CURRICULUM VITAE

James A. Montgomery, Ph.D.
Associate Professor
Vincent DePaul Professor
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Scholarly and Service Interests: wetland science, urban soils, environmental science education; sustainability

As of January 8, 2015
Note: activities since last merit review are highlighted in yellow.

CURRICULUM VITAE

NAME: James A. Montgomery

EDUCATION:

Ph.D. in Soil Science (1993), Washington State University
Dissertation: *Measurement and Prediction of Long-Term Soil-Landscape Change in the Palouse Region Induced by Tillage and Water Erosion.*

M.S. in Geology (1986), Baylor University
Thesis: *The Geomorphic Evolution of the Taylor Black Prairie between the Trinity and Colorado Rivers.*

B.S. in Geology, *cum laude* (1982), Baylor University
Thesis: *The Descriptive Geomorphology of the Taylor Black Prairie between the Trinity and Colorado Rivers.*

ACADEMIC APPOINTMENT

June 2000 – present: **Associate Professor with tenure**, Environmental Science Program, DePaul University, Chicago, IL.

August 1992-June 2000: **Assistant Professor**, Environmental Science Program, DePaul University, Chicago, IL

June 1990 – June 1991: **Instructor**, Department of Crop and Soil Sciences, Washington State University, Pullman, WA.

ADMINISTRATIVE APPOINTMENTS

2004 – 2010: Director, Environmental Science Program

TEACHING EXPERIENCE[1]

Undergraduate Courses for ENV Majors

- ENV 350 – Senior Capstone (WQ 2013, SQ 2013)

HON Program Courses

- HON 225 – Intro. To Environmental Science (SQ 2013)

[1] Courses taught since the last merit review

Undergraduate Research Supervision

- **Cassie Shah –** Environmental Science Major
  Project: *Measuring Rates of Atmospheric Phosphorus Deposition into a Freshwater Wetland.* **(In progress)**
- **Christian DeKnock (BA), Katy Rico (BS), Yarency Rodriguez (BS), Kate Vollrath (BA), Ellen Webb (BS), Allison Williams (BA) -** *Community-based Soil Quality Assessment as a Tool for Designing an Urban Green Infrastructure Network to Manage Runoff.* This project is funded by the USEPA P3 Program ("People-Prosperity-Planet"). Co-directed with Cr. Christie Klimas in the Department of Environmental Science and Studies. **(In progress).**
- **Robin Zalinger** – Environmental Science Major
  Project: *A Comparison of Water Quality in Two Lincoln Park Ponds Undergoing Different Management Practices* **(In progress)**
- **Miki Yoshimura-Rank** – Environmental Science Major
  Project: *Recycling Habits in a University Setting* (Completed Spring 2013)
- **Kathryn Rico** – Environmental Science Major
  Project: *Characterization of sediment in a restored freshwater wetland through analysis of select chemical and physical properties, source determination, and sedimentation rates* (Completed Spring 2013)
- **Tim Mazurek** – Environmental Science Major
  Project: *Comparison of phosphorous storage and release by two wetland plant species* (Completed Spring 2013)
- **Carl McNeese** – Environmental Science Major
  Project: *The Use of ArcGIS to Assess Soil Characteristics of Lincoln Park, Chicago* (Completed Spring 2013)
- **Erin Economos** – Environmental Science Major
  Project: *Explorations in using the annuals Indian mustard (Brassica juncea), geraniums (Pelargonium), and sunflowers (Helianthus annuus) for the phytoremediation of lead contaminated urban garden soils* (Co-directed with Judy Bramble; Completed Spring 2013)
- **Carolyn Samuelson** – Environmental Science Major
  Project: *Analysis of Stormwater Runoff Quality in the Lincoln Park Neighborhood* (Completed Spring 2012)
- **Danny O'Rourke** – Environmental Science Major. *Comparison of lead content in organically grown versus conventionally grown leafy greens at Eden Place Nature Center*. (Completed Spring 2012).

2006-2012

- **Helena Gren** – Environmental Science Major.
  Project: *Comparative changes in removal efficiencies in Prairie Wolf Slough.* (Completed 2006)
- **Keegan Delaney** – Environmental Science Major
  Project: *Phosphorus Release from Detritus in a Northeastern Illinois Constructed Wetland (*Completed 2006; J.M. Eames Co-Advisor)
- **Joshua Anderson** – Environmental Science Major
  Project: *Framework for a sustainable campus master plan: DePaul University Lincoln Park Campus*. (Completed 2007)
- **Jason Macejak** – Environmental Science Major
  Project: *A comparative examination of indoor air quality legislation on the state and federal level of government.* (Completed 2007)
- **Nicole Scharko –** Environmental Science Major
  Project: *A comparative look at the sustainable city movement through the use of environmental indicators in an urban community in Chicago. (Completed 2007)*
- **Zachary Howard –** Environmental Science Major
  Project: *Survey of DePaul residence hall occupants' use of resources and environmental attitudes and habits.* (Completed 2008)
- **Kim Frye –** Masters Student in ISP/MALS Program
  Project: Links in Lincoln Park: above-and belowground interactions in an urban forest. (Completed 2008)
- **Jeffrey Sprovkin –** Environmental Science Major
  Project: *Calculation of the Hydrologic Budget for Prairie Wolf Slough Wetland Demonstration Project.*
  (Funded by UGRA Summer 2009; Completed 2010).
- **Vincent Pansino –** Environmental Science Major
  Project: *Coupled Soil-Water Phosphorous Dynamics at Prairie Wolf Slough Wetland Demonstration Project.* (Completed 2010).
- **Sandra Begani** – Environmental Science Major
  Project: *Determination of Hydrology and Soil Chemistry in a Midwestern Temperate Zone Fen* (Completed 2010)
- **Anne Wagenaar** – Environmental Science Major
  Project: *Method Evaluation of Macroinvertebrate Collection at Prairie Wolf Slough* (Completed 2012).
- **Bobbi Jo Fernandez** – Environmental Science Major
  Project: *Phosphorus Uptake by Cattail Plants at Prairie Wolf Slough Wetland* (Completed 2012)

