

Franco Montalto P.E. Ph.D.

Civil/Environmental Engineer and Hydrologist



Dr. Montalto is a civil engineer with a strong background in both applied and theoretical approaches to solving complex environmental problems. He has a particular interest in the development of ecologically, economically, and socially sensible solutions to urban environmental problems, with a focus on sustainable water resources engineering. His ~20 years of experience have included a variety of eco-hydrologic research, planning, and design projects, involving the restoration of wetlands, and the use of constructed wetlands for wastewater and stormwater treatment, as well as work with “green infrastructure” and “low impact development” technologies. He joined Drexel in September, 2007 after a two year research fellowship at The Earth Institute at Columbia University, and an adjunct faculty position at The Cooper Union for the Advancement of Science and Art in New York City. He also serves as the Director of

the North American Hub of the Urban Climate Change Research Network (UCCRN) and is President of eDesign Dynamics LLC, an environmental consulting firm he founded in New York City. Dr. Montalto is a licensed engineer in New York, Pennsylvania, New Jersey, and Connecticut.

EDUCATION

Cornell University, Department of Biological and Environmental Engineering; 1/98 – 8/03

Ph.D. Environmental Engineering
MS Environmental Engineering and Soil Physics
Minor City and Regional Planning

The Cooper Union for the Advancement of Science and Art, 9/91 - 5/95

BS Civil Engineering

AWARDS, TEMPORARY APPOINTMENTS, AND RESEARCH FELLOWSHIPS RECEIVED

Fall 2018	Harleman Distinguished Lecturer, Penn State University, Department of Civil and Environmental Engineering
5/4/18	Environmental and Water Resource Engineer of the Year, American Society of Civil Engineers, Philadelphia Section
2014-2015	Visiting Scholar, the NYC Urban Field Station (Fort Totten, NY)
2/15-5/15	Visiting Professor, the IUAV University (Venice, Italy)
2/12-9/17	Recipient of NSF CAREER award
Winter 2012	The Drexel University College of Engineering Outstanding Teaching Award
Spring 2009	The Dr. Mark L. Greenberg Distinguished Faculty Award for Community Based Experimental Learning at Drexel University
10/05-10/07	The Earth Institute at Columbia University Postdoctorate Research Fellowship
6/00-6/03	National Science Foundation Graduate Research Fellowship
6/98-6/99	NY Sea Grant & Hudson River National Estuarine Research Reserve Cooperative Research Fellowship
9/95-9/96	Fulbright Research Fellowship (Venice, Italy)
5/95-8/95	Cooper Union Research Foundation Fellowship
6/94-8/94	International Technical Exchange Fellowship, (Århus, Denmark)

CURRENT EMPLOYMENT

Drexel University, Department of Civil, Architectural, and Environmental Engineering (Phila, PA)

Associate Professor (9/13 to present); Assistant Professor (9/07 – 8/13); Director of the Sustainable Water Resource Engineering Laboratory (9/07- Present) Teach courses in hydrology, hydraulics, wastewater, stormwater, and sustainability. Supervise PhD and MS students who work on externally funded research projects in urban ecohydrology. Involves field studies, modeling, and extensive cross-disciplinary research and collaboration.

eDesign Dynamics LLC and Montalto & Rothstein Engineering D.P.C. (New York, NY)

Founder and President (2000-Present)

Supervise the design, engineering, analysis, business development, research and planning activities for environmental engineering firm based in New York City. Current projects are in the field of green infrastructure and low impact development system planning and design, ecological restoration, including also some work with alternative energy systems.

PRIOR EMPLOYMENT

Assistant Adjunct Research Scientist (The Earth Institute at Columbia University, NYC, NY, 9/07- 8/09)

- ✦ Involved in collaborative research project featuring the use of agent-based models to investigate various the cross-sectoral (economic, food security, soil and water conservation) impacts of water development projects in rural water-scarce regions

Adjunct Professor (The Cooper Union for the Advancement of Science and Art, NYC, NY, 1/04-5/05)

- ✦ Designed and twice taught an interdisciplinary course entitled “Water in the City” addressing a wide range of urban water management issues. Also as instructor for “Senior Civil Experimental Design” supervised student projects focusing on reducing combined sewer discharges in the Gowanus Canal using low impact development, rainwater harvesting at the Brooklyn Botanical Garden, and tidal microhydropower projects in the NJ Meadowlands.

Ecological Engineer (The Gaia Institute, Bronx, NY, 6/00 – 8/03)

- ✦ Conducted engineering, research, and design for non-profit corporation that, through research and the development of conceptual designs, seeks to integrate natural systems and built infrastructure in an effort to protect and enhance environmental quality.

Wetlands Engineer (Hackensack Meadowlands Development Comm., Lyndhurst, NJ, 1996-97, 1998-99)

- ✦ Primary duties included engineering and hydrologic design of saltmarsh restoration projects, preparation of construction bid documents and plans, and coordination of ecological research aimed at improving effectiveness of local ecosystems. Secondary responsibilities involve conducting ecological field surveys, providing QA/QC control and construction supervision, and coordinating internal interaction between CAD, GIS, and GPS systems.

Assistant Project Engineer (Eckenfelder / Brown and Caldwell, Mahwah, NJ, 1998)

- ✦ Conducted hydraulic and geotechnical design calculations, reviewed submittals, prepared construction drawings, specifications, soil erosion and sediment control plans, and performed other engineering duties for environmental engineering consulting firm.

Researcher (Laboratory for Locally Sustainable Development, Arch. University, Venice, Italy, 1997)

- ✦ Conducted research into the integrated use of the natural water cycle in community and building design. Also assisted in the development of a laboratory Internet home page and assisted architecture students in hydrologic design of thesis projects.

Assistant Project Engineer (Hayden Wegman Consulting Engineers, NYC, NY, 1994-1995)

- ✦ Duties included proposal writing, inspection, obtaining construction permits, and preparation of graphical displays for civil/transportation engineering consulting firm.

PROFESSIONAL CERTIFICATION

- ✦ Licensed Professional Engineer in New York, Pennsylvania, New Jersey & Connecticut

PAST AND PRESENT SYNERGISTIC ACTIVITIES

Organizations and Technical Committees:

- ✦ Series Editorial Board Member, Planning for Climate Proof Cities, Springer (Series Editor, Musco, F)
- ✦ Director, North American Hub, Urban Climate Change Research Network, 10/16 - Present
- ✦ Chair, Environmental Properties (Monitoring and Measuring) Committee, NYC Green Roof Working Group, 2016-Present.
- ✦ Co-Chair, ASCE-EWRI Technical Committee on Low Impact Development Computational Methods, 2010-Pres.
- ✦ Member, ASCE-EWRI Technical Committee Investigating Low Impact Development as a Means of Reducing Combined Sewer Overflows, 2009-Present
- ✦ Member, WEF Sustainability Literature Review Committee, 2010-2014
- ✦ Member, CUAHSI Standing Committee on Observations, 2011-Present
- ✦ Member, ASCE Urban Water Resources Research Council, 2015-present

Professional Memberships:

Water Environment Federation; American Society of Civil Engineers; American Geophysical Union; Association of Environmental Engineering and Science Professors, Urban Climate Change Research Network

Involvement as a Scientific Expert/Technical Advisor

- ✦ Invited Member, “Absorb” Advisory Group, Climate Smart Cities Program, The Trust for Public Land, 5/18-Present
- ✦ Invited Expert for the “Design, Construction, and Stewardship Working Group on Water, US General Services Administration, Public Buildings Service, Office of the Chief Architect, 2016
- ✦ Invited Member, International Association of Building Physics (IABP), Technical Program Committee, 7th International Building Physics Conference to be held in Syracuse, NY on September 23-28, 2018.
- ✦ Invited Member, Impervious Disconnection Expert Panel, Chesapeake Bay Program, 7/15- 12/16
- ✦ Member, Advisory Board, New York City Natural Areas Conservancy, established with \$1 million provided from both the Doris Duke Charitable Foundation and the Tiffany & Co. Foundation, July 2012 through present
- ✦ Member, Advisory Committee, “Broadway: 1000 Steps, Sustainability Made Tangible through Art” (Mary Miss)
- ✦ Scientific Advisor and Funded Research Partner, the New York City Department of Parks and Recreation, Green Infrastructure and Greenstreets programs
- ✦ Member, Green Roofs for Healthy Cities Academic Committee, Philadelphia Mayor's Office of Sustainability; Philadelphia Water Department; Pennsylvania Horticultural Society, 2011
- ✦ Scientific Advisor, Gowanus Canal Conservancy, Brooklyn, NY, 2006-2011
- ✦ Scientific Advisor, Gowanus Canal Community Development Corporation, Brooklyn, NY, 2006-2011
- ✦ Invited Scientific Advisor, Metropolitan Transportation Authority of the State of New York, Blue Ribbon Commission on Sustainability – Water Committee 1/08 through 1/09
- ✦ Invited Technical Expert, Environmental Protection Agency, Green Infrastructure Research Forum, Washington DC, 1/17-1/18, 2008
- ✦ Member, Advisory Board, NYC Mayor's Office of Long Term Planning and Sustainability, Infrastructure and Natural Systems Taskforce (Presented “A Low Impact Development Approach to Reducing Combined Sewer Overflows” 11/1/06) 2005-07

INVITED SEMINARS, PUBLIC TESTIMONY AND SPEAKING

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| 5/25/18 | Workshop Lead, <i>Green Infrastructure and Flooding in Cramer Hill</i> . Camden County Municipal Utilities Authority, Camden, NJ. |
| 5/10/18 | Invited speaker and panelist, <i>Enhancing Urban Communities Through Applied, Multifunctional Green Water Infrastructure Research- From Science to Practice</i> . Green Infrastructure Workshop, University of Pennsylvania Environmental Humanities Symposium, Philadelphia, PA. |
| 4/18/18 | Invited Seminar. <i>Enhancing Communities Through Applied, Multifunctional Green Infrastructure Research</i> , CUNY – Queens College (Queens, NY) |
| 6/5/17 | Convener and Host, <i>Exploring Urban Resilience: Transferable Lessons from Venice, Italy</i> , Public presentation and Film Screening by Giovanni Cecconi, Venice Resilience Lab, formerly of Consorzio Venezia Nuova, the quasi-governmental agency that built the Venice Storm Surge Barrier |
| 5/31/17 | Invited Keynote, <i>The Critical Role of Green Infrastructure Investments in Enhancing the Resilience of Urban Landscapes</i> . Growing Green Cities: Urban Forests and Green Infrastructure for Health, Resilience, and Sustainability. Conference sponsored by Orange County Citizens Foundation, and the City University of New York Institute for Sustainable Cities, Newburgh, NY. |
| 5/16/17 | Invited Presenter, <i>Mainstreaming Resilience as a Universal Project Goal</i> . Promoting Resilience and Transformation in Cities: A Conference for a Public Policy of Urban Climate Governance, Hunter College, City University of New York. |
| 5/14/17 | Community Presentation, <i>Using Modeling to Evaluate Flood Mitigation Strategies in Eastwick, PA</i> ; A CCRUN event in Philadelphia, PA in collaboration with Univ. of Penn and Friends & Neighbors of Eastwick Coalition |
| 5/1/17 | Host and Speaker, Pennsylvania Congressional Roundtable, <i>Community Resilience in the Urban Environment</i> , Organized with National Oceanic and Atmospheric Administration (NOAA) |
| 4/25-27/17 | Invited Participant, <i>Exploring Paths to Collaboration on Green Cities</i> , International Workshop Convened by The Nature of Cities, Portland, OR |

4/12/17 Host and Invited Lecturer, Relationship between water consumption, population, and design. Presentation to the Philadelphia 2030 District Meeting, Delaware Valley Green Building Council

4/10/17 Invited Speaker, *Enhancing Communities Through Multifunctional Green Infrastructure*, Hixon Center for Urban Ecology, Yale School of Forestry and Environmental Studies, Urban Resources Initiative

4/5/17 Invited Speaker, *The Next Phase in Green Infrastructure Implementation*, Webinar presentation for ReNUWIt NSF's Engineering Research Center on Reinventing the Nation's Urban Water Infrastructure, including researchers UC Berkeley, Stanford, Colorado School of Mines, and New Mexico State

3/29/17 Invited Seminar Speaker, *Enhancing Communities through Applied, Multifunctional Green Infrastructure Research: the role of the 21st Century Engineer*, Southern Methodist University

3/23/17 Invited Speaker, *Community-based Green Infrastructure*, Penn State Philadelphia Delaware Valley Stormwater Dialogue, Penn State Center, Philadelphia, PA

2/21/17 Invited Panelist, *Community Resilience through Green Infrastructure*, Science of the Living City Seminar Series, NYC Department of Parks and Recreation and USDA Forest Service

1/10/17 Invited Speaker and Participant, *Evaluation of New York City's Coastal Areas and Potential Adaptation Strategies in the Wake of Hurricane Sandy*, Post-Sandy Workshop, National Oceanic and Atmospheric Administration (NOAA), Rutgers University, New Brunswick, NJ

6/21/16 Invited speaker, *Green Infrastructure and Urban Resilience*, The 46th Annual Conference of the International Urban Fellows Association (Venice, Italy)

6/16/16 Invited to present Green Infrastructure in North America to Paolo Botton, Commissioner of Building, Green Spaces, Parks and Rivers, (Padua, Italy)

5/5/16 Invited Presenter, *The Resilience Benefits of Green Infrastructure*, Evening Presentation for the Science of the Living City Seminar Series, NYC Department of Parks and Recreation and USDA Forest Service

4/27/16 Invited Presenter, *Measuring the Resilience Benefits of Green Infrastructure*, Invited Webinar for the Trust for Public Land, [Measures of Success: Measuring Environmental Impact](#)

4/19/16 Invited Speaker, *Managing Water in a Dynamic World*, Invited Section Chapter Presentation, IEEE Philadelphia

4/12/16 Invited Speaker, *Multifunctional Green Infrastructure*, Invited seminar at Manhattan College, Department of Civil and Environmental Engineering, Roads and Water Quality Symposium

8/26/15 Invited Speaker, The Low Impact Development Rapid (LIDRA) Model: Planning GI retrofits through stakeholder dialogue. Presentation at the NYC Department of Environmental Protection, Bureau of Environmental Planning and Assessment (BEPA).

