, Co-PI Dr. Ann-Margaret Esnard)
Funding Agency: National Science Foundation (CMMI-#2028968)
Total amount: \$175,848 [Collaborative award with Georgia State University]
Grant period: 05/15/2020 – 04/30/2021
7. **Co-PI, Salty Urbanism Adaptation: Using Natural and Nature-based Features to Enhance Ecosystem Services and Quality of Life in Response to Sea-Level Rise** (with J. Huber and C. Polsky)
Funding Agency: Florida Sea Grant
Amount: \$184, 737

Grant period: 2019-2022

8. **PI**, Collaborative Research: CRISP TYPE 2: Probabilistic Resilience Assessment of Interdependent Infrastructure
Funding Agency: National Science Foundation (CMMI-#1541089)
The research team was awarded NSF supplemental funding to the amount of \$158,000
Total amount: \$2.4M (FAU \$296,793 + Supplement \$58,000, total \$346,793) [Collaborative award with Lehigh University and Georgia State University]
Grant period: 09/01/2015 – 08/31/2020
9. **Co-PI**, **Florida Watershed Study Phase I** (with F. Bloetscher, Y. Yong, and D. Meeroff, PIs)
Funding Agency: Federal Emergency Management Agency/ Florida Department of Emergency Management
Total amount: \$1.7M
Grant period: 09/01/2019 – 03/31/2021
10. **Co-PI**, **Crash Risk for Low-Income and Minority Populations: An Examination of At-risk Population Segments and Underlying Risk Factors** (with E. Dumbaugh, L. Merlin, and D. Saha)
Funding Agency: Florida Department of Transportation
Total amount: \$83,115
Grant period: 2019-2021
11. **PI**, **Crash Risk for Low-Income and Minority Populations: An Examination of At-Risk Population Segments and Underlying Risk Factors** (with E. Dumbaugh)
Funding Agency: Collaborative Sciences Center on Road Safety (CSCRS) (National UTC)
Total amount: \$33,316
Grant period: 2019-2021
12. **Co-PI**, **ADAPT: Adaptation Design and Planning Tool for Urban Areas in the Coastal Zone** (PI Jeffery Huber, School of Architecture, FAU)
Funding Agency: Florida Sea Grant
Amount: \$186,874
Grant period: 02/01/2016-01/31/2019
13. **Co-PI**, **Analyzing the Effects of Neighborhood Characteristics and other Factors on the Disaster Readiness and Resilience of Older Adults in Southeast Florida** (with Dr. Alka Sapat, School of Public Administration)
Funding Agency: CUES – Abacoa Endowment
Amount: \$25,983
Grant period: 2019-2020
14. **PI**, The Nature Conservancy, "Suitability Analysis for Living Shorelines in Southeast Florida Estuarine Systems" (Amount: \$17,228), Grant period: 8/31/2014 – 01/31/2016
15. **Co-PI**, Kresge Foundation, "Impacts of Sea Level Rise on Public Health in Southeast Florida" (PI, Roderick King, Florida Institute for Health Innovations, Dr. Len Berry & Dr. Colin Polsky, FAU), (12/2013 – 12/2015), \$250,000.

16. **Co-PI (Lead Co-Author)**, a research grant awarded by the State of Florida for "A SUS Climate Change Task Force: Science addressing the needs of Florida Agencies, Industry and Citizenry" (with Principal Investigators: Len Berry and Marguerite Koch-Rose (1/11-1/12); \$175,000.
17. **Co-PI**, USGS, "Sea Level Rise Vulnerability Framework for USGS Ecosystem Portfolio Model" (with Principal Investigator: Ann-Margaret Esnard; 2012, \$23,274.
18. **PI**, The National Park Service (in collaboration with the FAU Environmental Sciences Everglades Fellowship Initiative), "Seasonal Flushing of Oil and Grease from Urban Runoff to the Biscayne Bay Aquatic Preserve" (4/09-5/11), with Jaap Vos as Co-PI; \$46,854
19. **Co-PI** (as a University stakeholder), *Rooftop Solar Challenge Phase II* funded by DOE, federal flow-through with Broward County as the lead agency, 09/2013 – 07/2015; \$1.575 million (FAU \$20,000).

Collaborations on other funded grants:

20. **Consultant on the mentoring team** for Dr. Lilah Besser's NIA Grant 1 K01 AG063895-01A1 (PI: Dr. Besser, Lilah)
Project Title: Longitudinal associations between neighborhood greenspace and brain aging in cognitively normal older adults
Funding Agency: National Institutes of Health
Total Amount: \$632,070
Grant period: 05/15/2020 – 05/14/2025
21. **Collaborator**, National Science Foundation [CMMI #0726808] "*Displacement Due to Catastrophic Hurricanes: Assessing Potential Magnitude and Policy Implications for Housing and Land Development*" [2009-2010, with Principal Investigators: Ann-Margaret Esnard, and A. Sapat, \$301,643]
22. **Collaborator**, Procter & Gamble research grant with Principal Investigator: Dr. Xinhao Wang, development of a geodatabase of drinking water quality data for 76 metropolitan statistical areas. Results are available at <http://www.uc.edu/gissa/projects/drinkingwater/> (06/2006-09/2006); \$40,000.