2001-2005

- **Greg Cegielski** – Environmental Science Major.
  Project: *Nutrient Dynamics Along Hydrologic Gradients in a Restored Wetland.(*Completed).
- **Michele Hargreaves –** Environmental Science Major.
  Project: *Impacts of Woody Invasive Species on Soil Properties.*
- **Jamie Sandifer** – Environmental Science Major.
  Project: *A Comparative Look at the Costs and Benefits of a Green Building Program at an Academic Institution.* (Completed).

1996-2000

- **Mattia Prian** -Department of Chemistry.
  Master's Thesis: ***Evaluation of membrane technologies for electroless copper wastewater treatment****.*
- **Elizabeth Elverson** – Environmental Science Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Research Assistant Program Grant. *Project*: *Nutrient and sediment budgets in a restored wetland in northeastern Illinois.*(Completed).
- **Nicole Stojak** – Environmental Science Major
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant and an Urban Forestry Program Grant. *Project: Water quality assessment of the North Branch of the Chicago River, Lake County, Illinois.* (Completed).
- **Bryan Moore** – Environmental Science Major.
  Recipient: Urban Forestry Program Grant. *Project: Particle-size analysis of prairie/wetland soils.* (Completed).
- **Kara Hellige** – Environmental Science Major.
  Recipient: Urban Forestry Program Grant. *Project: S*t*reambank erosion and sediment transport in the Middle Fork, North Branch-Chicago River, Highland Park, IL*. (Completed).
- **Patricia Veltri** - Environmental Science Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project****: Analysis of spatial and temporal variations in major cation chemistry in the soil and groundwater of a wetland ecosystem*. (Completed).
- **Josh Mallan** - Geography/History Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project:*** *Mapping the Des Plaines River watershed using GIS.* (Completed).
- **Raffat Little** – Environmental Science Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project:*** *Assessing the physical relationship between water table fluctuations and spatial variations in soil redox potential in a wetland ecosystem*. (Completed).

- **Bil McCann** – Environmental Science Major.
  Characterization of soil physical and chemical properties at Somme Woods, Northbrook, IL. (Completed).
- **Jay Flanyak** – Geography Major.
  Environmental Impact Statement: Construction of a condominium and Jewel/Osco Superstore complex in Bannockburn, Illinois. (Completed).
- **Lisa Sciolaro** – International Studies Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant**.** ***Honors Program Senior Thesis:*** *Development, the environment, and public health.* (Co-supervised with Charles Strain, Religious Studies Department). (Completed).
- **Priscilla Villeda** – Environmental Science Major.
  Recipient: Alliance for Minority Participation (AMP) Grant. ***Project:*** *Characterization of soil physical properties at Somme Woods, Northbrook, IL.*
- **Cynthia Grace** – Environmental Science Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project:*** *A comparison of two methods for determining soil texture.* (Completed).
- **Scott Morgan** – Math Major**.**
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project:*** *Environmental Models.*
- **Phillip Mole** – Chemistry Major.
  Recipient: College of Liberal Arts and Sciences Undergraduate Summer Research Program Grant. ***Project:*** *A preliminary investigation of the structure and function of an inland freshwater marsh.* (Completed).

GRANTS AND CONTRACTS

2012

C. Klimas and J.A. Montgomery. Grantor: Vincentian Endowment Fund. Title: *Improving soil management via education and community empowerment*. **$5,000**. INTERNAL. [Co-PI; **FUNDED**].

Montgomery, J.A. and C.A. Klimas. Grantor: U.S. Environmental Protection Agency. Title: *Community-based Soil Quality Assessment as a Tool for Designing an Urban Green Infrastructure Network to Manage Runoff.* **$15,000.** EXTERNAL. [PI; **FUNDED**].

2011

Montgomery, J.A. and C.A. Klimas. Grantor: U.S. Environmental Protection Agency. Title: *Community-based Soil Quality Assessment as a Tool for Microsite Management of Pollutant Runoff.* **$15,000**. EXTERNAL. [PI; Not funded].

C. Klimas and J.A. Montgomery. Grantor: Vincentian Endowment Fund. Title: *Improving soil management via education and community empowerment.* **$9,000**. INTERNAL. [Co-PI; Not funded].

2010

Montgomery, J.A. Grantor: DePaul University College of Liberal Arts and Sciences Faculty Research and Development Committee – Undergraduate Research Assistant. Title: *Evaluation of heavy metal concentrations in soils of the Lincoln Park Neighborhood.* Funding of 150 hours for undergraduate CHE student Michael Cycon to assist me with this project in WQ and SQ 2011. INTERNAL. [PI; Funded].

2009

Montgomery, J.A. Grantor: DePaul University College of Liberal Arts and Sciences Faculty Research and Development Committee – Undergraduate Research Assistant. Title: *Calculation of the hydrologic budget for Prairie Wolf Slough Wetland-Demonstration Project.* Funding of 75 hours for undergraduate student Jeffrey Sprovkin to assist me with this project in WQ and SQ 2011. INTERNAL. [PI; Funded].