5/22/15 Invited Participant, Workshop entitled La Citta' Metropolitana Resliente (Mestre, Venice, Italy) Meeting attended by more than 100 regional stakeholders to discuss what resilience planning means for the new Metropolitan City of Venice.

4/30/15 Invited Speaker, Green Infrastructure in the Urban Northeast, USA. Brownbag presentation University of Copenhagen, Denmark

4/23/15 Invited Speaker, Green Infrastructure in the Urban Northeast, USA. Brownbag presentation at the Technical Institute of Munich, Germany.

4/17/15 Invited Panelist. *Paessagi liquidi*, continuing education workshop offered at the IUAV University (Venice, Italy) and attended by approximately 100 local design professionals

4/2/15 Invited Lecturer, Green Infrastructure 101. Presentation for architecture and urban planning students at the University of Florence, Italy

4/3/14 Invited Speaker, "Planning Green Infrastructure Retrofits in Urban Neighborhoods with the Low Impact Development Rapid Assessment (LIDRA) Tool" Low Impact Development in Houston Workshop, Rice University, Houston, TX

2/20/14 Invited Speaker, "Using Agent-Based Models to Investigate Green Infrastructure Emergence" National Science Foundation, Washington, DC

1/24/14 Invited Panelist, Yale Urban Ecosystem Services Symposium, Yale University, New Haven, CT

11/19/13 Invited Speaker, "Green Infrastructure: Building Decentralized Ecosystem Services in the Urban Landscape" Institute of Electrical and Electronics Engineers (IEEE), Philadelphia Section Meeting, Philadelphia, PA

11/7-8/13 Invited Colloquium Participant, City Parks and Green Infrastructure: How Can Parks Help Manage Stormwater? Harvard Graduate School of Design, Boston, MA

10/17-18/13 Invited panelist, Urban Resilience in an Era of Climate Change: Global Input for Local Solutions, Kingsboro Community College, Brooklyn, NY

10/16/13 Invited Keynote Speaker, "Severe Weather, Flooding, and Green Infrastructure: Leveraging Distributed Watershed Investments to Promote Regional Resilience" Southeast New York Stormwater Conference and Trade Show, Beacon, NY

10/8/13 Invited Speaker, "Green Technologies (Infrastructure): A Distributed Approach to Providing Infrastructure Services (and mitigating threats)" New Jersey's Lower Hudson River Waterfront - 25 Years of Construction. Challenges for the Next 25 Post Sandy Era. Stevens Institute of Technology, Hoboken, NJ.

9/18/13 Invited Speaker, "What is Being Done to Address Water Pollution" Citizen Science Water Quality Monitoring Workshop, Pier 40 Hudson River Park, New York, NY

9/9/13 Invited Speaker, "Performance of the Nashville Greenstreet (Queens, NY) during Hurricane Irene, Superstorm Sandy, and other Recent Extreme Events" H2O9 Forum: Water Challenges for Coastal Cities- From the Dutch Delta to New York Harbor, Columbia University, New York, NY

7/10/13 Invited presenter, "Daylighting Streams in Urban Contexts" Urban Streams Symposium, The CUNY Institute for Sustainable Cities and the Hudson River Foundation, New York, NY

6/13/13 Invited Speaker, "Urban Green Infrastructure: Enhancing the Triple Bottom Line" City21/Part 3: Issues and Innovations in 21st Century Cities: A Cross Cultural Video Conference Between Mexico City and Philadelphia, Philadelphia PA

6/12/13 Invited Speaker, "Planning Green Infrastructure Retrofits in Urban Neighborhoods with the Low Impact Development Rapid Assessment (LIDRA) Tool" 2nd Long Island Green Infrastructure Conference and Expo, Brookhaven National Labs, Upton, NY

5/23/13 Invited speaker, "Urban Green Infrastructure: Mitigation, Adaptation, or Both" Climate Changed Cities: conference on Climate Adaptation in Urban Areas, IUAV University, Venice, Italy

4/7/2013 Invited presenter, "Emerging Phenomena in Green Infrastructure Research" Engineering Sustainability 2013, The Mascaro Center for Sustainable Innovation at the University of Pittsburgh and the Steinbrenner Institute for Environmental Education and Research at Carnegie Mellon University, Pittsburgh, PA.

3/28/13 Invited Speaker, "Plant Stormwater Use Through Evaporation and Evapotranspiration" Office of Green Infrastructure, NYC Department of Environmental Protection, Queens, NY

2/26/2013 Invited keynote presenter, "Green Infrastructure – Cost Effectiveness at Different Scales" Low Impact Development in Houston, TX. Rice University.

1/17/2013 Invited presenter, "Green Infrastructure – Triple Bottom Line Benefits at Different Scales" AWRA-PMAS lunchtime seminar series, Philadelphia, PA

1/16/13 Invited to present post-Sandy testimony to NYS Assembly on adaptation: <http://vimeo.com/58579903>

12/18/2012 Invited presenter, "Accounting for Uncertainty in Determining Green Infrastructure Cost-effectiveness with LIDRA" National webinar with ~200 viewers hosted by USEPA

12/3/2012 Invited Presenter, "Ecosystems and Green Infrastructure", Hurricane Sandy and Beyond Engineering, Ecology, and Policy Pathways, Hunter College, NYC

11/28/2012 Invited Presenter, "Green Infrastructure: Stormwater Benefits at Different Scales" The Con Edison Sustainable Infrastructure Symposium, New York, NY.

9/21/2012 Invited Presenter, "Watershed Planning and Restoration: Emerging Tools and Green Infrastructure Strategies." Watershed Assessment & Low Impact Development for Local and Regional Stormwater Management, Westchester County Center, White Plains, NY.

7/25/12 Featured Faculty Presentation, "Post-Earthquake Haitian Infrastructure Reconstruction" Summer Days 2012. Invited to address group of ~200 prospective students & their families, Drexel University.

7/24/12 Co-Convener, Roundtable on Urban Ecohydrology Science and Practice. Convened with the US Forest Service; attended by over 75 scientists and practitioners attended. Master of Ceremonies and also presenter "Green infrastructure as a Climate Adaptation Strategy." Drexel Univ. Philadelphia, PA

6/26/12 Invited breakout group facilitator, "Impacts of Extreme Climate Events on Urban Coasts" a workshop organized by the Consortium for Climate Risk in the Urban Northeast, Stevens Institute, Hoboken, NJ

6/22/12 Invited session organizer and speaker, “Just Add Water: Greening Cities through Sustainable Stormwater Management” Remaking America for the 21st Century: Reclaiming Vacant Properties Conference, June 20-22, New Orleans, LA

5/18/12 Invited Speaker and Panelist, “Green Infrastructure: New Opportunities born of challenges” 2012 Waterfront Conference – Our Harbor: an Environmental Engine and Economic Resource, organized by the Metropolitan Waterfront Alliance

4/17/12 Invited Speaker, “Challenges to Scaling up Green Infrastructure Implementation in Urban Watersheds” Green Roof Science Symposium. Barnard College and Columbia University, New York

4/5/12 Invited Speaker, “Green infrastructure: site and scale-up studies” Syracuse University, LC College of Engineering and computer science

3/29/12 Invited Speaker, “Green infrastructure: Engineering and Planning challenges in Heavily Urbanized Landscapes” Università IUAV di Venezia, Regional Planning Program

3/15/12 Presentation at Hudson County, NJ Municipal Planning Offices to NY/NJ Baykeeper, Hackensack Riverkeeper, Sustainable Jersey City Program staff “Exploring green infrastructure program scenarios through stakeholder-informed LIDRA 2.0 simulations”

1/12/12 Webinar Presenter for the NOAA-funded Consortium for Climate Risk in the Urban Northeast (CCRUN) “Exploring green infrastructure program scenarios through stakeholder informed agent-based simulations”

12/15/11 Keynote Speaker and Breakout Session Facilitator, 6th Annual Meeting Hudson River Watershed Alliance, “Watershed Planning and Restoration: The “Emergence” of Green Infrastructure Strategies”

11/7/11 Invited Speaker, “Green Infrastructure: Engineering multiple functions into urban landscapes.” University of Pennsylvania, Graduate Program in Landscape Architecture

10/6/11 Invited speaker and panelist, Fall 2011 Million Trees NYC Advisory Board Meeting, Prospect Park (Brooklyn, NY) Rainfall Interception and Carbon Sequestration for “the first 500,000”

8/17/11 Trainer, LIDRA 2.0: All day training for municipal engineers and planners from the Hudson River Valley Regional Council

7/13/11 Host, LIDRA 2.0: Webinar for municipal engineers and planners from the Hudson River Valley, Hudson Valley Regional Council

7/7-8/11 Invited Expert, USEPA Stormwater Rulemaking Workgroup Meeting, Washington DC (Headquarters)

6/24/11 Host and Speaker during visit to Drexel by Dr. Jane Lubchenco, NOAA Administrator and Under Secretary of Commerce for Oceans and Atmosphere

4/13/11 Invited speaker, “Urban green infrastructure: a case study in integrated asset management, informed by hydrology” Seminar given at Cornell University Dept. of Biological and Environmental Engineering

4/1/11 Invited panelist, “Integration of engineering teaching, research, and service in Philadelphia” 3rd Annual Civic Engagement Symposium: Finding Mutual Benefits, Walter Rand Institute, Rutgers University, Camden Campus

2/12/11 Featured speaker, “Post-earthquake Haitian Infrastructure Reconstruction: A focus on water and sanitation” Scholar’s Day 2011. Invited to address group of ~1000 prospective students and their families, Drexel University.

6/18/10 Invited speaker, “Urban green infrastructure: a case study in regenerative design”; Regional Plan Association, Regenerative Design Conference

6/17/10 Invited panelist, “Growing green: community efforts to become sustainable” 2nd annual Northeast Sustainable Communities Workshop

5/25/10 Invited speaker, “Multi-scale, multi-domain modeling of urban green infrastructure” ASCE, Civil Engineering Department Head’s meeting

5/11/10 Invited speaker, “The low impact development rapid assessment model, version 2.0” Center for Neighborhood Technology, The Values of Water: Measuring Green Infrastructure’s Economic, Ecological and Social Benefits

10/22/09 Invited Speaker, “Planning and Implementation Models for LID retrofits”, USEPA Regional Science Workshop on Stormwater Management, Edison, NJ

8/5/09 Invited Speaker, “Ecological Engineering and Modeling of Green Stormwater Infrastructure” 94th Annual Meeting of the Ecological Society of America, Albuquerque, NM

5/13/09 Invited Speaker, “Modeling Decentralized Green Infrastructure in the Urban Environment”, NJWEA Annual Conference, Atlantic City, NJ

5/1/09 Invited Speaker and Facilitator, NYC Dept. of Parks and Recreation MillionTreesNYC, Green Infrastructure, and Urban Ecology Workshop: Building a Research Agenda, Special section on Ecosystem Services: Water Quality & Stormwater Management

4/24/09 Invited Panelist and Convener, "Green Infrastructure: Wastewater Reuse and Green Streets" Presentation at a Drexel Engineering Cities Conference: Greening the Post Industrial City: Innovative Reuse of Philadelphia's Idle Lands

4/16/09 Invited Panelist, AWRA-PMAS, American Water Resource Association - Philadelphia Metropolitan Area Section (AWRA PMAS)

3/13/09 Invited Speaker, "Modeling Decentralized Green Infrastructure in the Urban Environment" The Center for Sustainable Urban Environments Seminar Series, University of Cincinnati

3/3/09 Invited Speaker, "Modeling Decentralized Green Infrastructure in the Urban Environment", NYWEA Winter Meeting, NYC, NY

2/27/09 Invited Panelist, "Redevelopment as a Green Infrastructure Opportunity" Conference convened by NJ Future, Trenton, NJ

12/10/08 Presentation for NSF ENG, CMMI Program Manager Dennis Wenger: "A research agenda for Infrastructure Asset Management"