INTERNAL

Funded

23. Mentor, mentorship grant through the FAU NSF ADVANCE Initiative. Mentee: Dr. Lilah Besser, Assistant Professor, Urban & Regional Planning, June 1 – July 31, 2020 [\$3,000].
24. PI, FAU Climate Change Seed Grant Initiative, "A shore zone inventory / characterization tool as an extension to ArcGIS" (with Ann-Margaret Esnard, SURP, and Ravi Shankar, Computer Science), \$10,000, 01/2012 -12/2012.
25. Grant Recipient, FAU Faculty Assessment Grant, *Assessment of Graduate Level Specialization Courses in Environmental and Economic Analysis Methods*, (1/10-5/10), with Yanmei Li, \$5,000.
26. Grant Recipient, FAU Faculty Research Mentoring Program, (2010-2011), with Ann-Margaret Esnard, \$2,000.

Refereed Presentations and Proceedings

International:

- Besser, L., **Mitsova, D.**, and Chrisphonte, S. (2023). Neighborhood social and built environments and neighborhood walking among Black older adults, *International Conference on Urban Health (ICUH 2023)*, November 6 - 9, 2023 Atlanta, Georgia,
- Dumbaugh, E., Stiles, J., and **Mitsova, D.** (2022). The Most Vulnerable User: Considering the Role of Income, Race, and the Built Environment on Pedestrian Crashes, Injuries, and Deaths. Association of the Collegiate Schools of Planning (ACSP 2022) Annual Conference, Track 14 - Transportation & Infrastructure Planning, November 3-6, 2022, Toronto, Ontario.
- Besser, L.M., **Mitsova, D.**, Wiese, L. 2022. Older adults living in US neighborhoods that were historically redlined reported less neighborhood walking: The 2017 National Household Travel Survey, 19th International Medical Geography Symposium (IMGS), June 19-24, Edinburgh, UK.
- Esnard, Ann-Margaret, Alberto Lamadrid, Diana **Mitsova**, & Alka Sapat. 2017. Community Resiliency and Interdependent Systems Using a Survey of Experts. *64th Annual North American Meetings of the Regional Science Association International*, November 8-11, 2017, Vancouver, British Columbia, Canada.
- Masser, Alexander, Alan E. Alvarez, David C. Prosperi, Diana **Mitsova**. 2012. Comparing Metropolitan Governance in Germany and the US: A Social Network Analysis. CD Proceedings, *17th REAL CORP Conference*, "Re-Mixing the City", May 14 – 16, 2012, Schwechat, Austria, 141-150, Available at http://www.corp.at/archive/CORP2012_82.pdf .
- Mitsova, D.**, Vos, J. and Stafeychuk, I. 2011. Seasonal variability in PAHs concentrations in urban runoff discharged to the Biscayne National Park and Aquatic Preserve, *Proceedings of the 3rd Biennial Subtropical Cities Conference*, March 8-11, 2011, Fort Lauderdale, FL. [Resulted in a journal article in the *Journal of Environmental Protection*]
- Mokadi, E., D. **Mitsova** and X. Wang. 2011. Modeling urban land use changes in respect to future establishment of an urban rail transit system: The case of Cincinnati (OH) and its proposed streetcar system. Presented at the 12th *International Conference on Computers in Urban Planning and Urban Management*, July 5-8, 2011, Lake Louise, Alberta, Canada. [Resulted in a journal article in *Cities* (Elsevier)].
- Oner, C. and D. **Mitsova**. 2009. *Academic Globalization: Implications for Planning and Governance of World Cities*. *Conference on Knowledge Globalization*, Boston, April 18, 2009. [Resulted in a journal article in the *Journal of Knowledge Globalization*].
- Mitsova, D.** and Wang, X. 2008. *Integrating a Cellular Model of Land Cover Change with a Non-point Source Nutrient Loading Model*. *ACSP-AESOP 4th Joint Congress*, July 6-11, 2008, Chicago, Illinois.

National:

- Dumbaugh, E., Stiles, J., **Mitsova, D.** and Saha, D. The Most Vulnerable User: Considering the Role of Income, Race, and the Built Environment on Pedestrian Crashes, Injuries, and Deaths. Transportation Research Board (TRB) 102nd Annual Meeting, January 8–12, 2023 in Washington, D.C.
- Sapat, A., **Mitsova, D.**, Sweeting, K., Esnard, A.-M., and Escaleras, M. 2022. COVID-19 Mitigation Policies, Risk Perceptions, and Adaptive Capacities in Hurricane-Prone Regions. MPSA Annual Conference [Online], April 7-10, 2022.
- Sapat, A., **Mitsova, D.**, Sweeting, K., Esnard, A.-M., and Escaleras, M. 2022. COVID-19, and Concurrent Disasters: Administrative Burdens and Household Coping Capacities. *PAR Virtual Workshop Symposium*, February 14-17, 2022.