2008

Montgomery, J.A. and M.E. Workman. Grantor*:* DePaul University College of Liberal Arts and Sciences – Quality of Instruction Council - Departmental Initiative Academic Technology Grant. Title: *The potential for online learning in the Environmental Science Program.* $7,500. [PI; Funded].

2006

Montgomery, J.A. and M. Pfister. Grantor: U.S. Environmental Protection Agency. Title: *Evaluation of a Restored Farmed Wetland as a Best Management Practice for Phosphorous Removal.* $92,727. EXTERNAL. [PI; Not funded].

Montgomery, J.A., L.J. Heneghan and M.A. Workman. Grantor: USDA Cooperative State Research, Education, and Extension Service – Agroecosystems Program Cluster. Title: *Dynamics of carbon and nitrogen in soils along a gradient of human impact: our need for a total carbon-nitrogen analyzer.* $45,000. EXTERNAL. [Co-PI; Funded].

2001

Montgomery, J.A. Grantor: DePaul University College of Liberal Arts and Sciences Faculty Research and Development. Title: *Nutrient dynamics and water budget along a forest wetland hillslope transect,* DePaul University College of Liberal Arts and Sciences Faculty Research and Development Grant. $4,500. INTERNAL. [PI;Funded].

1999

Montgomery, J.A. and S. McChesney. Grantor: The Nature Conservancy and the Forest Preserve District of Cook County. Title: *An investigation of the hydropattern characteristics of invasive woody species communities: implications for savanna/wetland restoration planning and management.* ($5,500 + $1,500 match from DePaul University). EXTERNAL. [PI; Funded].

Montgomery, J.A., L. A. Masters, and S. McChesney. Grantor: Chicago Wilderness Partnership/Illinois Department of Natural Resources. Title: *Hydropattern characteristics of invasive woody species: implications for wetland restoration and management* . $4,000. EXTERNAL. [Co-PI; Not funded].

Montgomery, J.A. and J.P. Tandarich. Grantor: Wisconsion-Illinois Upper Des Plaines Ecosystem Partnership/Illinois Department of Natural Resources. Title: *Evaluating the human impact on wetland ecosystems in a rapidly urbanizing watershed in northeastern Illinois.* $15,000. (Co-PI; Not funded].

Montgomery, J.A. Grantor: Corlands and U.S. Army Corps of Engineers. Title: *Baseline groundwater hydrologic monitoring at Gensburg-Markham Prairie, Oak Forest, IL.* $7,500. EXTERNAL. [PI; Funded].

1998

Montgomery, J.A. Grantor: U.S. Fish and Wildlife Service. Title: *Water quality improvement by Prairie Wolf Slough Wetlands Demonstration Project* **($25,000 + $13,000 match from DePaul University).** EXTERNAL. [PI; Funded].

1997

Montgomery, J.A. Grantor: Friends of the Chicago River. Title: *Water quality monitoring program at Prairie Wolf Slough Wetlands Demonstration Project.* $10,000. EXTERNAL. [PI; Funded].

Montgomery, J.A. and J.P. Tandarich. Grantor: Charles and Anne Morrow Lindbergh Foundation. Title: *Evaluating the human impact on wetland ecosystems in a rapidly urbanizing watershed in northeastern Illinois*. $25,000. EXTERNAL. [Co-PI; Not funded].

Montgomery, J.A. and J.P. Tandarich. Grantor: U.S. Department of Agriculture-Natural Resources Conservation Service. Title: *Urban uses of STATSGO and SSURGO and associated databases.* $20,000. EXTERNAL. [Co-PI; Not funded].

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences – University Research Council Paid Sabbatical Leave Program. Title:*Assessing wetland functions using a hydrogeomorphic approach* [One-quarter paid leave program for untenured junior faculty]. Leave was approved.

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences – University Research Council. Title: *Assessing wetland functions using a hydrogeomorphic approach.* $2,500. INTERNAL. [PI; Funded].

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences Faculty Research and Development Grant. TITLE: *Evaluation of soil-water potential and unsaturated flow using tensiometers.* $3,500., INTERNAL. [PI; Funded].

1996

J.A. Montgomery. Grantor: Camille and Henry Dreyfus Postdoctoral Program in Environmental Science for a post-doctoral environmental scientist to collaborate on projects to investigate the physicochemical processes involved in hydric soil genesis. [Request denied].

1995

J.A. Montgomery. Grantor: Forest Preserve District of Cook County Restoration Research Fund. Title: *Effects of prescribed burning on hydrophytic vegetation and selected soil properties in a palustrine emergent marsh.* $2,000. INTERNAL. [PI; Not funded].

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences – University Research Council. Title: *An investigation of hydromorphic features at an inland marsh near Northbrook, IL*. $2,500. INTERNAL. [PI; Not funded].

1994

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences – University Research Council. Title: *A preliminary investigation of the structure and function of an inland marsh near Northbrook, IL*. $2,500. INTERNAL. [PI; Funded].

J.A. Montgomery. Grantor: DePaul University College of Liberal arts and Sciences Faculty Research and Development Grant. Title: *A preliminary investigation of the structure and function of an inland marsh near Northbrook, IL*. $3,500. INTERNAL. [PI; Funded].

1993

J.A. Montgomery. Grantor: DePaul University College of Liberal Arts and Sciences Quality of Instruction Council Grant. Summer curriculum development grant to develop a three-hour geology laboratory course to accompany PHY 105, ***Physical Geology*.** $3,500. INTERNAL. [PI; Funded].