12/8/08 Invited Speaker "Challenges and Opportunities in the Restoration of Coastal Urban Wetlands" US Army Corps of Engineers, Philadelphia District Coastal Planning Unit

9/12/08 Invited Panelist, Newark Green Summit Open Space Panel, Geraldine R. Dodge Foundation, Newark NJ

7/7/08 Convener and Speaker, "The importance of ecosystem valuation in multi-functional infrastructure asset management" at an International Conference in Istanbul Turkey (National Science Foundation Award Number 0828734)

9/26/08 Invited Guest Speaker, "Modeling Decentralized Green Infrastructure in the Urban Environment" an IGERT funded event at University of Maryland, Baltimore City

7/14/08 Panel Organizer and Presenter "Modeling Decentralized Green Infrastructure in the Urban Environment" CUAHSI Science Meeting, July 14-16 Boulder, CO

7/7/08 Convener and Presenter "The importance of ecosystem valuation in multi-functional infrastructure asset management" an International Workshop Funded by the National Science Foundation, in Istanbul, Turkey

3/27/08 Invited Expert "Green Infrastructure as a Means of Controlling CSOs in Syracuse, NY" New York State Department of Environmental Conservation

1/29/08 Guest Speaker "LID as a Means of Controlling CSOs in Urban Watersheds" Philadelphia Water Department

1/23/08 Panel Convener and Speaker "LID Technology Studies" at the Low Impact Development Conference Organized by the NY/NJ Baykeeper

2/28/08 Guest Speaker "LID as a Means of Controlling CSOs in Ultra Urban Watersheds" International Association for Hydrologic Research – Drexel Chapter

10/12/07 Invited Speaker, "Sustainable Water Resource Planning and Design: New Constraints and Opportunities" Planning a More Livable New York: Regional Growth, Nature, and the Ecological City, a conference planned by the NY Metro Chapter of the American Planning Association

9/12/07 Invited Panelist, "Factors constraining implementation of green infrastructure in New York, and New Jersey" New York Academy of Sciences

3/29/07 Guest Speaker & Convener; The Gowanus Canal Water Quality Summit

12/7/06 Invited Technical Expert, Jamaica Bay Watershed Protection Plan, Strategy Development Workshop, Land Use and Development Group, organized by the NYC Dept. of Env. Protection

11/1/06 Invited Speaker "A Low Impact Development Approach to Reducing CSOs" Presented to the Advisory Board, NYC Mayor's Office of Sustainability, Infrastructure and Natural Systems Taskforce

11/15/06 Guest Speaker, The New York City Soil and Water Conservation District, New York, NY

10/18/06 Guest Speaker, The Bronx River Alliance, Bronx, NY

10/17/06 Invited Expert, Committee on Environmental Protection, NYC Council Hearing on Oversight of the Department of Environmental Protection's development of a Long Term Plan for the Control of Combined Sewer Overflows in New York City

10/5/06 Guest Speaker, IUAV, Università di Architettura di Venezia, Venice, Italy

10/2/06 Guest Speaker, EAWAG, UTH, Zurich, Switzerland
 9/21/06 Lecturer, Urban Soil and Water Seminar Series, Columbia Univ., New York, NY
 9/18/06 Lecturer, City Life is Moving Bodies (CLIMB) Studio, Columbia Univ., New York, NY
 9/15/06 Keynote Speaker, The Water Studio, Columbia Univ., New York, NY
 9/12/06 Invited Lecturer, The City Gardens Club, New York, NY
 8/10/06 Invited Expert, New York City Council, Environmental Protection Committee, New York, NY
 6/28/06 Invited Speaker, Citizens Advisory Committee (CAC), NJCSO Group, Ridgefield Park, NJ
 5/23/06 Invited Speaker, The Metropolitan Waterfront Alliance Conference on Blue & Green Infrastructure Planning
 5/3/06 Guest Speaker, The Columbia University Seminar Series on Legal, Social, and Economic Environmental Policy, New York, NY
 4/29/06 Panelist, Opening of The Drop, an exhibit on water at Exit Art, New York, NY
 3/2/06 Invited Expert, Provided testimony to Brooklyn Borough President's Office on potential CSO Impacts of Proposed Atlantic Yards Project
 10/10/05 Invited Speaker, Environmental Law Clinic, Columbia University, New York, NY
 6/16/05 Keynote Speaker, American Inst. of Architects, Architects League of Northern NJ, Lyndhurst, NJ

PUBLICATIONS AND ORIGINAL WORK

Works Published or Accepted in Peer-Reviewed Journals:

- Montalto, F.** and D. Tagliapietra, E. Trevisiol. (1996). Natural Treatment Systems in the Venetian Lagoon, Case Study: The Island of Lazzaretto Nuovo. Ingegneria Sanitaria Ambientale. ANDIS: Perugia (Italy). No. 3-4. 40-88.
- Chambers, RM; Osgood, DT; Bart, DJ and **FA Montalto** (2003). Phragmites australis Invasion and Expansion in Tidal Wetlands: Interactions among Salinity, Sulfide, and Hydrology. Estuaries. Vol. 26, No. 2b, 398-406.
- Montalto, FA** and T Steenhuis (2004). The Link between Hydrology and Restoration of Tidal Marshes in the NY/NJ Estuary. Wetlands. Vol. 24, No. 2 pp. 414-425.
- Collick, AS; Easton, ZM; **Montalto, FA**; Gao, B; Kim, YJ and T Steenhuis. (2006) Hydrologic Evaluation of Septic Disposal Field Design in Sloping Terrains". Journal of Environmental Engineering 132: 1289-1297
- Montalto, FA**, T. S. Steenhuis, and J.-Y. Parlange (2006) The hydrology of Piermont Marsh, a reference for tidal marsh restoration in the NY Estuary, Journal of Hydrology., 316 (1-4) 108-128.
- Montalto, FA**; Parlange, J-Yves; and TS Steenhuis, (2007). A Simple Model of For Predicting Water Table Fluctuations in a Tidal Marsh. Water Resources Research. 43, W03439, doi:10.1029/2004WR003913.
- Montalto, FA**; Behr, CT; Alfredo, K; Wolf, M; Arye, M; and M. Walsh (2007) A Rapid Assessment of the Cost Effectiveness of Low Impact Development for Control of Combined Sewer Overflows Landscape and Urban Planning 82: pp. 117-131.
- Zhou, J, **Montalto, FA**; Erdal, ZK; McCreanor, PT (2009) Sustainability. Water Environment Research, (39) pp. 1451-1489.
- Alfredo, K; **Montalto, FA**; & A. Goldstein (2010) Observed and Modeled Performance of Prototype Green Roof Test Plots Subjected to Simulated Low and High Intensity Precipitation in a Laboratory Experiment. Journal of Hydrologic Engineering. Vol. 15. Issue 6. 444-457.
- Basinger, M; **Montalto, FA**; and U Lall (2010) A Rainwater Harvesting System Reliability Model Based on Nonparametric Stochastic Rainfall Generator. Journal of Hydrology. 392. 105-118.
- Cataldo, J; Behr, C; **Montalto, FA**; Pierce, RJ (2010) Prediction of Transmission Losses in Ephemeral Streams: Western USA. Open Journal of Hydrology. Vol. 4. pp 19-34.
- Gurian, PL; Aktan, AE; **Montalto, FA** and F. Moon. (2010) Research Priorities for Infrastructure Asset Management COMMONWEALTH: A Journal of Political Science Vol. 9.4, pp 43-53.
- Zhou, J; Erdal, ZK; McCreanor, PT **Montalto, FA** (2010) Sustainability. Water Environment Research. 82 (10). 1376-1395.
- Spatari, S; Yu, Z and **FA Montalto** (2011) Life Cycle Implications of Urban Green Infrastructure Development. Environmental Pollution. 159 (8-9) 2174-2179.
- Zhou, J; McCreanor, PT; **Montalto, FA**; Erdal, ZK; (2011) Sustainability. Water Environment Research. 83 (10). 1414-1438.
- Catalano de Sousa, M; **Montalto, FA**; and S Spatari. (2012) LCA as a Tool to Evaluate Watershed-Scale CSO control Strategies, including Green Infrastructure. Journal of Industrial Ecology. 16(6) 901-913.

- Zhou, J, **Montalto, FA**; Erdal, ZK; McCreanor, PT (2012) Sustainability. Water Environment Research, 84 (10) 1364-1385.
- Montalto, FA**; Bartrand, TA; Waldman, AM; Travaline, K; Loomis, C; McAfee, C; Geldi, J and G. Riggall. (2012) Decentralized Green Infrastructure: The Importance of Stakeholder Behavior in Determining Spatial and Temporal Outcomes. Journal of Structure and Infrastructure Engineering. 1-19.
- Aguayo, M; Yu, Z; Piasecki, M; and **FA Montalto** (2013) Development of a Database and Web Application for Low Impact Development Rapid Assessment (LIDRA) tool version 2.0. Journal of Hydroinformatics. 15.4: 1276-1295.
- DiGiovanni, K; Gaffin, S; **Montalto, FA** and C Rosenzweig (2013) The Applicability of Classical Predictive Equations for the Estimation of Evapotranspiration from Urban Green Spaces: Green Roof Results. Journal of Hydrologic Engineering 99-107.
- Felson, AJ; Pavao-Zuckerman, M; Carter, T; **Montalto, FA**; Shuster, W; Springer, N; Stander, EK; and O Starry (2013) Mapping the Design Process for Urban Ecological Researchers. Bioscience. 63(11) 854-865.
- Sheller, M; Galada, HC; **Montalto, FA**, Gurian, PL; Piasecki, M; Ayalew, TB; and S O'Connor. (2013) Gender, Disaster, and Resilience: Assessing Women's Water and Sanitation Needs in Leogane, Haiti, before and after the 2010 Earthquake. WH20: The Journal of Gender and Water. 2(2) 18-27.
- Smalls-Mantey, L; DiGiovanni, K; Olson, M; and **FA Montalto** (2013) Validation of two soil heat flux estimation techniques against observations made in an engineered urban green space. Urban Climate. 3. pp 56-66.
- Galada, HC; **Montalto, FA**; Gurian, PL; Sheller, M; Piasecki, M; Ayalew, T; and S O'Connor (2014) Assessing Preferences Regarding Centralized and Decentralized Water Infrastructure in Post-Earthquake Leogane, Haiti. Earth Perspectives. 1:5. <http://www.earth-perspectives.com/1/1/5>
- Galada, HC; Gurian, PL; **Montalto, FA**; Sheller, M; Piasecki, M; Ayalew, T; and S O'Connor. (2014) Attitudes Toward Post-earthquake Water and Sanitation Management and Payment Options for Leogane, Haiti. Water International. 38(6) 744-757.
- Sheller, M; O'Connor, S; Galada, HC; **Montalto, FA**; Gurian, PL; and M Piasecki (2014) Participatory Engineering for Recovery in Post-earthquake Haiti. Engineering Studies, Vol. 6, No. 3, 159–190.
- Mason, E and **FA Montalto** (2014) The Overlooked Role of New York City Urban Yards in Mitigating and Adapting to Climate Change. Local Environment. (1-16)
- Miller, S; Kidd, G; **Montalto, FA**, Gurian, P; Worral, C and R. Lewis (2014) Contrasting Perspectives Regarding Climate Risks and Adaptation Strategies in the New York Metropolitan Area after Superstorm Sandy. Journal of Extreme Events. Vol. 01, Issue 01. 22 pages.
- Rangarajan, S; Marton, D; **Montalto, FA**; Cheng, Z and G Smith (2015). Measuring the Flow: Green Infrastructure Grows in Brooklyn. Current Opinion in Environmental Sustainability. 17: 36-41.
- Travaline, K; **Montalto, FA**; and C. Hunold (2015) Deliberative Policy Analysis and Policy-Making in Urban Stormwater Management. Journal of Environmental Planning and Policy. 1-18. DOI: 10.1080/1523908X.2015.1026593
- Alfredo, KA; **Montalto, FA**; Bartrand, B; Wolde-Georgis, T and U Lall (2016) Using a Participatory Stakeholder Process to Plan Water Development in Koraro, Ethiopia. Water. 8, 275; doi:10.3390/w8070275
- Alizadehtazi, B; DiGiovanni, K; Foti, R; Morin, T; Shetty, N; **Montalto, FA**; and Gurian, PL (2016) Comparison of the Infiltration Rates of Different Permeable Urban Surfaces Using a Cornell Sprinkle Infiltrometer. Journal of Hydrologic Engineering. 10.1061/(ASCE)HE.1943-5584.0001374 , 06016003
- Catalano de Sousa, R; Gurian, P; Foti, R; and **FA Montalto** (2016) Evaluating Green Infrastructure Performance Under Extreme Events. Journal of Extreme Events. doi.org/10.1142/S2345737616500068
- Catalano de Sousa, R; Palmer, M; Gurian, P; and **FA Montalto**. (2016) Potential climate change impacts on green infrastructure vegetation. Urban Forestry and Urban Greening. v20. 128-139.
- Goldstein, A, Foti, R and **FA Montalto** (2016) Effect of spatial resolution in modeling stormwater runoff for an urban block. Journal of Hydrologic Engineering 10.1061/(ASCE)HE.1943-5584.0001377, 06016009.
- Rostad, N, Foti, R and **FA Montalto**. (2016) Harvesting urban runoff to flush metropolitan toilets: a quantitative comparison of potential benefits in four major US cities. Resources, Conservation, and Recycling. 108. pp 97-106.
- Alvizuri, J; Cataldo, J; Smalls-Mantey, L; and **FA Montalto** (2017). Green Roof Thermal Buffering: Insights Derived from Fixed and Portable Monitoring Equipment. Energy and Buildings. 151. 455-469