- Mitsova, D.** and Besser, L. The Effects of Historic Redlining and Urban Heat on Neighborhood Walking Among Older Adults: Findings from the 2017 National Household Travel Survey. Mid-Continent Regional Science Association (MCRSA), June 9-10, 2022 [Online]
- Mitsova, D.** & E. Dumbaugh. 2021. [Crash risk for low-income and minority populations: An examination of at-risk population segments and underlying risk factors.](#) CSCRS Research Call, May 12, 2021.
- Mitsova, D.** The Upper Limit on Sea Level Rise (panelist). October 15, 2021 [Online]
- Mitsova, D.,** Esnard, A-M, Sapat, A. 2021. Strengthening the Resilience of Interdependent Infrastructure Systems Through Transformative Climate Adaptation Planning, October 7-8, 61st Annual Conference of the Association of the Collegiate Schools of Planning (ACSP 2021) [Online].
- Mitsova, D.,** Hoermann, S., Renne, R. 2021. Toward Resilient Coastlines and Transportation Infrastructure. October 7-8, 61st Annual Conference of the Association of the Collegiate Schools of Planning (ACSP 2021) [Online].
- Mitsova, D.,** Escaleras, M., Sapat, A., and Esnard, A-M. 2021. Infrastructure Disruptions and Household Recovery After Hurricane Michael: A Longitudinal Analysis, presented at the Researchers' Meeting following the 46th Annual Natural Hazards Workshop, July 11-15, 2021, Online.
- Sapat, A., **Mitsova, D.,** Esnard, A.-M., Escaleras, M., Sweeting, K. 2021. COVID-19, Subjective Resilience, Intersectional Vulnerabilities, and Adaptive Capacities in Hurricane-Prone Regions. presented at the Researchers' Meeting following the 46th Annual Natural Hazards Workshop, July 11-15, 2021 [Online].
- Mitsova, D.,** Sapat, A., and Esnard, A-M. 2020. Science integration to enable higher levels of adaptability to evolving contexts. Panel on Interdisciplinary Research, Resilience Week 2020, Virtual Symposium, October 19-23, 2020.
- Mitsova, D.,** Sapat, A., Esnard, A-M, Li, Y. and R. Einsteder. 2020. Big data applications to address disparities in power restoration after Hurricane Michael in the Florida Panhandle, presented at the Researchers' Meeting following the 45th Annual Natural Hazards Workshop, July 12-16, 2020, Online.
- Mitsova, D.,** Sapat, A., Esnard, A-M, Lamadrid, AJ 2019. Disruption of infrastructure services and post-disaster household recovery following Hurricane Irma, presented at the Researchers' Meeting following the 44th Annual Natural Hazards Workshop, July 14-18, 2019, Broomfield, Colorado.
- Sapat, A., **D. Mitsova,** and A-M Esnard. 2019. Policy mandates and organizational compliance: Determinants of the Adoption of Emergency Power Plans by Nursing Homes, presented at the 4th International Conference on Public Policy, Montreal, Canada, June 25-28, 2019.
- Sapat, A., **D. Mitsova,** and A-M Esnard. 2019. Policy mandates and organizational compliance: Internal, External, and Spatial Determinants of the Adoption of Emergency Power Plans by Nursing Homes, presented at the 77th Annual meeting of the Midwest Political Science Association, Chicago, April 4-8, 2019.
- Mitsova, D.,** Sapat, A., Esnard, A-M, Bocchini, P., Lamadrid, A., Davison, B., Snyder, L., Sun, W., Sause, R., McDaniel, R., & Cuadra, J. 2018. **I-Cube (i3): The Interdependent Infrastructure Incident.** A tabletop exercise held as a session (May 17, 8:30 am to 11:45 am) at the *32nd Governor's Hurricane Conference*, May 13-17, 2018, Palm Beach County Convention Center, West Palm Beach, Florida.
- Bocchini, P., B. Davison, A-M Esnard, A. Lamadrid, **D. Mitsova,** A. Sapat, R. Sause, L. Snyder, W. Sun. 2018. Probabilistic Resilience Assessment of Interdependent Systems: the PRAISys Platform. Presentation and [poster](#) at the *Resilience of Interdependent Infrastructure Systems: A CRISP/RIPS Grantees Workshop*, December 5-6, 2018, Arlington, VA.

- Sapat, A., A-M Esnard and **D. Mitsova**. Policy mandates and organizational compliance: Internal, External, and Spatial Determinants of the Adoption and Implementation of Emergency Power Plans by Nursing Homes and Assisted Living Facilities. *77th Annual Meeting of the Midwest Political Science Association*, Chicago, April 4-7, 2019 (abstract accepted).
- Mitsova, D.** 2018. Integrative Interdisciplinary Approaches to Critical Infrastructure Interdependency Analysis, presentation at the NSF Interdisciplinary Approaches Workshop, February 8-9, 2018, Boulder, CO.
- Mitsova, D.**, Sapat, A., Esnard, A-M, Lamadrid, AJ 2018 Socioeconomic vulnerability and electric power restoration timelines in Florida: The case of Hurricane Irma. 43rd Annual Natural Hazards Workshop, July 9–12, 2018, Broomfield, Colorado.
- Sapat, A., **D. Mitsova**, and A-M Esnard. 2018. Policy Innovation and Diffusion in Post-Disaster Housing, Presented at the 75th Annual meeting of the Midwest Political Science Association, Chicago, April 5-9, 2018.
- Mitsova, D.** 2018. Integrative Interdisciplinary Approaches to Critical Infrastructure Interdependency Analysis, presentation at the NSF Interdisciplinary Approaches Workshop, February 8-9, 2018, Boulder, CO.
- Mitsova, D.**, Bergh, C., Guannel, G., Lusic, C. 2017. Shoreline Exposure and Site Suitability Modeling for Living Shorelines in South Florida's Estuarine Environments, 2017 National Coastal Conference of the *American Shore and Beach Preservation Association*, October 24-27, 2017, Ft. Lauderdale, Florida.
- Mitsova, D.**, Lamadrid, A.J., Esnard, A-M, Sapat, A., & Yanmei Li. Framework for Criticality Assessment of Infrastructure Interdependencies to Support Planning for Community Readiness and Resilience, 57th Annual Conference of the Association of the Collegiate Schools of Planning, Oct. 12-15, 2017, Denver, Colorado.
- Mitsova, D.**, Sapat, A., Esnard, A-M, Lamadrid, AJ 2017. Using Expert Judgment to Understand the Impacts of Critical Infrastructure Interdependencies on the Delivery of Vital Community Services, 42nd Annual Natural Hazards Workshop, July 9–12, 2017, Broomfield, Colorado.
- Mitsova, D.**, Sapat, A., Esnard, A-M. 2016. Modeling and Path Diagrams for Understanding Critical Infrastructure Interdependencies and Cascading Effects from Disasters, paper presented at the 56th Annual Conference of the Association of the Collegiate Schools of Planning, Nov. 3-6, Portland, Oregon.
- National Workshop on Resilience Research (NWRR) for Critical Infrastructure: Current Status and Challenges, National Science Foundation, October 22-23, 2015, Washington, DC. Poster presentation for the NSF CRISP Grant (P. Bocchini, **D. Mitsova**, B. Davison, L. Snyder, R. Sause, A. Lamadrid, A. Sapat, and A-M Esnard).
- Mitsova, D.**, R. Shankar, F. McAfee. 2015. Mobile GIS Applications for Coastal Planning. Association for Environmental Studies and Sciences (AESS), 2015 Annual Conference - "Confronting Frontiers, Borders and Boundaries," June 24-27, San Diego, California.
- Donate, K., Shankar, R., D. Mitsova, F. McAfee. 2015. The Semantic Web: Searching the Worldwide Web, Finding the Right Information the First Time. *ASEE 122nd Annual Conference & Exposition*, June 14-17, 2015, Seattle, WA. (peer-reviewed)
- Shankar, R., **D. Mitsova**, F.X, McAfee, and M. Harris. 2014. Mentor and Mentee Pipeline in Smart Phone App Development, *2014 Annual Mentoring Conference* (peer-reviewed), University of New Mexico, October 21-24, Albuquerque, New Mexico. (peer-reviewed)
- Mitsova, D.** 2012. Integrating Urban Growth Model with Climate Projections to Estimate Seasonal Variability in Runoff from an Urbanizing Catchment, Paper presented at the 53rd ACSP Annual Conference, November 1-4, Cincinnati, Ohio. [Resulted in a journal article under review]