PUBLICATIONS

Refereed Journal Articles

2014

J.A. Montgomery, C.A. Klimas, J. Arcus, C. DeKnock, K. Rico, Y. Rodriguez, K. Vollrath, E. Webb, and A. E. Williams. *Using A Soil Quality Assessment Approach For Designing Urban Green Infrastructure.* Submitted to the Journal of Environmental Quality, December 2014. **[IN REVIEW].**

2008

Heneghan, L., S.P. Miller, M.A. Callaham Jr; S. Baer, J.A. Montgomery, S. Richardson, C.C. Rhoades, and M. Pavao-Zuckerman. *Integrating a soil ecological perspective into restoration management*. Restoration Ecology Vol. 16, No. 4, pp. 608-617 (December 2008).

Montgomery, J.A. and J.M. Eames. *Prairie Wolf Slough Wetlands Demonstration Project: A Case Study Illustrating the Need for Incorporating Soil and Water Quality Assessment in Wetland Restoration Planning, Design and Monitoring.* Restoration Ecology Vol. 16, No. 4, pp. 618-628 (December 2008).

2001

Eames, J.M., J.J. Mihelic, J.A. Montgomery, and S. Kauffman. *Watershed management in Woods Creek Watershed, Illinois. AWRA Proc. International Conf. On Riparian Ecology and Management in Multi-Use Watersheds.* Portland, OR.

2000

Montgomery, J.A. and J.P. Tandarich. *Use of natural resource information in wetland creation and restoration: reflections on the value of talking and listening*. Ecol. Rest. 18:1.

1998

J.A. Montgomery, D.K. McCool, A.J. Busacca, and B.E. Frazier. *Quantifying tillage translocation and deposition rates due to moldboard plowing in the Palouse Region of eastern Washington, USA*. Soil & Tillage Research, 51:175-187.

McCool, D.K., J.A. Montgomery, A.J. Busacca, and B.E. Frazier. *Soil degradation by tillage movement.* Advances in GeoEcology 31:327-332

1997

Montgomery, J.A., Busacca, A.J., B.E. Frazier, and D.K. McCool. *Evaluating soil movement rates in a Palouse watershed using ^{137}Cs and RUSLE.* Soil Sci. Soc. Am. J. 61:571-579.

Book Chapters

2014

Klimas, C.K., and J.A. Montgomery. Science in service to society: using soil science to create solutions/visions for vacant lots in low income neighborhoods. RISE Research Vo. 8. **(IN REVIEW)**

1998

Montgomery, J.A., J.P. Tandarich, and P.M. Whited. *Ch. 10. Use of soil information for hydromorphic assessment.* Pp. 229-250 in Richardson, J.L., and M.J. Vepraskas (eds.). ***Wetland Soils: Their Genesis, Morphology, Hydrology, Landscapes, and Classification***, CRC Press, Boca Raton, FL.

Richardson, J.L., J.L. Arndt, and J.A. Montgomery. Ch. 3. *Hydrology of wetland and related soils*. Pp. 35-84 in Richardson, J.L., and M.J. Vepraskas (eds.). ***Wetland Soils: Their Genesis, Morphology, Hydrology, Landscapes, and Classification,*** CRC Press, Boca Raton, FL.

Unpublished Manuscripts

2011

Montgomery, J.A. and S.V. Kelley (eds). *What Sustains Us? An Institutional Sustainability Plan for DePaul University.* Report #5 of the Sustainability Initiatives Task Force.

2010

Montgomery, J.A. and S.V. Kelley (eds). *Sustainabilty at DePaul University: Recommendations to the Strategic Planning Task Force.* Report #4 of the Sustainability Initiatives Task Force.

Montgomery, J.A., B.F. Nahser and S.V. Kelley (eds). *A Report on the Curriculum Research and Roundtable Discussions on Sustainability Initiatives at DePaul.* Report #3 of the Sustainability Initiatives Task Force.

Montgomery, J.A. and S.V. Kelley (eds). *A Guidance Document for Developing a Sustainability Master Plan at DePaul.* Report #2 of the Sustainability Initiatives Task Force.

2009

S.V. Kelley and J.A. Montgomery (eds.) *What Must Be Done? DePaul As Sustainable Learning Community.* Report #1 of the Sustainability Initiatives Task Force.

2004

Montgomery, J.A., J.M. Eames, M.A. Workman and J.E. Bramble. **Final Report: FINAL REPORT:** Water Quality Improvement by Prairie Wolf Slough Wetlands Demonstration Project. Submitted to U.S. Department of the Interior - Fish and Wildlife Service.

2002

Montgomery, J.A. Water Quality Improvement by Prairie Wolf Slough Wetlands Demonstration Project. 2001-2002 Progress Report. Submitted to U.S. Department of the Interior - Fish and Wildlife Service.

Montgomery, J.A. and S. McChesney. Final Report-Part 2: *An Investigation of the Hydropattern Characteristics of Invasive Woody Species Communities: Implications for Savanna/Wetland Restoration Planning and Management.* Submitted to The Nature Conservancy.

2001

Montgomery, J.A. Water Quality Improvement by Prairie Wolf Slough Wetlands Demonstration Project. 1999-2001 Progress Report. Submitted to U.S. Department of the Interior - Fish and Wildlife Service

2000

Montgomery, J.A. and S. McChesney. Final Report-Part 1: *An Investigation of the Hydropattern Characteristics of Invasive Woody Species Communities: Baseline Characteristics.* Submitted to The Nature Conservancy.

1997

Montgomery, J.A. Final Report-Part 1: *Assessing wetland functions using a hydrogeomorphic approach.* Submitted to DePaul University College of Liberal Arts and Sciences University Research Council.