- Close, SL; **Montalto, FA**; Orton, P; Antoine, A; Peters, D; Jones, H; Parris, A and A Blumberg (2017) Achieving sustainability goals for urban coasts in the US Northeast: Research needs and challenges. Local Environment. Volume 22 – Issue 4. pp 508-522.
- Zidar, K; Belliveau-Nance, M; Cucchi, A; Denk, D; Kricun, A; O'Rourke, S; Rahman, S; Rangarajan, S; Rothstein, ER; Shih, J, O'Rourke, S; and **FA Montalto**. (2017) A Framework for Multifunctional Green Infrastructure Investment in Camden, NJ. Urban Planning. Vol. 2, Issue 3. pp 56-73. DOI: <http://dx.doi.org/10.17645/up.v2i3.1038>
- Zidar, K; Bartrand, TA; Loomis, CH; McAfee, CA; Geldi, JM; Riggall, G; and **FA Montalto**. (2017) Maximizing Green Infrastructure in a Philadelphia Neighborhood. Urban Planning. Vol. 2, Issue 4. pp 115-132. DOI: <http://dx.doi.org/10.17645/up.v2i4.1039>
- DiGiovanni, K; **Montalto, FA**; and S. Gaffin. (2018) A comparative analysis of micrometeorological determinants of evapotranspiration rates within a heterogeneous urban environment. Journal of Hydrology. 562. 223-243.
- Yu, Z; Bedig, A; Quigley, M; and **FA Montalto**. (2018) Automated detection of unusual soil moisture probe response patterns with association rule learning. Environmental Modeling and Software. 105, 257-269.
- Yu, Z; Miller, S; **Montalto, FA**; and U Lall. (2018) The bridge between precipitation and temperature – pressure change events: modeling future non-stationary precipitation. Journal of Hydrology. 562, 346-357.
- Yu, Z. **Montalto, FA** and CT Behr. (2018) Probabilistic Green Infrastructure Cost Calculations Using a Phased Life Cycle Algorithm Integrated with uncertainties. Journal of HydroInformatics. <https://doi.org/10.2166/hydro.2018.107>

Works Currently Submitted or In Revision in Peer-Reviewed Journals:

- Alizadehtazi, B; and **FA Montalto**. Observed Variability in Soil Moisture in Engineered Urban Green Infrastructure Systems and Linkages to Ecosystem Services. Journal of Hydrology. (Submitted)
- Abualfaraj, N; Cataldo, J; Elborolasy, Y; Fagan, D; Woerdeman, S; Carson, T and **FA Montalto** (2018) Monitoring and modeling the long-term rainfall-runoff response of the Jacob K. Javits Center green roof. Water. (In Revision)
- Feldman, A; Foti, R; and **FA Montalto**. Green Infrastructure Implementation in Urban Parks for Stormwater Management. Urban Forestry and Urban Greening. (In revision)
- Hamilton, K; Reyneke, B; Waso, M; Clements, T; Ndlovu, T; Khan, W; DiGiovanni, K; Rakestraw, E; Montalto, FA; Haas, CN and W Ahmed. (2018) A global review of the microbiological quality and potential health risks associated with roof harvested rainwater tanks. NPJ Clean Water. (Submitted)
- Jeffers, S and **FA Montalto** (2018) Modeling urban sewers with artificial fractal geometries. Journal of Construction Engineering and Management. (Submitted)
- Jeffers, S and **FA Montalto** (2018) Applying river basin scaling laws to urban catchments. Journal of Hydrology. (In revision).
- Jeffers, S and **FA Montalto** (2018) Using artificial sewer networks to study the role of green stormwater infrastructure in reducing runoff during both historic and future changed precipitation. Journal of Hydrologic Engineering. (In revision)
- Miller, S and **FA Montalto** (2018) The Long-Term Economic and Social Impact of Green Infrastructure in New York City. Landscape and Urban Planning (Submitted)
- Miller, S and **FA Montalto** (2018) Stakeholder perceptions of green infrastructure and ecosystem services in New York City. Ecosystem Services. (In revision)
- Miller, S; Gurian, P; Daley, J; Elwell, H; Matsil, M and **FA Montalto** (2018) A preliminary assessment of the role of green infrastructure during Hurricane Sandy: A case study of three coastal communities. Journal of Disaster Risk Reduction (In Revision).
- Pu, G; Roodsari, BK; Hamilton, K; Stillwell, C; Haas, C and **FA Montalto**. Reducing urban runoff on ultra-urban land: performance of a stormwater treatment wetland on the Bronx River. To be submitted to Journal of Sustainable Water in the Built Environment. (In Revision)
- Rakestraw, E; Gurian, P; and **FA Montalto** (2017) Quantification of stemflow in three isolated shrub species in an urban environment. Frontiers Built Environment. (In Revision)

Works in Preparation for Imminent Submission to Peer-Reviewed Journals:

- Alizadehtazi, B; and **FA Montalto**. The Dynamic Relationship between Vegetation Canopies, Infiltration, Runoff and Recharge in Engineered Urban Green Infrastructure Systems. Catena. (In preparation)
- Alizadehtazi, B; and **FA Montalto**. A Simple Model of GI Soil Moisture Patterns as a Function of Hydrologic Loading, Surface Treatment, and Urban Climate. Journal of Hydrology. (In preparation)

- Campellone, S; Levia, D; and **FA Montalto**. Does Canopy Phenophase affect Rainfall Interception by Three Honeylocus (*Gleditsia triacanthos* L.) street trees in New York City? Urban Ecosystems (in preparation)
- Campellone, S; Levia, D; and **FA Montalto**. Interspecific and Vertical Variation of Bark and Foliar Water Storage Capacities among Ten Common Species of Street Trees. Environmental Management (in preparation)
- Campellone, S; Levia, D; and **FA Montalto**. Sub-millimeter surface morphology of *Gleditsia triacanthos* L. (Honeylocust) Reveals Insight into Foliar and Bark Interception Storage Capacities. Ecohydrology. (in preparation)
- DiGiovanni, K and **FA Montalto**. A statistically Comparative Analysis of Actual Evapotranspiration rates in Urban Green Spaces and Microclimate Conditions across New York City. Urban Climate. (In preparation)
- DiGiovanni, K and **FA Montalto**. Crop Coefficients and Attenuation Factors for the Application of the ASCE Standardized Reference Evapotranspiration Equation to Urban Green Spaces. Journal of Hydrology. (In preparation)
- Goldstein, A; **Montalto, FA**; Li, C; and S Rangarajan. Evaluation of Low Impact Development Modeled at Different Resolutions for an Urban Block. Journal of Landscape and Urban Planning. (In preparation)
- Kidd, G; Gurian, P; and **FA Montalto**. Changing Climate in Philadelphia: Climate Risks and Recommendations for Risk Reduction. Journal of Extreme Events. (In preparation)
- Lempitsky, I; and **FA Montalto**. Effectiveness of Coastal Green Infrastructure Under Compound Events Due to Climate Change. Journal of Hydrologic Engineering. (In preparation)
- Miller, S; Foti, R; and **FA Montalto**. Quantifying Evapotranspiration of Urban Landscape Vegetation for Stormwater Management. Urban Forestry and Urban Greening. (In preparation)
- Roodsari, BK; Chen, W; DiGiovanni, K; and **FA Montalto**. Monitoring and Modeling the Hydrologic Performance of a Right-of-Way Bioswale in NYC. Journal of Hydrologic Engineering. (In preparation)
- Saleh, F; Orton, P; **Montalto, FA**; Solecki, W; and F Musco. Participatory Coastal Adaptation Planning: Uncertain Futures, Distributed Models, Social Validation and Public Engagement. Journal of Coastal and Ocean Management. (In Preparation)
- Smalls-Mantey, L and **FA Montalto**. The Seasonal Microclimate Trends of a Large-Scale Extensive Green Roof. Sustainable Cities and Society. (In Preparation)
- Smalls-Mantey, L and **FA Montalto**. The Potential Role of Urban Stormwater Green Infrastructure in the Reduction of the Urban Heat Island Intensity. Urban Climate. (In Preparation)
- Smalls-Mantey, L and **FA Montalto**. Quantifying the Thermal and Microclimate Effects of Small-Scale Stormwater Green Infrastructure. Urban Forestry and Urban Greening. (In Preparation)
- Yerk, W** and **FA Montalto**. Canopy interception and associated evaporation of incident rainfall from urban green infrastructure. Journal of Hydrologic Engineering. (In preparation)
- Yu, Z; **Montalto, FA**; Lall, U; Bader, D; and R. Horton. Using Pressure Change to Stochastically Disaggregate Non-stationary Hourly Precipitation Series from Monthly Temperature Projections in the Northeast US. Water Resources Research. (In Preparation)

Book Chapters:

- Montalto, F.** (1996) *Biofitodepurazione in Nord America* (Natural Treatment Systems in North America). In Parancola, S and ER Trevisiol, (eds). L'Acqua Salvata: Utilizzo Integrato del Ciclo dell'Acqua in Una Prospettiva di Biourbanistica (Reclaimed Water: The Integrated Use of the Water Cycle in Bio-Planning). (pp. 77-88) Istituto Universitario di Architettura di Venezia, Dipartimento di Urbanistica. (In Italian)
- Montalto, FA**; Steenhuis, T; and JY Parlange. (2002). The Restoration of Tidal Marsh Hydrology. In Brebbia, CA (ed), Coastal Environment: Environmental Problems in Coastal Regions IV. WIT Press, 35-47.
- Tillinger, D; Ostroff, G; Beattie, D; Berghage, R; Mankiewicz, P; and **F Montalto** (2004) Hydrological Functions of Green Roofs in New York City. In Rosenzweig, C; Solecki, W; and C Cheney (eds.) Green Roofs in the New York Metropolitan Region: Research Report I. (pp. 55-72.) NASA/Goddard Institute for Space Studies: New York.
- Montalto, FA** "Optimism and the Future of Urban Water Infrastructure" an essay in Brookner, J. (2009) Urban Rain: Stormwater as Resource. ORO Editions, 64 pp.
- Montalto, FA**; Behr, CT ; Yu, Z (2011) Accounting for Uncertainty in Determining Green Infrastructure Cost-effectiveness. In Thurston, H., ed. Economic Incentives for Stormwater Control. CRC Press: Boca Raton, FL. 256 pp.
- Rostad, N and **FA Montalto** (2012) "Chapter 15: Using Urban Runoff for Toilet Flushing" in Zehman, F (ed) Metropolitan Sustainability: Understanding and Improving the Urban Environment. Woodhead Publishing: Philadelphia. 739 pp.