- Mitsova, D., A.M. Esnard, and Y. Li.** Using Areal Interpolation Techniques to Improve the Spatial Accuracy of Sea Level Rise Vulnerability Assessments, presented at the 52nd Annual Conference of the Association of the Collegiate Schools of Planning, October 13-15, 2011, Salt Lake City, UT. [Resulted in a journal article in the *Journal of Coastal Conservation: Planning and Management*]
- Mitsova, D., W. Shuster and X. Wang.** *Integrating a Cellular Automata Model of Land Cover Change with an Open Space Conservation Network.* 51st ACSP Annual Conference, Getting to Scale: Planning in Multi-Scale, Functionally Integrated Environments, October 7-10, 2010, Minneapolis, Minnesota. [Resulted in a journal article in *Landscape and Urban Planning*].
- Esnard, A-M, A. Sapat and D. **Mitsova.** *Estimating Long-Term Displacement from Catastrophic Hurricanes.* 35th Annual Natural Hazards Research and Applications Workshop, Broomfield, Colorado, July 10-13, 2010. [Resulted in a journal article in *Natural Hazards*]
- Mitsova, D., and J., Vos.** *Potential Damage Cost of Relative Mean Sea Level Rise.* Presented at the 50th Annual Conference of the Association of Collegiate Schools of Planning, Washington, DC, October 1-4, 2009.
- Mitsova-Boneva, D., and Wang, X.** 2008. A Cell-based Model for Identifying Contributing Areas of Nitrogen Loss to Surface Waters. 2008 Annual International Meeting, American Society of Agricultural and Biological Engineers, June 29 - July 2, Providence, Rhode Island. *ASABE On-Line Technical Library: 2008 Annual International Meeting*, American Society of Agricultural and Biological Engineers, available at <http://asae.frymulti.com/abstract.asp?aid=24809&t=2>.
- Mitsova-Boneva, D., and Wang, X.** 2007. Predicting the Contribution of Atmospheric Deposition to the Seasonal Nitrogen Loads in the East Fork Little Miami River Watershed, Ohio. Presented at the 4th Conference on Watershed Management and TMDL, March 10-13, 2007, San Antonio, Texas. In: *Proceedings of 4th Conference on Watershed Management to Meet Water Quality Standards and TMDL*, ASABE Publication 701P0207, pp. 216-230. St. Joseph, MI: American Society of Agricultural and Biological Engineers (ASABE), ISBN 1-892769-56-5, Library of Congress Card Number (LCCN) 2007921906.

Regional /Local:

- *Elney, S., **D. Mitsova**, and M. Escaleras. 2019. The effects of infrastructure service disruptions and socio-demographic factors on household hurricane recovery. Poster presentation at the FAU Undergraduate Research Symposium, April 8, 2019, Florida Atlantic University, Boca Raton, Florida. **Awarded first place in category Business, Finance, and Public Administration.**
- *Elney, S., **D. Mitsova**, and M. Escaleras 2019. The effects of infrastructure service disruptions and socio-demographic factors on household hurricane recovery. Poster presentation at the Florida Undergraduate Research Conference, Feb. 22-23, 2019, University of North Florida, Jacksonville, FL.
- Mitsova, D.** 2015. Living Shorelines. **Seventh Annual Southeast Florida Regional Climate Leadership Summit: *Charting the Course***, December 1-3, 2015, Casa Marina Resort, Key West, Florida.
- Mitsova, D.** and S. Reed. **2015 APA Florida Annual Conference**, Session Title: *Building Coastal Green Infrastructure through Living Shorelines*, Session Track: *SPEED Session 2 - Memorable Places*, September 9-12, 2015, Hollywood, Florida.
- Mitsova, D., F. Wissinger, A-M Esnard, R. Shankar, and P. Gies.** A Collaborative Geospatial Shoreline Inventory Tool to Guide Coastal Development and Habitat Conservation. Presented at the 77th Annual Meeting of the Florida Academy of Sciences - "*Climate Change and Florida's Coastal Communities*," Barry University, Miami Shores, FL, March 8-9, 2013. [Resulted in a journal article in *ISPRS International Journal of Geo-Information*].