Montgomery, J.A. Final Report: *An investigation of hydromorphic features at an inland marsh near Northbrook, Illinois.* Submitted to DePaul University College of Liberal Arts and Sciences University Research Council.

1996

Montgomery, J.A. Final Report: *A preliminary investigation of the structure and function of an inland marsh near Northbrook, Illinois.* Submitted to DePaul University College of Liberal Arts and Sciences University Research Council.

1994

Montgomery, J.A. *The nature and origins of the Blackland Prairies of Texas.* Pp. 24-40 in Sharpless, M.R., and J.C. Yelderman (eds). ***The Texas Blacklands: Land, History, Culture,*** Baylor University Program for Regional Studies, Waco, TX.

1992

Busacca, A.J. and J.A. Montgomery. *Yield-landscape variation in soil physical properties of the Northwest Dryland Crop Production Region*. Pp. 8-18 in Veseth, R.J. and Miller, B.C. (eds). ***Precision Farming Variable Cropland: An Introduction to Variable Management Within Whole Fields, Divided Slopes, and Field Strips.*** Washington State University Cooperative Extension and University Cooperative Extension System, Pullman, WA.

Works in Progress

Manuscripts in Progress – 2013-2014

- Montgomery, J.A. and J.M. Eames. Phosphorous release from a restored farmed wetland in northeastern Illinois.

SCHOLARLY PAPERS PRESENTED

Conference Presentations

2014

Montgomery, J.A. and J.M. Eames. *Prairie Wolf Slough: A Case Study Illustrating the Need for Incorporating Land Use History and Soil Quality Assessment in Wetland Restoration Planning, Design and Monitoring.* 2014 International Meeting of the Soil Science Society of America. November 2-5, 2014, Long Beach, CA. **INVITED ORAL PRESENTATION.**

C.A. Klimas and J.A. Montgomery. *Soils in the city*: growing green infrastructure & community. SENCER SCI-Midwest Regional Symposium, Teaching College Science and Math Through Food, Health and Sustainability

Themes. March 8, 2014. Roosevelt University-Schaumburg Campus. **ORAL PRESENTATION**

Montgomery, J.A. and C.A. Klimas. Community-based Soil Quality Assessment as a Tool for Designing an Urban Green Infrastructure Network to Manage Runoff. Presentation at the "Soils in the City-Enhancing Urban Soils for Living Landscapes and Healthy Communities" conference, June 29-July 2, Chicago, IL. **ORAL PRESENTATION**

2013

Montgomery, J.A. and J.M. Eames. Export of Phosphorus from a Restored Shallow Marsh in Northeastern Illinois. 5th World Congress on Ecological Restoration, October 6-11, 2013, Madison, WI. POSTER PRESENTATION

2012

Montgomery, J.A. and J.M. Eames. *Phosphorus release from a restored farmed wetland in northeastern Illinois.* 17th Annual Conference, Wisconsin Wetlands Association, February 22-23, 2012, Lake Geneva, WI. POSTER PRESENTATION.

Montgomery, J.A. and J.M. Eames. *Phosphorus Release from Soils in Restored Farmed Wetlands*. 2012 International Meetings of the 76th Annual Meeting of the Soil Science Society of America, October 21-24, 2012, Cincinnati, OH. POSTER PRESENTATION.

2011

Montgomery, J.A. and S. V. Kelley. *The Place of Sustainability in the University Strategic Plan.* Annual Meeting of the Association for the Advancement of Sustainability in Higher Education (AASHE), October 9- 12, Pittsburgh, PA. ORAL PRESENTATION.

Frye, K. L. and J.A. Montgomery. *Tree Species-Driven Effects on Above- and Below-Ground Feedbacks in An Urban Forest.* 2011 International Meetings of the 75th Annual Meeting of the Soil Science Society of America, October 16-19, 2011, San Antonio, TX. POSTER PRESENTATION.

2009

Montgomery, J.A., W.H. Warner, and K. Frye. *Phosphorous dynamics in a restored freshwater marsh in suburban Chicago: A case study illustrating the need for incorporating soil and water quality assessment in wetland restoration planning, design and monitoring.* Annual Meeting, Society of Wetland Scientists, June 22-26, Madison, WI. POSTER PRESENTATION.

2005

Montgomery, J.A. and J.P. Tandarich. *Soil Scientists by Any Other Name.* 97th Annual Meeting, Soil Science Society of America, November 6-November 10, Salt Lake City, UT. ORAL PRESENTATION.

Montgomery, J.A. and J.M. Eames. *The Effectiveness of Native Landscaping in Providing Functional Hydrological and Biogeochemical Cycles: Myth vs Reality.* Annual Meeting of the Soil and Water Conservation Society, July 25-28, Rochester, NY. ORAL PRESENTATION.

2004

Montgomery, J.A. and J.M.Eames. *The hydrologic benefits of native landscaping.* Landscaping with Native Plants: Exploring the Environmental, Social and Economic Benefits, Conference, DePaul University, December 8, 2004. ORAL PRESENTATION.

2003

Montgomery, J.A., K.A. Labno, and M.A. Workman. *Water quality functions in a reclaimed wetland. Soil Science Society of America.* 95th Annual Meeting, Soil Science Society of America, November 2-November 7, Denver, CO. POSTER PRESENTATION.

2002

Montgomery, J.A., E. Elverson, J. Neukom, M. Pfister. *Water Quality Dynamics in a Restored Wetland in Northeastern Illinois*. Society of Wetland Scientists, Annual Meeting, June 2-6, Lake Placid, NY. POSTER PRESENTATION.