- Catalano de Sousa, MR and **FA Montalto**. (2015) Green infrastructure as a climate change adaptation strategy for the urban northeast. in Musco, F. and E. Zanchini (eds). *Il clima cambia le città: Strategia di adattamento e mitigazione nella pianificazione urbanistica*. Francoangeli: Milano, Italy. 250-265
- Catalano de Sousa, MR; Miller, SM; Dorsch, M, and **FA Montalto**. (2016) Green Infrastructure as a Climate Change Resiliency Strategy in Jamaica Bay, NY. In Sanderson, E et al. Prospects for Resilience: Loss, Recovery and the Future of New York City's Jamaica Bay. Island Press: Washington. 287 pp.
- Montalto, FA** (2018) Box 5.6 NBS in Urban Settings: New York City. pg 88 in The United Nations, ed, World Water Development Report 2018 (WWDR): Nature-Based Solutions for Water. Paris, UNESCO

Conference Papers and Presentations:

- Bartrand, T; **Montalto, FA**; Lall, U; Steenhuis, T and T Wolde-Georgis (2008) "Preliminary results of an agent-based simulation featuring the coupled hydrologic and human interactions typical of a rural Ethiopian village" paper presented at International Conference on Water Scarcity, Global Changes, and Groundwater Management Responses. Convened by UNESCO, University of California, Irvine, and USGS
- Moon, F.L.; Gurian, P; **Montalto, F.A.** and A.E. Aktan (2008) Integrating human, natural and engineered systems and associated paradigms for infrastructure asset management. Fourth International Conference on Bridge Maintenance, Safety and Management (IABMAS 08), Seoul, Korea
- Behr, CT and **FA Montalto** (2008). "Risk Analysis Application for Assessing the Cost-effectiveness of Low Impact Development for CSO Control using LIDRA" Paper presented at the 2008 International Low Impact Development Conference, organized by the American Society of Civil Engineers, Nov. 16-19, 2008. Seattle, WA
- Khader, O and **FA Montalto** (2008) "Development and Calibration of a High Resolution SWMM Model for Simulating the Effects of LID Retrofits on the outflow hydrograph of a dense urban watershed" Paper presented at the 2008 International Low Impact Development Conference, organized by the American Society of Civil Engineers, Nov. 16-19, 2008. Seattle, WA
- Braden, J; Ghalayini, D; Grant, J; Kloss, C; MacMullen, E; Morse, S; **Montalto, FA**; Nees, D; Nowak, S; Peck, S; Shaikh, S; Wise, S; and C Yu (2009) Integrating Valuation Methods to Recognize Green Infrastructure's Multiple Benefits. Proceedings of the 2010 International LID Conference "Redefining Water in the City" April 11-14, 2010 Westin Airport Hotel, San Francisco, CA
- DiGiovanni, K; Gaffin, S and **FA Montalto** (2009) Green Roof Hydrology: Results from a Small-Scale Lysimeter Setup (Bronx, NY). Proceedings of the 2010 International LID Conference "Redefining Water in the City" April 11-14, 2010 Westin Airport Hotel, San Francisco, CA
- Goldstein, A and **FA Montalto** (2009) Resolution and Uncertainty Analysis of a Block-Scale Urban Drainage Model. Proceedings of the ASCE Environment and Water Resources Institute Conference, Providence, Rhode Island, May 16-20, 2010
- Yu, Z; Aguayo, M; Piasecki, M and **FA Montalto** (2010) Developments in LIDRA 2.0: a planning level assessment of the cost-effectiveness of low impact development. Proceedings of the ASCE Environment and Water Resources Institute Conference, Providence, Rhode Island, May 16-20, 2010
- Montalto, FA** and A Waldman (2010) Green Stormwater Infrastructure: A Prototypical Multi-Domain Complex Infrastructure System. Proceedings from the Fifth International Conference on Bridge Maintenance, Safety, and Management, July 11-15 2010 Philadelphia, PA
- Pradhan, AR; Gurian, PL; **Montalto, FA**; Moon, F; and AE Aktan (2010) System-Identification of Multi-Domain (Human, Natural, and Engineered) Infrastructure systems. Proceedings from the Fifth International Conference on Bridge Maintenance, Safety, and Management, July 11-15 2010 Philadelphia, PA
- Wegst, UGK; Barr, CM; and **FA Montalto** (2010) Eco-Audit of Seven Green Infrastructure Practices. Proceedings from the Fifth International Conference on Bridge Maintenance, Safety, and Management, July 11-15 2010 Philadelphia, PA
- Goldstein, A and **FA Montalto** (2009) Uncertainty in the Modeling of Urban Green Infrastructure. Watershed Management 2010 Conference, ASCE-EWRI Madison, Wisconsin, August 23-27, 2010
- DiGiovanni, K; Gaffin, S; **Montalto, FA** and C Rosenzweig (2010) Evaluation of Physically and Empirically-based Models for the Estimation of Green Roof Evapotranspiration. Oral Presentation at AGU Fall Meeting, San Francisco, CA.
- Montalto, FA** and A Waldman, T Bartrand, K Travaline, C Loomis, C McAfee, J Geldi and G Riggal (2010) The Emergence of Urban Hydrologic Outcomes from Inter-Related Social and Physical Dynamics. Oral presentation at AGU Fall Meeting, San Francisco, CA

- DiGiovanni, K; Gaffin, S; **Montalto, FA**, and C Rosenzweig. (2011) The Applicability of Classical Predictive Equations for the Estimation of Evapotranspiration from Urban Green Spaces: Green Roof Results. Proceedings of the World Environmental and Water Resources Conference, Palm Springs, California, May 22-26, 2011.
- Montalto, FA** and W Lucas (2011) How Are Low Impact Stormwater Control Measures Simulated By Different Computational Models? Proceedings of the World Environmental and Water Resources Conference, Palm Springs, California, May 22-26, 2011.
- Britton, J; Galada, H; Gurian, P; **Montalto, FA**; O'Connor, S; Piasecki, M and M Sheller. (2011) Stakeholder Priorities for Water and Sanitation Development in Leogane, Haiti. Oral presentation and extended abstract. AEESP Research and Education Conference. University of South Florida, July 11, 2011.
- Alizadehtazi, B; DiGiovanni, K; Gurian, PL; and FA Montalto. (2011) Relationships between Land Cover and Infiltration Capacity in Urban Landscapes. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- DiGiovanni, K; **Montalto, FA**; Gaffin, S; and C Rosenzweig (2011) Measurement and Estimation of Evapotranspiration from Urban Green Spaces in New York City. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Goldstein, A and FA Montalto (2011). Comparison of a High and Low Spatial Resolution Model for an Urban Block and Implications for Depicting Low Impact Development. (2011) Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Nichols, C; **Montalto, FA**; Rothstein, E; Bayley, A; and B Mitchell (2011) Implementation and Assessment of the Effectiveness of a Green Infrastructure Technology in Newark. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Rostad, N and **FA Montalto** (2011) Assessing Rainwater Harvesting Potential in Four US Cities. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Travaline, KA; Waldman, AM; and **FA Montalto** (2011) Managing Uncertainty and Complexity in the Development of a Green Infrastructure Program Through Stakeholder Participation: An Analysis of a Participatory Process through Deliberative Democracy Lens. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Waldman, A; Bartrand, T; Travaline, K; **Montalto, FA**; Riggall, G; Geldi, J; McAfee, C and C Loomis. (2011) Exploring Green Infrastructure Program Scenarios in a Gentrifying Ultra-Urban Blighted Neighborhood. Proceedings of the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.
- Rostad, N; White, S; DiGiovanni, K; and **FA Montalto**. (2011) Canopy Interception in Vegetated Stormwater Management Features. Oral Presentation at the AGU Fall Meeting. San Francisco, CA. December 5-9, 2011
- Rostad, N; DiGiovanni, K and **FA Montalto**. (2012) Ecosystem Service Valuation of Three Green Infrastructure Installations in New York City. Oral presentation at the 2012 American Water Works Association 2012 Sustainable Water Management Conference March 18-21, 2012 – Portland, Oregon
- Alizadehtazi, B; **Montalto, FA**; and AE Aktan (2012) Routing Bridge Deck Runoff to Underlying Riparian Ecosystems: Soil Moisture and Thermal Loads. Proceedings of the World Environmental and Water Resources Conference, Albuquerque, NM, May 20-24, 2012.
- Catalano de Sousa, M; **Montalto, FA**; Spataro, S; Li, C and S. Rangarajan (2012) Assessing the Life Cycle Performance of Alternative CSO Reduction Strategies. Proceedings of the World Environmental and Water Resources Conference, Albuquerque, NM, May 20-24, 2012.
- DiGiovanni, K; **Montalto, FA** and S. Gaffin (2012) Evapotranspiration from Urban Green Spaces in the Urban Northeast. Proceedings of the World Environmental and Water Resources Conference, Albuquerque, NM, May 20-24, 2012.
- Rostad, N; White, S; and **FA Montalto** (2012) Incorporating Experiments under Simulated Rainfall to Improve Curve Number Estimates Influence of Canopy Interception on the SCS Initial Abstraction. Proceedings of the World Environmental and Water Resources Conference, Albuquerque, NM, May 20-24, 2012.
- Behr, CT and **FA Montalto** (2012) "Accounting for Uncertainty in the Economic Valuation of Green Infrastructure Investments" Paper presented at the 2012 Stormwater Symposium, organized by the Water Environment Federation, July 18-20, 2012. Baltimore, MD.
- Montalto, FA**, Waldman, A; Travaline, K; Bartrand, T; Geldi, J; Rigal, G; McAfee, C and C Loomis (2012) "Directing stormwater into small, urban, vegetated spaces: interacting biophysical and institutional constraints" Invited presentation at the 2012 AGU Fall Meeting, San Francisco, CA. December 3-7, 2012

- DiGiovanni, K; **Montalto FA**; and S. Gaffin (2013) A Comparative Analysis of Evapotranspiration Rates and Microclimate Conditions Across Urban Green Spaces in NYC. Oral Presentation at the ASCE-EWRI World Environmental and Water Resources Congress, Cincinnati, Ohio May 19-23, 2013
- Montalto, FA** and Z Yu (2013) Planning Green Infrastructure Retrofits in Urban Neighborhoods with the Low Impact Development Rapid Assessment (LIDRA) Tool. Oral Presentation at the 2013 International Low Impact Development Symposium, University of Minnesota, August 18-21, Saint Paul, Minnesota
- Montalto, FA** and T Bartrand (2013) Using Agent-Based Models to Investigate Green Infrastructure Emergence in Philadelphia. Oral Presentation at the 2013 International Low Impact Development Symposium, University of Minnesota, August 18-21, Saint Paul, Minnesota
- Montalto, FA**, Catalano de Sousa, MR; Smalls-Mantey, L and Z Yu (2013) Performance of the Nashville Greenstreet (Queens, NY) during Hurricane Irene and Superstorm Sandy. Oral Presentation at the 2013 International Low Impact Development Symposium, University of Minnesota, August 18-21, Saint Paul, Minnesota
- DiGiovanni, K; Miller, S; **Montalto, FA**; and S Gaffin. (2013) Engineering Urban Green Spaces for Evapotranspiration: Vegetation and Climate. Oral presentation at the Pennsylvania Stormwater Management Symposium. October 17-18, 2013; Villanova University, Villanova, PA.
- Yerk, W and **FA Montalto** (2013) Rainfall Interception by Four Common Shrub Species. Oral presentation at the Pennsylvania Stormwater Management Symposium. October 17-18, 2013; Villanova University, Villanova, PA.
- Catalano de Sousa, MR; Smalls-Mantey, L; Yu, Z; and **FA Montalto** (2013) Distributing Urban Resilience to Extreme Precipitation Events with Green Infrastructure. Oral presentation at 2013 AGU Fall Meeting, San Francisco, CA, December 9-13, 2013
- Yerk, W and **FA Montalto** (2013) Quantifying Interception Associated with New Urban Vegetation Canopies. Oral presentation at 2013 AGU Fall Meeting, San Francisco, CA, December 9-13, 2013
- Jeffers, Scott and **FA Montalto** (2014) Quantifying Urban Green Stormwater Infrastructure Performance with Hydrologic Abstractions. Oral Presentation at the Green Infrastructure and Water Management in Growing Metropolitan Areas Conference, January 14-15, University of South Florida, Tampa, FL.
- DiGiovanni, K, **Montalto, FA** and S Gaffin. (2014) Evapotranspiration from Sites in a Heterogeneous Urban Environment (2014) Oral Presentation at the 2014 Evapotranspiration: Challenges in Measurement and Modeling from Leaf to the Landscape Scale and Beyond. April 7-10, 2014, Raleigh Brownstone- University, Raleigh, North Carolina
- Smalls-Mantey, L and **FA Montalto**. (2014) Predicting Actual Evapotranspiration through Artificial Neural Networks in an Urban Environment. Oral presentation at the ASABE 2014 Symposium on Evapotranspiration: Challenges in Monitoring and Modeling from a Leaf to the Landscape Scale and Beyond, April 7-10, 2014, Raleigh, NC.
- Alizadehtazi, B; **Montalto, FA**. (2014) Role of Vegetation and Mulch in Mitigating the Effects of Raindrop Impact on Runoff and Infiltration from Urban Vegetated Green Infrastructure. The 2014 World Environmental and Water Resources Congress, Portland, OR, June 1-5, 2014.
- Schneider, S; Smalls-Mantey, L and **FA Montalto** (2014) The Participation of Citizen Scientists in Green Infrastructure Post-Construction Monitoring efforts in New York City. Oral presentation at the World Environmental and Water Resources Conference, June 1-5 2014, Portland, Or.
- DiGiovanni, K., Catalano de Sousa, MR and **FA Montalto** (invited) (2014). Severe Weather, Flooding, and Green Infrastructure. Oral presentation at the 3rd Annual Long Island Green Infrastructure Conference & Expo, Westbury, NY, June, 2014.
- Miller, S., G Kidd, **FA Montalto**, PL Gurian, C Worrall, and R Lewis. 2014. Perceptions of climate risks and adaptation strategies after Superstorm Sandy. Society for Risk Analysis Annual Meeting, Denver, CO, December 10, 2014.
- DiGiovanni, K., **Montalto, FA** and S. Gaffin (2014). Do Engineered Urban Green Spaces Replicate Background Evapotranspiration? Oral presentation at the 2014 ASCE-EWRI World Environmental & Water Resources Congress, Portland, Oregon.
- DiGiovanni, K., **Montalto, FA** and S. Gaffin (2014). Evapotranspiration from sites in a heterogeneous urban environment. Oral presentation from 2014 Evapotranspiration: Challenges in Measurement and Modeling from Leaf to the Landscape Scale and Beyond, Raleigh, NC
- Smalls-Mantey, L and **FA Montalto**. (2015) The role of maintenance in green infrastructure performance. Oral presentation at the 2015 International Low Impact Development Symposium, January 19-21, Houston, TX.
- Catalano de Sousa, MR; Smalls-Mantey, L; and **FA Montalto** (2015) Vulnerability of Green Infrastructure Vegetation to Climate Change. ASABE 1st Climate Change Symposium - Adaptation and Mitigation, held on MAY 3-5 2015, Chicago, Illinois.