Non-refereed Publications, Presentations, and Proceedings

- Sapat, A. and D. Mitsova.(2022). COVID-19: Disaster Readiness and Resilience of Older Adults in Southeast Florida, May 12, 2022, FAU, Boca Raton.
- Mitsova, D. Shoreline protection through gray and green infrastructure, presentation at the Delray Beach King Tide event, October 11, 2017.
- Mitsova, D. Spatial analysis with ArcGIS: Focus on location-allocation analysis, trip routing, and navigation GPS data. Webcast at the [Infrastructure Resilience Seminar for Professional Engineers](#), Lehigh University, September 22, 2017, Bethlehem, PA.
- Mitsova, D. Spatial optimization and location-allocation models in ArcGIS. Webcast at the [Infrastructure Resilience Seminar for Professional Engineers](#), Lehigh University, October 28, 2016, Bethlehem, PA.
- Mitsova, D. Spatial Modeling of Critical Infrastructure interdependencies. FAU Dept. of Geosciences Colloquium Series, November 18, 2016, Boca Raton, FL.
- Bocchini, P., **D. Mitsova**, A. Sapat, A-M Esnard, D. Davison, L. Snyder, A. Lamadrid, R. Sause. 2015. Probabilistic Resilience Assessment of Interdependent Systems – PRAISYS, Poster presentation at the National Workshop on Resilience Research (NWRR) for Critical Infrastructure: Current Status and Challenges, National Science Foundation, October 22-23, 2015, Arlington, VA.
- Mitsova, D.** 2014. SEFL Living Shorelines Spatial Database Technical Report, a project funded by a Grant Agreement #FLFO-FAU-060114 between The Nature Conservancy and the Florida Atlantic University Board of Trustees.
- Mitsova, D.** SEFL Living Shorelines Spatial Database, a workshop organized by The Nature Conservancy and the SEFL Regional Compact Shoreline Resilience Working Group, February 23-24, 2015, Miami Beach, FL.
- Mitsova, D.** Shoreline resilience through green infrastructure and living shorelines, a workshop organized by The Nature Conservancy and the SEFL Regional Compact Shoreline Resilience Working Group, June 18-19, 2014, West Palm Beach, FL.
- Mitsova, D.** ' Student participation in developing an Android App for the Green Neighborhood Certification Program," invited speaker at Leadership Boca, April 16, 2014.
- Shankar, R., F. McAfee, **D. Mitsova**, M. Harris. Android Apps at FAU: 600 students, 60 apps, 4 years, Mobile Technology Consortium (MTC) Symposium, April 4, 2014, <http://mtc.fau.edu/>
- Mitsova, D. "A Collaborative Geospatial Shoreline Inventory Tool to Guide Coastal Development and Habitat Conservation," presented at the UK/Florida: Sea Level Rise Exchange, Boca Raton, March 26, 2013.
- Mitsova, D. "Using GIS to Forecast and Plan for Future Urban Development", Geosciences Colloquium Series, Fall 2012 Schedule, September 21, 2012.
- Mitsova, D., A.M. Esnard, R. Shankar, F. Wissinger, and M. Viciado. Holding back the Sea: Approaches toward shoreline management and planning to reduce the impacts of coastal hazards. Poster presentation at the SLR Summit *Risk and Response: The Future of Florida and the Coast*, June 20-22, 2012, Boca Raton, Florida.
- Neighborhood Certification Program developed by students enrolled in URP6429 Environmental Policy and Programs in collaboration with the Green Living Advisory Board of the City of Boca Raton (Fall 2012). Presented to the City Council of Boca Raton on Aug. 26, 2013 (streaming video at <http://www.ci.boca-raton.fl.us/city/agendas.aspx>; http://bocaraton.granicus.com/MediaPlayer.php?view_id=2&clip_id=846).
- Mitsova, D., J. Vos and I. Stafeychuk. 2011. *Seasonal Flushing of Oil and Grease from Urban Runoff to Biscayne National Park and Aquatic Preserve*, Final Report to the National Park Service under Task Agreement: J5284-09-0004, Cooperative Agreement: H5000-06-0103 FAU.