2001

Montgomery, J.A., D. Ramsay, E. Elverson. *Restoration of Wetland Values and Functions at Prairie Wolf Slough: An Update.* 22nd Annual Society of Wetland Scientists Conference, May 27 – June 1, 2001, Chicago, IL. ORAL PRESENTATION.

Eames, J.M., J.J. Mihelic, J.A. Montgomery, and S. Kauffman. *Watershed management in Woods Creek Watershed, Illinois. AWRA Proc. International Conf. On Riparian Ecology and Management in Multi-Use Watersheds.* Portland, OR. POSTER PRESENTATION.

Montgomery, J.A. *Landscape-vegetation-hydromorphic relationships in a wet soil catena.* 22nd Annual Society of Wetland Scientists Conference, May 27 – June 1, 2001, Chicago, IL. POSTER PRESENTATION.

1999

Montgomery, J.A., J.P. Tandarich, S. McChesney, P. Veltri, and S. Kauffman. *Landscape-vegetation-hydromorphic relationships in a wet soil catena.* Division S-10 (Wetland Soils), 91st Annual Meeting, Soil Science Society of America, October 31-November 3, Salt Lake City, UT. POSTER PRESENTATION.

1998

Montgomery, J.A. and J.P. Tandarich. *Use of natural resource information in wetland creation and restoration,* 90th Annual Meeting, Soil Science Society of America, October 18-22, Baltimore, MD.ORAL PRESENTATION.

1997

Montgomery, J.A., and J.P. Tandarich. *Use of soil information for*

hydrogeomorphic assessment in an urbanizing Area. Division S-10 (Wetland Soils), 89th Annual Meeting, Soil Science Society of America, October 26-31, Anaheim, CA. ORAL PRESENTATION.

Montgomery, J.A., D.K. McCool, A.J. Busacca, and B.E. Frazier. *Tillage soil movement and soil degradation in the Palouse Region of Eastern Washington, USA.* Tillage Translocation & Tillage Erosion International Symposium, July 24-25, Toronto, Ontario, Canada. POSTER PRESENTATION.

McCool, D.K., J.A. Montgomery, A.J. Busacca, and B.E. Frazier. *Soil degradation by tillage movement.* 9th ISCO Conference: ***Towards Sustainable Land Use,*** Bonn, Germany, August 26-30. ORAL PRESENTATION.

1996

Montgomery, J.A., and B.A. McCann. *A preliminary investigation of the structure, function, and soil hydromorphology of a palustrine emergent marsh.* 23rd Natural Areas, 15th North American Prairie, and Indiana Dunes Ecosystems Conferences, October 23-26, St. Charles, IL. ORAL PRESENTATION.

Montgomery, J.A., and B.A. McCann. *An investigation of soil hydromorphological features in an emergent marsh in Northbrook, IL.* Division S-10 (Wetland Soils), 88th Annual Meeting, Soil Science Society of America, November 3-8, Indianapolis, IN. POSTER PRESENTATION.

1995

Montgomery, J.A., B.A. McCann, and P.N. Molé. *A preliminary investigation of the structure and function of a palustrine emergent marsh in Northbrook, IL.* Division S-10 (Wetland Soils), 87th Annual Meeting, Soil Science Society of America, October 29-November 1, St. Louis, MO. POSTER PRESENTATION.

1992

Montgomery, J.A., B.E. Frazier, A.J. Busacca, and D.K. McCool. *Evaluation of soil movement rates in an open watershed using ^{137}Cs as a tracer.* Division S-5 (Pedology), 84th Annual Meeting, Soil Science Society of America, October 30-November 3, Denver, CO. ORAL PRESENTATION.

Busacca, A.J. and Montgomery, J.A. *Yield-landscape variation in soil physical properties of the Northwest Dryland Crop Production Region*. 10th Inland Northwest Conservation Farming Conference, February 18, Pullman, WA. ORAL PRESENTATION.

1990

Montgomery, J.A. *The nature and origins of the Blackland Prairies of Texas.* ***The Texas Blacklands: Land, History, Culture,*** Baylor University, April 20, Waco, TX. ORAL PRESENTATION.

OTHER INVITED PRESENTATIONS

2010

Montgomery, J.A. *The Environmental Practice Journal*. Presentation given at the 35th Annual Conference of National Association of Environmental Professionals, April 27-30, 2010, Atlanta, GA.

2008

Montgomery, J.A. *Some idle thoughts and random speculations on my best practices in teaching.* Delivered at the DePaul Faculty Teaching and Learning Conference. ORAL PRESENTATION.

Montgomery, J.A. *Chicago: An Accident of Geography and the Making of a Metropolis.* Delivered at the Geography and Environmental Studies Department weekly seminar at Monash University, Melbourne, Australia. August 20, 2008. ORAL PRESENTATION.

2006

Montgomery, J.A. and J.M. Eames. *Prairie Wolf Slough: A Case Study of Soils as an Afterthought in Wetland Restoration Design and Management.* Delivered at "Soils and Restoration Ecology" conference, 18-20 December 2006, DePaul University (Liam Heneghan and Mac Callaham organizers). ORAL PRESENTATION.

Montgomery, J.A. *Resource Conservation and Management in the Urban Environment: Science the Practitioner Can Use.* Annual Meeting of the Soil and Water Conservation Society, 22-26 July, Keystone, CO. Note: This was a special seminar that I convened for this meeting.

2004

Montgomery, J.A., J.M. Eames, M.A. Workman, J.E. Bramble, and M. Pfister. *Urban wetland restoration: Water quality functions of a restored wetland in Chicagoland.* Invited seminar at School of Public and Environmental Affairs, Indiana University. February 26, Bloomington, IN. ORAL PRESENTATION.