- Catalano de Sousa, MR; Smalls-Mantey, L; and **FA Montalto** (2015) The Importance of Maintenance in Green Infrastructure: A study of GI performance under extreme precipitation and site maintenance conducted through community programming. ASABE 1st Climate Change Symposium - Adaptation and Mitigation, held on MAY 3-5 2015, Chicago, Illinois.
- Yerk, W; and **FA Montalto** (2015) Green Infrastructure as a Vehicle for Engaging College Freshmen into STEM Research, The Association of Environmental Engineering & Science Professors (AEESP) 2015 Research and Education Conference, held on June 13-16, 2015 at New Haven, CT
- Yerk, W; and **FA Montalto** (2015) Rainfall Interception by Street Vegetation: Can We Accurately Inform Engineering and Modeling of Green Urban Watersheds? EWRI Watershed Management Symposium, held on August 5-7, 2015 at Reston, VA.
- Miller, S; Foti, R; **FA Montalto**, (2015) Evaluation of New York City's Coastal Vulnerability and Potential Adaptation Strategies in the Wake of Hurricane Sandy. Oral Presentation at 2015 AGU Fall Meeting, San Francisco, CA.
- Montalto, FA**; Yu, Z; Soldner, K; Israel, A; Fritch, M, Kim, Y, and S. White. Using Amazon Web Services (AWS) to enable real-time remote sensing of biophysical and anthropogenic conditions in green infrastructure systems in Philadelphia. Invited Oral Presentation at the AGU Fall meeting, 14-18 December 2015 in San Francisco, Ca.
- Rakestraw, E; **FA Montalto**, (2015) Quantification of Stemflow in Three Shrub Species in an Urban Environment. Oral Presentation at 2015 AGU Fall Meeting, San Francisco, CA.
- Smalls-Mantey, L; Foti, R; **FA Montalto** (2015) The Climatic and Energetic Dynamics of a Large Scale Green Roof. Oral Presentation at 2015 AGU Fall Meeting, San Francisco, CA.
- Yerk, W.; **FA Montalto**, (2015) Implication of Intrastorm Rainfall-Canopy Interaction on Interception Performance of Broadleaf Evergreen Shrubs in an Ultra-Urban Setting. Oral Presentation at 2015 AGU Fall Meeting, San Francisco, CA.
- Miller, S and **FA Montalto** (2016). Reducing or Exacerbating Building Damages: A Statistical Analysis of Coastal Green Infrastructure During Hurricane Sandy. Oral Presentation at Grey to Green: Addressing Climate Change with Green Infrastructure, Toronto, Canada June 1-4, 2016.
- Montalto, FA** and MRC de Sousa (2016) The Ability of the Nashville Greenstreet to Mitigate for Extreme Precipitation. Oral Presentation at Grey to Green: Addressing Climate Change with Green Infrastructure, Toronto, Canada June 1-4, 2016.
- Smalls-Mantey, L and **FA Montalto** (2016) New York City's Green Streets and Roofs: Green Infrastructure's Impact on Air and Surface Temperature. Oral Presentation at Grey to Green: Addressing Climate Change with Green Infrastructure, Toronto, Canada June 1-4, 2016.
- Miller, S; **Montalto, FA**; Gurian, P; Daley, J; Elwell, H; and M Matsil (2016) Evaluation of New York City's Coastal Areas and Potential Adaptation Strategies in the Wake of Hurricane Sandy. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Montalto, FA**; Barbagianis, T; Lipsky, I; Rothstein, E; and A. Ateta. (2016) Multifunctional Green Infrastructure. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Montalto, FA**; Renner, A; Rothstein, E; Shih, J; Rahman, S; Rangarajan, S; Cucchi, A and A Kricun. (2016) Community-based Green Infrastructure. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Shevade, L; Yu, Z; and **FA Montalto** (2016) Extracting Generalized Relationships for Stormwater Capture Monitoring at Different Sites. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Smalls-Mantey, L and **FA Montalto** (2016) Mechanisms Involved in the Mitigation of Urban Heat Islands Through Green Infrastructure. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Yu, Z; and **FA Montalto**. (2016) Planning Green Infrastructure Retrofits in Urban Neighborhoods with the Low Impact Development Rapid Assessment Tool. Oral Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Gurian, P; Miller, S; Daley, J; Elwell, H; Matsil, M and **FA Montalto** (2016) Managing Risk to Buildings from Coastal Storms: Lessons Learned from Hurricane Sandy. 2016 Meeting of the Society for Risk Analysis. December 11-16, 2016, San Diego, CA.
- Miller, S., P.L. Gurian, J. Daley, H. Elwell, M. Matsil, **F. Montalto**. Managing Risk to Buildings from Coastal Storms: Lessons Learned from Hurricane Sandy, Society for Risk Analysis Annual Meeting, December 2016.

- Amur, A; Sahin, SE; Tezcan, B; Olson, MS; Miller, S; Daley, J; Elwell, H; Matsil, M, **Montalto, FA**; DiGiovanni, K; Foti, R; Morin, T; Shetty, NH; and PL Gurian (2017). “Green Infrastructure and Storm Events”, Delaware Estuary Summit, Cape May, NJ, January 2017.
- Alizadehtazi, B; DiGiovanni, K; Foti, R; Morin, T; Shetty, NH; Gurian, PL and **FA Montalto** (2017) Green Infrastructure and Storm Events. Delaware Estuary Summit, Cape May, NJ, January
- McLaughlin, J; Urisaka, M; **Montalto, FA**; Pasquel, F; Paiva Acosta, V (2017) NYC DEP Green Infrastructure Research & Development Project: Monitoring Strategy and Protocols, Oral Presentation at NYWEA Annual Meeting, New York City.
- McLaughlin, J; Urisaka, M; **Montalto, FA**; Pasquel, F; Paiva Acosta, V (2017) NYC DEP Green Infrastructure Research & Development Project: Monitoring Strategy and Protocols, Oral Presentation at WEFTEC, Seb 30-Oct 4, Chicago, IL
- Woerdeman, S.; White, S; Yu, Ziwen and **FA Montalto** (2017). Green Infrastructure Living Laboratory (GILL). Oral presentation at the meeting of the World Environmental & Water Resources Congress (EWRI), Sacramento, CA
- Montalto, FA**; Campellone, S; and W Yerk (2018) Shrubs and Trees as Stormwater Infrastructure: A study of Urban Interception. Invited oral presentation at the Philadelphia Flower Show: Tree Care Update. March 8, Philadelphia, PA.
- Montalto, FA**; Abualfaraj, N; and J. Cataldo (2018) Monitoring the Rainfall Runoff Response of a Large-Scale Green Roof. Oral presentation at The State of Green Roofs in NYC, June 7; New York City.
- Smalls-Mantey, L; **Montalto, FA**; and J Cataldo (2018) The Seasonal Microclimate Trends of a Large-scale, Extensive Green Roof. Oral presentation at The State of Green Roofs in NYC, June 7; New York City.
- Jeffers, S and **FA Montalto** (2018) Understanding Green Stormwater Infrastructure with Fractal Based Sewer Models. Oral Presentation at the World Environmental and Water Resources Conference, June 3-7, Minneapolis, MN.
- Soldner, K; Yu, Z; Israel, A; White, S; Fritch, M and **FA Montalto**. (2018) Real-time, Remote Sensing of Biophysical and Anthropogenic Conditions in Green Infrastructure Systems in Philadelphia: an Application of the Internet of Things. Oral Presentation at the World Environmental and Water Resources Conference, June 3-7, Minneapolis, MN.
- Lampen, B; Fowle, B; Elbin, S and **FA Montalto** (2018) Javits Center: A Case Study in Urban and Environmental Revitalization. Oral Presentation at the AIA Conference on Architecture 2018. June 21-23, New York City.
- Alizadehtazi, B; Gurian, P; and **FA Montalto** (2018) A Simple Model of Green Infrastructure Soil Moisture Patterns as a Function of Hydrologic Loading, Surface Treatment, and Urban Climate. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Carson, T; Enoch, M and **FA Montalto** (2018) Framework for a Performance-Based Green Roof Incentive in New York City. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Miller, S and **FA Montalto** (2018) Stakeholder Perceptions of Green Infrastructure and Ecosystem Services in New York City. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Miller, S and **FA Montalto** (2018) The Long-Term Economic and Social Impacts of Green Infrastructure in New York City. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Pasquel, F; Urisaka, M; McLaughlin, J; **Montalto, FA**; and V Paiva-Acosta (2018) New York City’s Green Infrastructure Research and Development Project – Monitoring Strategy and Protocols. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Roodsari, BK; DiGiovanni, K; Chen, W; and **FA Montalto** (2018) Case Study: Monitoring and Modeling the Hydrologic Performance of a Right of Way Bioswale in NYC. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Soldner, K; Roodsari, B; Yu, Z; Fritch, M; White, S and **FA Montalto** (2018) Reducing Costs of Green Stormwater Infrastructure Monitoring Data Collection to Inform Site Maintenance Decisions with Real-time Soil Moisture Sensing Technologies and the Internet of Things. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Smalls-Mantey, L and **FA Montalto** (2018) Quantifying the Thermal and Microclimate Effects of Small Scale Green Stormwater Infrastructure. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.

Yu, Z; Bedig, A; **Montalto, FA**; and M Quigley (2018) Automated Detection of Unusual Soil Moisture Probe Response Patterns with Association Rule Learning. Oral presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.

Poster Presentations:

Montalto, FA (2004) “Marsh Hydrology: A Simple Model for Predicting Water Table Elevation Fluctuations” Presented at the American Geophysical Union Chapman Conference: Salt Marsh Geomorphology: Physical and Ecological Effects on Landform, October 9-13, 2004 Halifax, Nova Scotia.

Montalto, FA; Behr, CT; Culligan, PJ; Vlnrotter, K; Fe, AZ (2006) “Brooklyn Property Owner Opinions And The Urban Water Cycle” Paper No. 116-5 presented at the Geological Society of America: Annual Meeting, October 22-25, 2006 Philadelphia, PA. Poster accessible at:
http://gsa.confex.com/gsa/2006AM/finalprogram/abstract_114332.htm

Moon, F.L.; Gurian, P; **Montalto, F.A.** and A.E. Aktan (2008) “Integrating human, natural and engineered systems and associated paradigms for infrastructure asset management,” Fourth International Conference on Bridge Maintenance, Safety and Management (IABMAS 08), Seoul, Korea

Basinger, M; Lall, U; and **FA Montalto** (2008) “SARET: A Rainwater Harvesting Storage Tank Sizing Tool Based on a Bootstrapped Markov Chain Model” Poster presented at the 2008 International Low Impact Development Conference, organized by the American Society of Civil Engineers, Nov. 16-19, 2008. Seattle, WA

DiGiovanni, K and **FA Montalto** (2009) Evaluation of the sustainability of rainwater harvesting and wastewater reuse to mitigate urban water issues: A NYC water quality perspective. Poster presented at PENNTEC 2009, Annual Conference of the Pennsylvania Water Environment Association (PWEA), June 7-10, 2009 Lancaster, PA

DiGiovanni, K; Gaffin, S; and **FA Montalto** (2009) The experimental results from a green roof lysimeter. Poster presented at 2010 Watershed Management Conference Madison, WI, August 23-27, 2010

Goldstein, A; DiGiovanni, K and **FA Montalto**. (2009) Statistical Examination of the Resolution of a Block-Scale Urban Drainage Model. Poster presented at the AGU Fall Meeting, San Francisco, CA, December 14-18, 2009

DiGiovanni, K; Gaffin, S; and **FA Montalto** (2009) Low Impact Development (LID) Technologies for Sustainable Stormwater Management: Studies from a Green Roof Poster presented at the AGU Fall Meeting, San Francisco, CA, December 14-18, 2009

DiGiovanni, K.; Goldstein, A; **Montalto, FA**; Morin, T; Reinhardt, L; Shaw, R; Shetty, N; and S. Yaeger. (2010) Evaluation of the Stormwater Capture Potential of New York City Soils: Implications of Infiltration Rate Variability on Urban Runoff Predictions. Presented at Million Trees Research Conference, NYC Dept. of Parks and Recreation.

Yu, Z; DiGiovanni, K and **FA Montalto**. (2010) Using a Calibrated Thornthwaite Mather Model to Estimate the Effects of Green Infrastructure on Hydro Fluxes in an Urban Watershed. Poster presentation at AGU Fall Meeting, San Francisco, CA

DiGiovanni, KA; **Montalto, FA**; and A Goldstein. (2010) “Evaluation of the Stormwater Capture Potential of New York City Soils: Implications of Infiltration Rate Variability on Urban Runoff Predictions” Cities and the Environment. (13)1. Pp 15. Available at <http://escholarship.bc.edu/cate/vol3/iss1/15>

Rostad, N and **FA Montalto** (2011) Interception Storage Capacities of Plants Used in Vegetated Stormwater Management Features. Poster Presented at the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.