- Mitsova, D., Esnard A.M and Li, Y. 2011. *Using Surface Population Models to Improve the Spatial Accuracy of Sea Level Rise Vulnerability Assessments*, a poster presented at CIMR – Climate Information for Managing Risk Symposium, *Local to Regional Adaptation and Mitigation Strategies*, May 24-27, 2011, Orlando, Florida.
- Mitsova, D. *Coastal Zone Planning for Sea Level Rise*, presented at the working luncheon and research symposium "Climate Change: The Threat and Opportunity for Global Security" with Rear Admiral Neil Morisetti, UK Climate and Energy Security Envoy, September 30, 2011, Boca Raton, FL.
- Mitsova, D. 2010. Fossil Fuels: Where Do We Stand? What Can We Do?, Two lectures for freshmen at the Engineering Academy of Olympic Heights Community High School, December 8, 2010, Boca Raton, FL.
- Mitsova, D. 2010. Lake Davie and the Rising Water: Potential Impacts of Sea-Level Rise on Developed Florida, presented at *The Truth About Florida*, an Educational Conference for Journalists and Planners presented on World Town Planning Day, co-sponsored by the FAU School of Urban and Regional Planning and Scripps Howard Institute for the Environment, November 8, Fort Lauderdale, FL.
- Mitsova, D. and Y. Li. 2010. Assessment of Analytical and Critical Thinking Skills in Two Advanced Methods Courses. *Faculty Assessment Grant Presentations* organized by the FAU Center for Teaching and Learning under the Scholarship of Teaching Faculty Enhancement Programs, November 18, 2010, Boca Raton. FL.
- Moderator, USGS-sponsored workshop titled "Developing a Sea Level Rise Vulnerability Framework for South Florida: Indicators, Metrics and Models.", FAU School of Urban and Regional Planning, Fort Lauderdale, FL, June 2, 2010.
- Lecturer, *The Use of Orthometric and Tidal Datums in Developing Sea-level Rise Scenarios*, a lecture presented at a workshop with visiting students and instructors from the University of Karlsruhe - Germany, Fort Lauderdale, FL, April 29, 2010.
- Mitsova, D. 2010. *Human Dimensions of Sea-Level Rise: A Dasymeric Demographic Analysis of South Florida*, abstract submitted to the *Sea-Level Rise Workshop*, February 16-17, 2010, Boca Raton, FL.
- Invited Panelist and Presenter, *Urban Assets at Risk Due to Incremental Sea Level Rise, Climate Change Symposium* hosted by Florida Atlantic University, April 3rd 2009.

Extramural Tools and Exhibitions

- **Coastal Resilience Tool in Collaboration with The Nature Conservancy – the results are disseminated through the coastalresilience.org mapping portal**
Decision support for "**Regional Planning**":
 - 2 projects including "Estuarine Shoreline Suitability for Resilience"
 - Florida Keys shoreline analysis and stabilization options
 Decision support for "**Community Planning**":
 - City of Miami – shoreline suitability analysis for living shorelines
 - City of Delray Beach – included in the Coastal Element of the Comprehensive Plan
- **Botanizing North Beach Village:** Reimagining North Beach Village with Future Sea Level Rise, April 5th - April 12th, 2017 at the Village Gallery, 600 Breakers Avenue, North Beach Village, Fort Lauderdale (with Huber, J., Principal Investigator, and the FAU School of Architecture).

Courses taught at FAU (August 2008-present)

Graduate

- URP6270 *Introduction to GIS for Planners*, Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020 (28 students)

- URP 6425 *Environmental Analysis in Planning* - Spring 2009, 2010, 2011, 2012, 2014, 2015, 2016, 2017, 2018, 2019, 2020 (10-18 students each)
 - URP6272 *Managing GIS Projects* - Fall 2015, 2016, 2017, 2018, 2019, 2020 (10-15 students)
 - URP6277 *GIS Applications in Planning* - Summer 2017, 2018, 2019 (10 students)
 - URP6406 *Sustainable Cities* - Spring 2017, Summer 2017, Spring 2018, Summer 2018, Spring 2019, Spring 2020 (20-25 students total)
- QUALITY MATTERS certified Spring 2017 (score 97/99)**
- URP 6115 *Urban Governance* - Fall 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017 (10 -22 students)
 - URP 6429 *Environmental Policy and Programs* - Fall 2009, 2010, 2012, 2013, 2014, 2015 (6 - 10 students each)
 - URP6310 *Seminar in Urban Planning*, Spring 2015 (12 students)
 - URP 6930 *Seminar in Cities & Climate Change Adaptation (graduate /undergraduate)*, Spring 2011 (18 students)
 - GEO 7978 018, *Advanced Research (PhD level, Department of Geosciences, Fall 2011 & Spring 2012, Fall 2016 & Spring 2017)* (2 students)
 - GEO 7978 *Dissertation*, Fall Spring Summer 2015, 2016, 2017, 2018, 2019, 2020

Undergraduate

- URP 4403 *RI Sustainable Cities (undergraduate)*, Spring & Summer 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 (48 – 75 students); Offered fully online in Spring 2014
- QUALITY MATTERS certified Spring 2017 (99/99), OURI Research-intensive designation**
- URP4120 *Planning Implementation Strategies*, Spring 2015, 55 students
 - URP 4979 *Planning Project (undergraduate)*, Spring 2009, Spring 2013, 2014, 2015 (15-20 students each)
 - URP 4978 *HONORS Planning Project*, Spring 2017, Fall 2017 (4 students)

Supervision of Graduate Students

Student/ University	Thesis/ Dissertation Topical Area	Type	Degree	Role	Date / expected date of graduation
Rebecca Clark		Dissertation			
Sanghamitra Sengupta		Master's Thesis			May 2023
Kemal Ulas Yagantekin		Master's Thesis			May 2023
Swarna Lexmi Natrajan		Master's Thesis			May 2023
Md Mahede Hasan Khan		Master's Thesis			June 2023