2001

Montgomery, J.A. *The wonderful world of wetlands.* ORAL PRESENTATION at LAS Faculty Research Seminar.

1998

Montgomery, J.A. *Use of natural resource information in wetland creation and restoration,* 90th Annual Meeting, Soil Science Society of America, October 18-22, Baltimore, MD.

1995

Montgomery. J.A. *Structure and function of a palustrine emergent marsh in northeastern Illinois.* ORAL PRESENTATION at LAS Faculty Research Seminar.

1994

Montgomery, J.A. *Use of geostatistics in the earth and environmental sciences.* ORAL PRESENTATION at LAS Faculty Research Seminar.

SERVICE

University

- **Member**-University Honors Program Committee
- **Co-Director**-DePaul Sustainability Network
- **Member** – Fair Business Practices Committee (Scott Kelley, Chair)
- **Member,** North Central Association Accreditation Committee, Chapter 1 Team (Mission and Integrity); Tom Drexler and Jim Halstead, Co-Chairs (2006).
- **Chair**, Scientific Inquiry Domain (SID) Committee (2001-2004).
    - Authored SID Assessment Report for Office of Teaching, Learning and Assessment (2001-2004).
    - Authored SID Report for Academic Program Review (2003).
- Academic Integrity Board (1994-1996)

College of Science and Health

- **Member**-Search Committee for Permanent CSH Dean, (Dr. Don Casey, Chair).
- **Member** – Assessment Committee (Dr. Richard Niedziela, Associate Dean, Chair).

College of Liberal Arts and Sciences

***2007-2010* Activities**

- **Member –** College Committee on Curriculum and Planning (CCCP-Lynn Narasimhan, Chair), 2009-2011
- **Member -** Faculty and Staff Advisory Board to the Division of Student Affairs (Jim Doyle, EVP Student Affairs, Chair), 2010
- **Director** – New B.A. degree in Environmental Studies degree.
- **Member -** Educating the Educators Task Force (Lynn Narasimhan, Chair).
- **Chair** - Student Field Experience Advisory Task Force.
- **Member -** "Promoting Academic Programs to Impact K-12 Community College. Education of Educators" (Lynn Narasimhan, Chair).
- **Member -** Institute for Nature and Culture (Liam Heneghan and Bill Jordan, Co-Directors).
- **Instructor -** Masters of Science in Science Education (Lynn Narasimhan, Director).
- **Member -** Committee to develop M.S. degree in Environmental Science Teaching (David Jabon and Lynn Narasimhan, co-PIs).
- **Member -** Forum on Nature and Culture Committee (Liam Heneghan and William Jordan III, co-Directors).
- **Participant –** Advising Encounter Workshop (Bob Rotenberg).
- **Participant –** *Visit Days* for prospective students.
- **Participant –** *Major-Minor Fair*.
- **Participant -** Natural Sciences and Mathematics Divisional Meeting (Lynn Narasimhan, Chair.

<u>Past Actitivies</u>

- Discussant, FGC-sponsored panel discussion on benefits of green buildings (Liam Heneghan, FGC member and convener; Spring 2006).
- Member, Teaching Committee (Lynn Narasimhan, Chair, 2004-2005).
- ESP representative - *Visit Days* for prospective students (Fall 2004).
- Panel Discussant – Open House for High School Guidance Counselors (December 2004 – Lynn Narasimhan, convenor).
- Worked with Study Abroad Office to design a study abroad experience targeted toward science majors at Monash University in Melbourne, AU.
- Allied faculty member in Public Policy Studies Program.
- Academic Program Review - participated in preparing Environmental Science Program APR report (2002-2003).
- Interviewer, Schmidt/Bauer Student Scholarship Program.
- Participant, *Science and Math Day* at DePaul University (2001-2003).
- Member, Truman Scholarship Review Committee (1999).
- Member, College Capstone Course Committee (Environmental Science Program representative - 1999).
- Member, Undergraduate Public Policy Studies Curriculum Working Group (1998).
- Environmental Science Representative for *Career Day for Undeclared Majors* (1998).
- Instructor, Chicago Alliance for Minority Participation - *Science Preparatory Institute*, DePaul University (Summer 1996-1998).
- Member, College Interdisciplinary Science Committee (1997).
- Group Leader, College Summer Academic Planning Retreat (1997).
- Member, *Scientific Literacy Committee* (1997).
- Delivered presentation to USDA site-visit team for proposed Biological Sciences-Environmental Sciences building (1996).
- Group Leader, Summer Academic Planning Retreat (1996).
- Member, *Working Group on Faculty Expectations* (1996).
- Environmental Science Program representative for College *New Student Open House* (1994).

Environmental Science Program (ESP)

- Member of ENV Assessment Subcommittee
- Headed up SWOT analysis for CSH strategic planning process.
- Member of ENV Assessment Subcommittee.
- Member of APR Self-Study Team
- Oversaw hiring of new administrative assistant
- Advisor to 15 ENV majors.
- Oversaw tenure-track searches in 2005 and 2008 for plant ecologist (Sarah Richardson) and global change faculty (Mark Potosnak) respectively.
- Participant – design process for Msgr. Andrew McGowan facility.
- Convened faculty retreat (December 6-7, 2005).
- Authored Assessment Project Report to College of Liberal Arts and Sciences and Office of Teaching, Learning and Assessment (2001-2004).

- Assisted in ESP Academic Program Review for University.
- Interim Director ESP – Autumn 2002 Quarter.
- Authored ESP Senior Integrative Capstone Course Proposal (ENV 350).
- Environmental Science Program representative to Capstone Course Committee.