Bayley, A and **FA Montalto**. (2011) Opportunities and Challenges for Collaboration in a Community-based LID project in Newark, NJ. Poster Presented at the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.

Yu, Z; **Montalto, FA**; and CT Behr. (2011) Probabilistic Analysis of the Life Cycle Cost of Green Infrastructure from an Investment Perspective. Poster Presented at the 2011 LID Symposium. Philadelphia, PA. September 25-28, 2011.

Catalano de Sousa, MR; **Montalto, FA**; and Spatari, S. (2011) LCA as a Tool to Evaluate Green Infrastructure Environmental Performance. Poster presented at the AGU Fall Meeting, San Francisco, CA. Dec. 5-9, 2011

DiGiovanni, K; Rostad, N; **Montalto, FA**; Gaffin, S; and C Rosenzweig (2011) A Comparative Analysis of Evapotranspiration from Urban Green Spaces in the Northeast US. Poster presented at the 2011 AGU Fall Meeting. December 5-9, 2011 San Francisco, CA.

Yu, Z and **FA Montalto** (2011) Optimizing Selection of Decentralized Stormwater Management Strategies in Urbanized Regions with LIDRA 2.0. Poster presented at the AGU Fall Meeting, December 5-9. San Francisco, CA.

- Yu, Z and **FA Montalto** (2012) Using machine learning to study the relationship of precipitation to other climate characteristics. Poster presentation at the 2012 AGU Fall Meeting, San Francisco, CA. December 3-7, 2012
- DiGiovanni, K; **Montalto, FA**; and S Gaffin (2012) Evapotranspiration from Urban Green Spaces in the Northeast United States. Poster presentation at the 2012 AGU Fall Meeting, San Francisco, CA. December 3-7 2012.
- Smalls-Mantey, L; DiGiovanni, K; Olson, M; and **FA Montalto** (2013) Validation of Two Soil Heat Flux Estimation Techniques Against Observations Made in an Engineered Urban Green Space. Poster Presentation at the 2013 International Low Impact Development Symposium, University of Minnesota, August 18-21, Saint Paul, Minnesota.
- Alizadehtazi, B; **Montalto, FA**; Gurian, P and K. Sjoblom (2013) Role of Vegetation and Mulch in Mitigating the Effects of Raindrop Impact on Runoff and Infiltration from Urban Vegetated Green Infrastructure. Poster Presented at 2013 AGU Fall Meeting, San Francisco, CA, December 9-13, 2013
- DiGiovanni, K and **FA Montalto** (2013) Measured Evapotranspiration Rates from Urban Green Spaces in New York City. Poster Presented at 2013 AGU Fall Meeting, San Francisco, CA, December 9-13, 2013
- Smalls-Mantey, L; Jeffers, S; and **FA Montalto** (2013) Neighborhood Scale Green Infrastructure Performance Informed by Field Monitoring and Social Interactions. Poster Presented at 2013 AGU Fall Meeting, San Francisco, CA, December 9-13, 2013
- Alizadehtazi, B; **Montalto, FA**; Sjoblom, K. (2014) The Role of Vegetation and Mulch in Mitigating the Impact of Raindrops on Soils in Urban Vegetated Green Infrastructure Systems. 2014 AGU Fall Meeting, San Francisco, CA. December 15-19, 2014.
- Kalra, M; Ochoa, A; and **FA Montalto** (2015) Identifying Affordable Rain Gauges for Green Stormwater Infrastructure Research, in 2015 Drexel Research Day, held on May 1, 2015 at Philadelphia; PA (***winners in the Undergraduate Physical Science & Engineering category***)
- Foti, R., Miller, S., **Montalto, F.** (2015) A Data-Driven Approach to Assess Coastal Vulnerability: Machine Learning from Hurricane Sandy. Poster presented at the AGU Fall meeting, 14-18 December 2015 in San Francisco, Ca.
- Alizadehtazi, B; and **FA Montalto**. (2016) The Evolution and Significance of Soil and Moisture Dynamics within New Green Spaces: The Importance of Surface Treatment. Poster Presentation at the International Low Impact Development Conference. August 29-31, 2016 Portland, Maine.
- Horton, RM; Bader, DA; **Montalto, FA**; and W Solecki (2016) Participatory Climate Research in a Dynamic Urban Context: Activities of the Consortium for Climate Risk in the Urban Northeast (CCRUN), Poster Presented at the AGU Fall Meeting, San Francisco, CA, December 12-16, 2016
- Woerdeman, S; White, S; and **FA Montalto** (2017) Philadelphia's Green Infrastructure Living Laboratory: An Academic and Municipal Partnership. World Environmental and Water Resources Conference, Sacramento, California | May 21-25, 2017
- Shevade, L and **FA Montalto** (2017) The Scale Effects of Engineered Inlets in Urban Hydrologic Processes. Poster presented at the AGU Fall Meeting, December 11-15, 2017, New Orleans, LA.
- Yu, Z; Bedig, A and **FA Montalto** (2017) Quality control of the soil moisture probe response patterns from a green infrastructure site using Dynamic Time Warping (DTW) and association rule learning. Poster presented at the AGU Fall Meeting, December 11-15, 2017, New Orleans, LA.
- Abualfaraj, N; Campellone, S; Caplan, N; Barbagianis, T; and **FA Montalto** (2018) Investigating the Hydraulic Constriction of Perforated Conveyance Pipes in a Stormwater Infiltration Planting Trench System. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Abualfaraj, N; Fagan, D; Dlborsy, Y; Cataldo J; and **FA Montalto** (2018) Monitoring the Rainfall Runoff Response of a Large-Scale Green Roof. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Alizadehtazi, B and **FA Montalto** (2018) Observed Variability in Soil Moisture in Engineered Urban Green Infrastructure Systems. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Roodsari, BK and **FA Montalto** (2018) Case Study: Water Quantity and Quality Mitigation Performance of a Constructed Wetland in New York City. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Yerk, W and **FA Montalto** (2018) Canopy Storage Capacity of Broadleaf Plants Under Different Temperature and Wetting Regimes. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.

- Shevade, L. and **FA Montalto**. (2018) Incorporating Storm Water Inlet Efficiency Into Small-scale Urban Subcatchment Model to Evaluate Spatial Performance of Green Infrastructure. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Shevade, L; Gurian, P; and **FA Montalto**. (2018) Replacement of Missing Precipitation Records Amidst Measurement Uncertainty in an Urban Rain Gage Network. Poster Presented at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.
- Uriska, M; DiGiovanni, K; and **FA Montalto** (2018) Play Ball! And Manage Stormwater? Do Artificial Turf Grass Fields Effectively Manage Stormwater. Poster presentation at the 2018 International Low Impact Development Conference. Nashville, TN. August 12-15.

Other

- Montalto, FA**. (1996) *Introduction to the Indicator Value Assessment Technique*. New Jersey Meadowlands Commission Internal publication. Document summarizing the technique used to compute wetland mitigation ratios based on multiple indicators, functions, and attributes of wetlands in the NJ Meadowlands. 14 pp.
- Montalto, FA**. (1997) *Design Rationale for Mitigation of Mill Creek Estuary*. New Jersey Meadowlands Commission Internal publication. Document summarizing the ecological and biological justification of restoration design of 139-acre saltmarsh in Secaucus, NJ. 50 pp.
- Montalto, F** and P Culligan (2006) “The Next Step in Green?” article published in a special issue of Update published by the New York Academy of Sciences. July/August 2006.
- Hill, D; Minsker, B; Ballesterio, T; Braden, J; Brezonik, P; Loheide, **Montalto, F**; S; Morgenroth, E; Pepper, I; Potter, K; Traver, R and C. Werth. *Science Requirements for adaptive and integrated water management, for WATERS Network Science Plan*, January, 21 2008.
- Montalto, FA** and E Rothstein (2008) “Decentralized Urban Water Infrastructure” article published in Leagueline: the Quarterly Newsletter for the Architects League of Northern New Jersey
- Waldman, A and **FA Montalto** (2008) *Appendix C: Memorandum on Technical Source Controls and Bibliography* provided to the New York City Mayor’s Office of Long Term Planning and Sustainability as part of the City’s Sustainable Stormwater Management Plan; see <http://www.nyc.gov/html/planyc2030/html/stormwater/stormwater.shtml>
- Center for Neighborhood Technology and American Rivers (2010) Advisor to publication of: The Value of Green Infrastructure: A Guide to Valuing its Economic, Environmental, and Social Benefits. Available for download at <http://www.cnt.org/>
- US General Services Administration, Public Buildings Service, Office of the Chief Architect. Site Commissioning Working Paper. (2017) Member of Design, Construction + Stewardship Working Group on Water. Available for download: <https://gsa.gov/portal/getMediaData?mediaId=166330>

Blogs and Press Coverage

- 9/10/17 **Eniday**. Interviewed and quoted in article entitled Green Spaces in Cities. https://www.eniday.com/en/sparks_en/green-spaces-cities/
- 9/1/17 **State Impact, A Reporting Project of NPR member Stations**. Interviewed and quoted in article: Harvey-level damage probably won’t happen in Philadelphia but intense flooding already does. Available here: <https://stateimpact.npr.org/pennsylvania/2017/09/01/harvey-level-damage-probably-wont-happen-in-philadelphia-but-intense-flooding-already-does/>
- 8/16/17 **State Impact, A Reporting Project of NPR member Stations**. Interviewed and quoted in article. Trump revokes Obama order protecting infrastructure projects from climate impacts. Available here: <https://stateimpact.npr.org/pennsylvania/2017/08/16/trump-revokes-obama-order-protecting-infrastructure-projects-from-climate-impacts/>
- 8/16/17 **Drexel News Blog**. Quick Take: The Danger of Rolling Back Building Standards in Areas Vulnerable to Flooding. <https://newsblog.drexel.edu/2017/08/16/quick-take-the-danger-of-rolling-back-building-standards-in-areas-vulnerable-to-flooding/>
- 6/14/17 **Public Health News**. Public Health and a Divided America: Challenges to the field in the new Administration’s first 100 days. <http://drexel.edu/dornsife/news/latest-news/2017/June/Dsph-spring-magazine-public-health-in-the-era-of-president-trump/>

- 6/2/17 **Philadelphia Inquirer**, Swift reaction from Pa., N.J. leaders as Trump pulls out of Paris accord. <http://www.philly.com/philly/health/environment/swift-reaction-from-pa-nj-leaders-as-trump-pulls-out-of-paris-accord-20170601.html>
- 6/1/17 **NBC 10. Quoted** on local television news broadcast regarding potential impact of Trump's decision to pull out of Paris Climate Agreement.
- 5/26/17 **Philadelphia Inquirer**, Can Italian design students solve Philly neighborhood's flooding? <http://www.philly.com/philly/health/can-italian-students-solve-eastwick-philadelphia-neighborhood-flooding-20170530.html>
- 5/19/17 **PLANPHILLY: A project of WHYY and Newsworks.org**, Researchers and residents explore ways Eastwick floods and ideas for mitigation <http://planphilly.com/articles/2017/05/19/researchers-and-residents-explore-ways-eastwick-floods-and-ideas-for-mitigation>
- 3/17/17 **Earthdesk**, The Multifunctionality of Green Infrastructure. <http://earthdesk.blogs.pace.edu/2017/03/17/the-multifunctionality-of-green-infrastructure/>
- 2/1/17 **Drexel Now**, Climate Change Workshop Tackles Solutions to a Global Problem. <http://drexel.edu/now/archive/2017/February/Climate-Change-Workshop/>
- 1/2/17 **The Nature of Cities**, Blog contribution, "Resolving to Act After the 2016 U.S. Election and the United Nations Climate Conference" <https://www.thenatureofcities.com/2017/01/02/resolving-act-2016-us-election-united-nations-climate-conference/>
- 11/21/16 **State Impact, A Reporting Project of NPR member Stations**, Interview for piece by Susan Phillips, Pennsylvania Academics Find Inspiration at Climate Conference. <https://stateimpact.npr.org/pennsylvania/2016/11/21/pennsylvania-academics-find-inspiration-at-climate-conference/#more-43458>
- 8/24/15 **New York 1**, Drexel/SWRE PhD Candidate Lauren Smalls-Mantey and one of her weather stations at Javits Center's Green Roof: <http://www.ny1.com/nyc/all-boroughs/news/2015/08/24/javits-center-s-green-roof-really-takes-flight-.html>
- 8/20/15 **CBS This Morning** Drexel/SWRE PhD Candidate Lauren Smalls-Mantey and one of her weather stations featured (briefly) on, 2015: <http://mediacenter.tveyes.com/downloadgateway.aspx?UserID=228406&MDID=5132644&MDSeed=9818&Type=Media>
- 7/22/15 **Wall Street Journal** SWRE research on the Javits Center featured. Accessible here: <https://www.wsj.com/articles/a-project-thats-literally-for-the-birds-1437559201>
- 5/19/15 **The Nature of Cities**, Global Roundtable on Resilience Invited Blog Post: Taking "resilience" out of the realm of metaphor. How do you measure resilience in cities? How would you know if your city or your community was resilient?: <http://www.thenatureofcities.com/2015/05/19/taking-resilience-out-of-the-realm-of-metaphor-how-do-you-measure-resilience-in-cities-how-would-you-know-if-your-city-or-your-community-was-resilient>
- 4/22/15 **Philadelphia Inquirer**, Drexel green roof research discussed: http://www.philly.com/philly/news/20150422_Philadelphia_roofs_are_sprouting_greenery.html
- 3/22/15 **The Nature of Cities**, Independent Blog Post, Lessons on Post-Resilience from Venice. <http://www.thenatureofcities.com/2015/03/22/lessons-on-post-resilience-from-venice-2015/>
- 12/3/14 **The New York Times**, SWRE research in Alley Pond Park and in the Smart Forest Network <http://www.nytimes.com/2014/12/03/nyregion/high-tech-woods-in-queens-help-us-monitor-urban-ecology.html?ref=nyregion>
- 10/12/14 **WNYC: NYC Public Radio** SWRE research on adaptation to extreme precipitation on WNYC: <http://www.wnyc.org/story/nyc-2050-more-rain-harder-rains/>
- 3/3/14 **The Nature of Cities**, Invited Blog Contribution on Urban Ecosystem Services, <http://www.thenatureofcities.com/2014/03/03/many-believe-that-better-information-on-the-monetary-value-of-ecosystem-services-is-critical-for-getting-cities-to-adopt-more-green-infrastructure-solutions-to-issues-such-as-storm-water-management-h/>
- 11/9/13 **The NY Daily News** SWRE research on the Jacob K. Javits Center featured in the NY Daily News: <http://www.nydailynews.com/life-style/big-town/raising-roof-article-1.1975080>