Tasnim Anika Majumder		Master's Thesis			June 2023
Ikramul Hasan		Master's Thesis			July 2023 proposal defense
Jyothirmayi Palaparthi		Dissertation			In progress
Vilma Caballero		Dissertation			In progress
Kevin Cresswell, FAU	The impact of natural disasters on urban infrastructure	Dissertation	Ph.D. Geosciences	Chair	Spring 2022
Heather Nicholson	Characterizing Coastal Marsh Species, remote sensing	Dissertation	Ph.D. Geosciences	Committee	Summer 2022
Chao Xu	Charecterization of tidal flats	Dissertation	Ph.D. Geosciences	Committee	Summer 2022
Michael Priddy	Characterizing Coastal Marsh Species, remote sensing	Master's Thesis	Geosciences	Committee	Summer 2022
Susana Rodrigues	Flood modeling in Pensacola, FL	Master's Thesis	URP	Chair	Spring 2021
Michelle Hewett	Flood modeling in Nassau, FL	Master's Thesis	URP	Chair	Spring 2021
Ross Einsteder	MTL and infrastructure disruptions after H Michael	Master's Thesis	URP	Chair	Summer 2021
Patricia Feliciano	Historic preservation and vulnerability to climate change	Master's Thesis	URP	Chair	Historic preservation and vulnerability to climate change
Bridget Huston	Social vulnerability to hazards	Master's Thesis	Environmental Science	Committee	Spring 2020

Shaikh Abdullah al Rifat	Coastal resilience, urban growth modeling	Dissertation	PhD Geosciences	Committee	Summer 2021
Pramod Pandey	Modeling land cover change in Nepal	Dissertation	Ph.D. Geosciences	Committee	Pending
Sara Denka	Measuring shoreline changes using drone technology	Dissertation	Ph.D. Geosciences	Committee	Spring 2020
Meagan Weisner, FAU	Drinking water quality	Dissertation	Ph.D., Geosciences	Committee	Spring 2019
Hallee Meltzer, FAU	Social cohesion in environmental management	Master's thesis	MS Environmental Science	Committee	2019
Sheryl van der Heiden	Urban agriculture	Dissertation	Ph.D. Geosciences	Committee	Pending
Andrew Kameronosky	Multispectral analysis of algae blooms	Dissertation	Ph.D. Geosciences	Chair	Pending
P. Bimal, Indian Institute of Technology, India	Modeling of population distribution	Dissertation	Ph.D. Urban Planning	External Evaluator	Fall 2017
Vince Edwards, FAU	Ecological Approaches to Coastal Resilience	Master's Thesis	MS, Environmental Science	Committee	Fall 2017
Mark Rochelo FAU	Remote Sensing, Green Infrastructure	Dissertation	PhD, Geosciences	Committee	2017
Rebecca Daugherty, FAU	Wildlife road kills, hot spot analysis	Thesis	Masters of Environmental Science	Committee	2015
Frank Wissinger, FAU	Surface and groundwater modeling	Dissertation	Ph.D., Computer Science	Committee	2014
Christine Mitchell, FAU	Human geography	Dissertation	Ph.D., Geosciences	Committee	2014
Keren Bolter, FAU	SLR vulnerability	Dissertation	Ph.D., Geosciences	Committee	2014

Amanda Mulcan, FAU	Renewable energy	Thesis	Masters of Environmental Science	Committee	2014
Gillian Breary, FAU	Remote Sensing, Green Infrastructure	Dissertation	Ph.D., Geosciences	Committee	2013
Shivangi Prasad, FAU	Vulnerability to hurricanes, index	Dissertation	Ph.D., Geosciences	Committee	2013
John Zahina-Ramos, FAU	Urban Agriculture	Dissertation	Ph.D., Geosciences	Committee	2013
Elad Mokadi, Univ of Cincinnati	Urban growth modeling	Thesis	Masters of Community Planning	Committee	2012

Service and Professional Development

Service to the Institution

University

- Member, University Honors Council, Fall 2014 – 2020
- Member, University Research Committee, 2015
- Member, FAU Environmental Sciences Program Committee, Fall 2012 - present
 - Participated in preparing the self-study report and the site visit (Spring 2015)
 - Member, Curriculum Subcommittee for the Graduate Certificate in Environmental Restoration (with Scott Markwith and John Baldwin).
- Member, FAU AWIS (Association of Women in Science), since Fall 2014
- Research team member, FAU Climate Change Research Priority Area, 2009-2014
- Member, FAU Environmental Sciences Everglades Fellowship Committee, 2009 - 2011
- FAU Faculty Learning Communities, participant, Spring 2010, Fall 2012 - Spring 2013

School/ College

- Chair, Environmental Planning Search Committee
- DURP Graduate Admissions Committee
- College of Science Liaison, Office of Undergraduate Research (OURI), 2020-2023
- Graduate GIS Certificate Coordinator for SURP (starting 2014)
- Developed an Honors Program for BURP and BUD, approved by the Faculty Senate in September 2015 and included in the FAU Catalog in January 2016.
- CDSI Liaison, Office of Undergraduate Research (OURI), 2016-2018, 2018-2020
- College of Science Liaison, Office of Undergraduate Research (OURI), 2020-2022
- CDSI Research Infrastructure Committee, (Fall 2015)
- School representative on the College P&T Committee, (2014-2015)
- Chair, Faculty Search Committee for three positions (2015)
- Member, CDSI - College Research Committee, (2012-2016)

- Member, Committee to Review Design and Social Inquiry Promotion and Tenure Document, FAU College for Design and Social Inquiry, 2011