Community

- **Member,** Board of Trustees, Chicago Academy of Sciences, Peggy Notebaert Nature Museum.
- **Member,** Board of Directors, Friends of Lincoln Park High School.
- **Research Supervisor: 2010.** Supervised two high school student interns from Walter Payton College Prep HS on projects in my lab.
- **Founder and Director**, *DePaul Science Experience*. 2007-2010. I taught a forensic science course ("CSI:Chicago") for a group of 7th and 8th grade students from area public and Catholic schools.
- **Founder and Director -** *High School Campus Sustainability Working Group.* Met monthly with CPS and suburban high school teachers of environmental science to discuss campus sustainability research projects.
- Science Fair Judge – Oscar Mayer, Abraham Lincoln, Prescott Elementary School and Walter Payton College Prep HS – December 2007.
- 2005-2007: Chairman, Local School Council, Oscar Mayer Elementary School.
- 2006: Judge – City of Chicago Science Fair.
- 2006: Judge – Prescott Elementary School Science Fair (Judy Bramble, coordinator).
- 2006: Judge-Area 6 Science Fair.
- 2004-2005: Founder and Director - *Hands-on Environmental Science.* I offered this course on Fridays from 1:00-3:00 for accelerated 7th and 8th grade students at Oscar Mayer Elementary School.
- 2005: Consulted with Friends of Chicago River to implement the *Rivers Curriculum* training for CPS teachers at DePaul in Summer 2005.
- 2005: Science Fair Judge – Lincoln Park HS, Oscar Mayer Elementary School; CPS Region 6 Judge.

- 2005: Member, Greenhouse/Green Rooftop Committee at Abraham Lincoln Elementary School.
- 2004: Assisted Eva Feldman and Rebecca Strauss, students in Lincoln Park High School's International Baccalaureate (IB) Program, on their science fair projects.
- 2004: Assisted Daria Zelasko, a senior at Mother Theodore Guerin High School, on her science fair project.
- 2004: Supervised three junior-year students, Nik Chevas, Mariana Aviles and Ignacio Granjas, at Walter Payton High School in my laboratory on a water quality project.
- 2004: Judge - Lincoln Park HS, Von Steuben HS, and Walter Payton HS science fairs.

- 2002: Supervised two students from Walter Payton High School (Chicago) in my laboratory on a wetland water quality project.
- 2000-2001: Past President - Illinois Association of Environmental Professionals.
- Editorial service
    - Division S-5 (Pedology) of *Soil Science Society of America Journal* (1996).
    - *Wetlands (Society of Wetland Scientists,* (1999)
- 1997: Middle and high school Science Fair Judge, Arai Middle School, St. Margaret Mary School.
- 1997: Collaborated with the not-for-profit group *Friends of the Chicago River* to develop service/experiential learning projects for my ENV 224 (*Environment of the Chicago River Watershed*) class.

PROFESSIONAL ACTIVITIES

Journal Editor

- Editor-in-Chief, *Environmental Practice*. The official journal of the National Association of Environmental Professionals. DePaul University houses the Editorial Office.

Professional Affiliations

- Soil Science Society of America
- Wisconsin Wetland Association
- American Water Resources Association
- National Association of Environmental Professionals

Professional Development

- ***DePaul University***
    - **CIRRUS (Chicago Initiative for Research and Recruitment in Undergraduate Science).** Summer 2010, 2011, 2012.
    - **Teaching and Learning Certificate Program**
        - *Engaging Students in Discussion (9/23/2011)*
        - *Teaching with Archives and Special Collections (10/14/2011)*
        - *Introduction to Digication (1/18/2013)*
- ***The Newberry Library***
    - **Teachers as Scholars Program** – 2011-2013. I taught a seminar entitled "Chicago: City on the Lake" for in-service CPS teachers. This course focused on the natural history of Chicago, with particular emphasis on the lakefront. I used a variety of maps and photos from the Newberry collection to illustrate the transformation of Chicago's physical environment. The second day of the seminar consisted of an all-day field trip along the lakefront, starting at MSI in Jackson Park and ending at Montrose peninsula.
    - **Newberry Teachers Consortium (NTC)** – 2011-2013. The NTC is geared for suburban high school teachers. I led a seminar entitled "The Transformation of Chicago's Physical Environment". The principle text was Donald Miller's "Chicago:City of the Century".

University of Chicago

- **SESAME Program (Science and Mathematics Education; Dr. Paul Sally, Director) –** Summer 2003, Spring and Summer 2004. Taught course in environmental science for CPS middle-grade science and mathematics teachers seeking Illinois State Science Standards endorsement.

AWARDS AND RECOGNITIONS

- 2013 – Recipient - Outstanding contribution by a faculty member for exceptional service to the Chicago Quarter Program.
- 2013 – DePaul University Honors Program. Distinguished Faculty Award in recognition of outstanding teaching in Honors
- 2012 – Inductee - Society of Vincent DePaul Professors
- 2004 – Recipient, College of Liberal Arts and Sciences *Excellence in Teaching Award*
- 2002 - Nominated for Coutelyou-Lowry Award
- 1998
    - Nominated for Excellence in Teaching Award, LA&S.
    - *Changing its Course – Chicago River Cleanup Project Part of Wetlands Project.* Article *in News Sun (Lake County, IL)* about my ENV *224(Environment of the Chicago River Watershed)* class' field trip to assess water quality in the Chicago River at Prairie Wolf Slough
- DePaul *Newsline:* interview about my research at Prairie Wolf Slough and its relationship to the new Urban Forestry Program.
- 1997 - Editor's Citation for Excellence in Manuscript Review, Soil Science Society of America.