- 9/26/13 **Environmental Monitor.** SWRE research on green roofs featured <http://www.fondriest.com/news/drexel-university-researchers-hone-tools-measuring-green-roof-benefits.htm>
- Spring 2013 **Ask the Experts, Center for Watershed Protection.** Invited contribution on Green Infrastructure: <http://www.cwp.org/ask-the-experts/152-ate-franco-montalto-phd-pe>
- 12/13/12 **National Public Radio.** SWRE research on post-Sandy climate adaptation on NPR: <http://www.npr.org/2012/12/13/167075395/new-york-planners-prep-for-a-new-normal-of-powerful-storms>
- 6-7/2011 **PBS Planet Forward,** “Greenstreets: Drexel University researchers investigate urban ecosystem improvements” Video elicited by National Science Foundation Office of Legislative & Public Affairs for broadcasting on NSF’s Youtube channel (7/2011); also featured on PBS Planet Forward website (6/20/2011), and was featured Webisode on 6/28/2011 <https://www.youtube.com/watch?v=N2tZBshku3U>
- 6/15/10 **WHYY Radio Times on Philadelphia Public Radio** SWRE research on rebuilding water and sanitation infrastructure in post-earthquake Haiti on WHYY’s Radio Times: <http://whyy.org/cms/radiotimes/2010/06/15/6651/>
- 3/4/06 **The Brooklyn Papers,** coverage of Montalto’s testimony regarding water impacts of Redevelopment of the Atlantic Yards site (Brooklyn, NY)

Research Awards

I have served as Principal Investigator (PI) on approximately \$6 million in research contracts since beginning work at Drexel University in September, 2007. These contracts are listed in the table below. Not shown are research awards for which I served as Co-Investigator.

#	Submitted	Project Title	Sponsor	Total Funds	FM %	Status
1	10/01/07	Monitoring and modeling the water quality impacts of urban low impact development	NFWF	\$ 200,000	\$200,000	closed
2	06/30/08	Investigation of the hydrologic performance of the Fieldston green roof	Ethical Culture Fieldston School	\$ 2,000	\$ 2,000	closed
3	07/06/08	Engineering & design services for a green infrastructure network in a pilot neighborhood	PWD	\$ 200,000	\$200,000	closed
4	09/21/08	Forest infrastructure tools for urban communities: proposed activities to refine the LIDRA model	US Forestry Service Grant administered through NYSDEC	\$ 125,982	\$ 88,187	closed
5	02/27/09	Green street gardens and stormwater capture: creating sustainable city streets	NYSDEC, NYSDOS	\$ 134,000	\$134,000	closed
6	08/16/09	Northeast regional science assessment	NOAA	\$ 434,595	\$434,595	closed
7	10/20/09	RAPID: Sustainable stormwater technologies (CBET 1010131)	NSF	\$ 161,528	\$121,146	closed
8	03/03/10	RAPID: Supporting Haitian Infrastructure Reconstruction Decisions with local knowledge: Case study focusing on water and sanitation in Leogane (CBET 1032184)	NSF	\$ 199,854	\$ 79,942	closed
9	03/05/10	Monitoring the performance of a Stormwater wetland at ABC Carpet and Home site	NFWF	\$ 52,166	\$ 39,125	closed

10	04/08/10	Wetlands and raingarden for treatment of stormwater entering Meadow Lake, Flushing Meadows Park Queens	NYCDEP	\$ 42,676	\$ 42,676	ongoing
11	04/15/10	Implementation and monitoring of green infrastructure pilot project in Bronx, NY	NYCDEP	\$ 850,000	\$850,000	ongoing
12	04/15/10	Greenstreet gardens and stormwater capture: crating sustainable city streets	NYCDPR	\$ 51,236	\$ 51,236	closed
13	07/26/11	CAREER: Integrated Assessments of the Impacts of Decentralized Land use and Water Management Practices in Urban Ecosystems (CBET 1150994)	NSF	\$ 409,984	\$409,984	closed
14	07/26/11	Green innovation Grant: stormwater capture in the Bronx	USEPA	\$ 222,300	\$222,300	ongoing
15	08/29/11	Design of a street end park in Shoelace Park: performance monitoring	NFWF	\$ 318,371	\$318,371	closed
16	09/08/11	Poppenhusen Institute infiltration gallery	NYCDEP	\$ 24,646	\$ 24,646	closed
17	06/15/12	Greenstreet monitoring: Crotona Parkway	National Fish and Wildlife Foundation	\$ 15,998	\$ 15,998	closed
18	06/15/12	Assessments of Green Block Builds in Mantua	Local Initiatives Support corporation	\$ 32,090	\$ 32,090	closed
19	06/15/12	Monitoring the Jacob Javits Center Green Roof	Javits II Architecture LLC	\$ 90,999	\$ 90,999	closed
20	06/29/12	Development of green infrastructure techniques using natural systems	NYS Department of Environmental Conservation, funds originating with US Forest Service	\$ 40,000	\$ 40,000	closed
21	07/30/12	Research Workshop: Greening of Cities (CMMI 1249672)	NSF, subaward from Virginia Polytechnic Institute	\$ 6,669	\$ 6,669	closed
22	01/17/13	Coastal SEES (Track 2), Collaborative: Developing High Performance Green Infrastructure Systems to Sustain Coastal Cities (CMMI 1325676)	NSF	\$ 200,000	\$200,000	ongoing
23	09/18/13	Monitoring the performance of green infrastructure at the Greenburg nature preserve	NFWF	\$ 40,705	\$ 40,705	closed
24	10/13/13	Investigation into the relationship of green infrastructure to Sandy building damages	Trust for Public Land	\$ 100,000	\$ 50,000	closed
25	04/01/14	Monitoring the Jacob Javits Convention Center (Extension)	Javits II architecture	\$ 72,383	\$ 72,383	closed

26	10/01/14	Supporting Regional Implementation of Integrated Climate Resilience: Consortium for Climate Risks in the Urban Northeast (CCRUN) Phase II (NA15OAR4310147)	NOAA	\$ 550,000	\$550,000	ongoing
27	04/28/16	Green Infrastructure Living Laboratory (Year 1)	PWD	\$ 250,000	\$150,000	closed
28	01/23/15	6th Street Green Corridor	NYC DEP	\$ 111,176	\$111,176	ongoing
29	09/16/15	Analysis of real time green infrastructure data sets (Year 1)	Opti-RTC	\$ 76,351	\$ 76,351	closed
30	12/21/16	Analysis of real time green infrastructure data sets (Year 2)	Opti-RTC	\$ 65,000	\$ 65,000	closed
31	05/01/17	Javits Green Roof	NY Convention Center Operating Corporation	\$ 437,847	\$437,847	ongoing
32	05/04/18	Green Infrastructure Living Laboratory (Year 2)	PWD	\$ 300,000	\$300,000	ongoing

MS, PHD, and Postdocs Advised

The following table contains the names of MS and PhD students and postdocs for whom I have served as Prime Academic Advisor/Supervisor since beginning work at Drexel University in September, 2007. Not shown are students for whom I have served as a secondary committee member.

#	Last	First	Type	Title	Year
1	Yu	Ziwen	MS	No Thesis Published	2010
2	Berg	Stuart	MS	No Thesis Published	2010
3	Goldstein	Alisha	MS	Comparison of a High and Low Spatial Resolution Model for an Urban Block and Implications for Depicting Low Impact Development	2011
4	Alizadehtazi	Bitu	MS	Relationship between Land Cover and Infiltration Rates in Urban Landscapes	2012
5	Jeffers	Scott	MS	Characterization of the rainfall-runoff response of an urban combined sewer catchment using observed and analytical methods	2012
6	Rostad	Nathan	MS	Harvesting rooftop runoff to flush toilets: Drawing conclusions from four major U.S. cities	2012
7	White	Stephen	MS	No Thesis Published	2012
8	Sunder	Ajay	MS	Implementation of a non-parametric rainfall simulation method to size rainwater harvesting systems for stormwater management and irrigation of urban agricultural facilities	2012
9	DiGiovanni	Kimberly	PhD	Evapotranspiration from urban green spaces in a Northeast United States City	2013

10	Chen	Wei	MS	Monitoring and modeling of the hydrologic performance of the Carroll Street Right-of-Way Bioswale	2014
11	Miller	Stephanie	MS	Evapotranspiration Potential of Green Infrastructure Vegetation	2014
12	Stammermann	Ramona	PhD	Hydrodynamics and Sediment Transport Studies in Tidal Marshes of the Delaware Bay using High Resolution Numerical Models	2014
13	Feldman	Andrew	MS	Green Infrastructure in Urban Parks for Stormwater Management	2015
14	Catalano de Sousa	Maria Raquel	PhD	Assessing green infrastructure as an effective strategy to help cities to build resilience to climate change	2015
15	Kidd	Griffin	MS	Changing Climate in Philadelphia: Expert Elicitation of Climate Risks and Recommendations	2015
16	Pu	Ge	MS	Developing a Modeling Framework for Nonstationary Urban Hydraulic Analyses	2015
17	Yu	Ziwen	PhD	Assessment of the physical, socioeconomic and climatic constraints on green infrastructure	2015
18	Frazier	Lindsay	MS	The Effects of Water Table, Hydraulic Loading Ratio, and Climate Change on Constructed Wetland Stormwater Capture Performance	2016
19	Pronchik	Emily	MS	The Use of a Green Infrastructure Treatment Train to Capture Street Runoff : Monitored and Modeled Stormwater Capture Performance of a Three Bed Right-Of-Way Bioretention Facility	2016
20	Rakestraw	Emma	MS	Quantification of Stemflow in Three Isolated Shrub Species in an Urban Environment	2016
21	Jeffers	Scott	PhD	Using Fractal Geometries to Understand Urban Drainage Networks and Green Stormwater Infrastructure Development	2017
22	Miller	Stephanie	PhD	Using Multifunctional Green Infrastructure to Address Resilience in Cities	2017
23	Alizadehtazi	Bitia	PhD	The Evolution and Significance of Soil, Soil Surface, and Soil Moisture in the Ecohydrology of Engineered Urban Green Spaces	2017
24	Smalls-Mantey	Lauren	PhD	The Potential Role of Green Infrastructure in the Mitigation of the Urban Heat Island	2017
25	Lempitsky	Ian	MS	Effectiveness of Coastal Green Infrastructure Under Compound Events Due to Climate Change	2018
26	Campellone	Sabatino	PhD	An Investigation into the Factors Affecting Street Tree Rainfall Interception	2018
27	Johnson	Katelyn	MS research in progress - expected graduation 2018		
28	McGovern	Joseph	MS research in progress		
29	Shevade	Leena	PhD research in progress - expected graduation 2019		
30	Soldner	Karly	PhD research in progress - expected graduation 2022		
31	Yerk	Walter	PhD research in progress - expected graduation 2018		

32	Alizadehtazi	Bitu	Postdoc supervised 2018- Present
33	Abualfaraj	Noura	Postdoc supervised 2017- Present
34	Roodsari	Babak	Postdoc supervised 2017- Present
35	Yu	Ziwen	Postdoc supervised 2016-Present
36	Foti	Romano	Postdoc supervised 2014-2015
37	Kader	Omar	Absentia
38	Ogonek	Peter	Absentia
39	Waldman	Alex	Absentia
40	Walsh	Mary	Absentia