Service to the Discipline/ Profession

- 2020-2022 [A member of the National Academies of Sciences, Engineering, and Medicine's planning committee](#), Community Engagement in Southeast Texas: Pilot Project to Enhance Community Capacity and Resilience to Floods (04/09/2020 – present)
- SRS NSF/NSFC virtual review panel
- NSF SBIR Phase I: Water Access - Blue Tech panel
- 2018 **Expert Reviewer** for the **Second Order Draft** of the **IPCC Special Report on Climate Change and Land** (SRCCL).
- 2016 Site visit team, **NSF 3-Gen Engineering Research Centers** (ERC) Program
- 2016 A peer reviewer/ panelist for the **NSF/USDA Food-Energy-Water (FEWs) Program** grant applications, Washington, DC.
- A peer reviewer/ panelist for the **USEPA STAR 2015 FELLOWSHIP APPLICATIONS: EPA-2015-STAR --F1 Sustainable and Healthy Communities- Multidisciplinary Approaches To Optimize Decision Outcomes**,
- 2015 External reviewer for a USEPA technical report
- 2013 A peer reviewer/ panelist for the **USEPA STAR 2013 FELLOWSHIP APPLICATIONS – B2 Air, Climate & Energy, Global Change, panel meeting**, Washington, DC
- 2012 A peer reviewer/ panelist for the **USEPA STAR 2012 FELLOWSHIP APPLICATIONS – A3-2 Social Sciences**, Washington, DC.
- 2013 Reviewer of 12 abstracts for the **4th BIENNIAL SUBTROPICAL CITIES CONFERENCE**, Fort Lauderdale, FL.
- Reviewer of six chapters of an undergraduate textbook *Global Climate Change: A First Course*, Jones and Bartlett Publishers (2010)
- Reviewer for the *Journal of Urban Technology* (2020), *Journal of Homeland Security and Emergency Management* (2020), *Natural Hazards Review* (2019), *Journal of Earth Informatics* (2018), *Infrastructures* (2018), *Intl Journal of Geo-Information* (2018), *International Journal of Geographical Information Science* (2017), *Journal of Environmental Planning and Management* (2017), *Journal of Environmental Management* (2017), *Journal of Environmental Planning and Management* (2015), *Journal of Hydrology* (2015), *Journal of Planning Education and Research* (2015), *Journal of Urban Planning and Development* (2008, 2010, 2013), *Environmental Modelling and Software* (2013), *Climatic Change* (2013). *Journal of Environmental Planning and Management* (2012), *Landscape and Urban Planning* (2012, twice), *International Journal of Geo-Information* (2012), *Journal of the Planning Literature* (2012), *Cities* (2012), *Land Degradation and Development* (2011), *Environmental Management* (2011), *Land Degradation and Development* (2011), *Environmental Management* (Springer) (2011), *Journal of Environmental Management* (Elsevier) (2011), *Urban Water Journal* (2011), *Water Resources Engineering* (2011), *Water Resources Management* (2011), *Soil and Water Conservation* (2008), *Science of the Total Environment* (2008), *Urban Water Journal* (2008), *Water Resources Management* (2008), *Journal of Environmental Management* (2006, 2009), *Journal of Water Resources Planning and Management Engineering* (2007)

- Reviewer of 10 abstracts for the 12th **International Conference on Computers in Urban Planning and Urban Management** held in Canada on July 5-8, 2011, Lake Louise, Alberta, Canada

Service to the Community/Public

- Member, Broward County Task Force on Water Resources and Built Environment Recommendations for the County's 5-year Climate Change Action Plan, 2020 to present
- Member, Executive Board, Florida Climate Institute, 2012 to present
- Member, Shoreline Resilience Working Group of the SEFL Regional Climate Compact, since 2013
- Interagency Flood Risk Management Project: **Coastal Flood Risk Reduction Decision Support System in Miami-Dade County, South Florida** (USACE, SFWMD, Miami-Dade County, USGS, USDI, Southeast Florida Regional Climate Change Compact Partners, Florida Silver Jackets, TNC, FAU, FIU), 2016-2017
- Serving as faculty liaison for *Go Solar Rooftop Challenge Phase II* and working with Broward County and selected municipalities on zoning and planning regulations in support of this initiative funded by DOE, 2013-2015
- Serving on Broward County Scientific and Technical Committee, 2015
- Working with the Green Living Advisory Board of the City of Boca Raton to develop a Green Neighborhood Certification Program, which was approved by the City Council in August 2013. URL: http://bocaraton.granicus.com/DocumentViewer.php?file=bocaraton_4638db570a8ffbf9af90abb9c965d463.pdf
- Working with Miami-Dade County Office of Sustainability to provide input to 40 initiatives included in the **GreenPrint** Sustainability Plan. A Letter of Appreciation has been sent to FAU in recognition of this effort.
- Working with the Village of Wellington to develop a Sustainable Element for the Comprehensive Plan (Spring 2009). Updating the Comprehensive Plan of the Village of Wellington to meet the requirements of HB697 (Summer 2009) – **approved** by DCA.
- Engineering Academy Advisory Board, Olympic Heights Community High School, Boca Raton, FL. The Engineering Academy is part of the Project *Lead the Way* (www.pltw.org) which is a nationwide initiative intended to promote technology education at high schools.

Honors and Awards

2018	National AIA Institute Honor Award for Regional and Urban Design for <i>Salty Urbanism: A Sea Level Rise Adaptation Design Framework for South Florida</i> (Lead: Jeffrey Huber, School of Architecture)
2014	The Planning Society at Florida Atlantic University – <i>Exceptional Research Award</i>
2011	FAU – <i>Nominated for Distinguished Teacher of the Year Award</i>
2008	<i>Outstanding Student Award</i> , College of DAAP, University of Cincinnati
2007 - 2008	<i>Scholarship for Academic Excellence</i> , College of DAAP, University of Cincinnati

2003
Indianapolis

Outstanding Student Award, SPEA, Indiana University-Purdue University,