

EDUCATION

- Ph.D.** Department of Geography, Texas A&M University
September 2013 – May 2017
Thesis: Assessing the Role of Framework Geology on Barrier Island Geomorphology
NSF Doctoral Dissertation Research Improvement Award
High-Impact Learning Experiences Grant
Excellence in Teaching Award
- M.S.** Department of Geography, Michigan State University
January 2011 – August 2012
Thesis: Coastline Change at Four Sites in Lower Michigan
- B.S.** Department of Fisheries and Wildlife, Michigan State University
August 2005 – May 2010
Minor: Geographic Information Science

ACADEMIC AND RESEARCH POSITIONS

Chair of UWill Discover! Undergraduate Conference Organizing Committee, Windsor, ON, Canada
September 2017 – present

Office of the Provost, University of Windsor

Responsibilities

- Organize an interdisciplinary conference for undergraduate students to showcase discovery and inclusivity across all University of Windsor Faculties and programs.
- Collaborate with faculty, administrators, graduate students, and undergraduate students from all Faculties and programs to promote the integration of all students and facilitate cross-disciplinary collaborations.
- Coordinate with major gift officers to develop corporate sponsorships and promote student opportunities and supplement internal conference funding.
- Enhance professional development opportunities for undergraduate and graduate students by integrating students into the organizing committee as volunteer, judging, accommodations, abstract, social media, marketing/communications, and general conference coordinators.
- Enhance professional development and student experience through pre-, mid-, and post-conference workshops by developing an online conference platform.
- Develop an adaptive and innovative marketing strategy to promote the conference and student achievements through social media and other online platforms.

Accomplishments

- Extended conference from 1 day in 2015-2017, to 2 full days in 2018, and 4 full days in 2019.
- Increased undergraduate student submissions from 2017 by 37% to 104 presentations.
- Engaged community sponsors to connect students with potential employers.
- Increased the conference budget from 2017 by 55% (\$11,894.25) through community sponsorships and partnerships.

Post-Doctoral Fellow, September 2017 – present

Windsor, ON, Canada

Department of Earth and Environmental Sciences, University of Windsor

Responsibilities

- Mentor graduate and undergraduate students on independent multidisciplinary research projects.
- Address complex issues in coastal geomorphology through collaborative and independent research projects using geospatial technologies (GIS, artificial intelligence, machine learning), geophysics, and geology.

CIRTL Practitioner, June 2016 – present

Center for Integration of Research, Teaching and Learning (CIRTL)

Responsibilities

- Develop an integrated learning community of undergraduate research scholars through formal weekly research meetings, conference presentations, conference networking, and informal large-group meetings.
- Mentor diverse multidisciplinary teams of undergraduate students in relevant student-directed research to improve undergraduate critical thinking and problem solving.
- Mentor students in effective research communication through conference presentations, publications, and active research collaborations.
- Develop best-practices report for mentoring diverse multidisciplinary teams of undergraduate students by (1) identifying an issue, (2) collecting pre-intervention data, (3) applying a well-researched intervention to address the issue, (4) collect post-intervention data, and (5) evaluate the effectiveness of the intervention.

Program Director, January 2017 – May 2017

College Station, TX, USA

Aggie Research Programs

Responsibilities

- Develop the Aggie Research Leadership Program to promote effective communication strategies, conflict resolution, and overall mentorship skills in graduate students, postdoctoral fellows, and high-achieving undergraduate students.
- Develop the Aggie Research Scholars Program to promote effective communication, research, and peer-to-peer mentorship skills in undergraduate students.
- Collaborate with the Texas A&M University Center for Teaching Excellence (CTE), Office of Graduate and Professional Studies (OGAPS), and the Undergraduate Research Office (LAUNCH) to provide professional development opportunities to research team leaders.
- Supervise undergraduate student program coordinators to improve and institutionalize the Aggie Research Programs.
- Facilitate team leader meetings to improve team leader effectiveness.

Textbook Contributor, September 2012 – January 2014

New York, NY, USA

John Wiley & Sons, Inc

Responsibilities

- Contributor for Alan F. Arbogast (editor) *Discovering Physical Geography*, 3rd Edition.
- Update lecture presentations, pre-lecture questions, post-lecture questions, and test bank questions.
- Apply Bloom's Taxonomy to formulate new high-level questions.
- Develop new geoDiscovery material for online course instruction.

GIS Technician, August 2012 – December 2013

East Lansing, MI, USA

Remote Sensing & GIS Research and Outreach Services

Responsibilities

- Supervise project integrating utility mapping and LiDAR processing.
- Develop custom geoprocessing algorithms for GIS applications.
- Develop GIS curriculum for students and professionals with a variety of experiences.
- Process and orthorectified large volumes of aerial imagery.

GIS Intern, January 2011 – April 2012

East Lansing, MI, USA

Michigan State University, Campus Planning and Administration

Responsibilities

- Collaborate with local and state emergency responders on the Ingham County Emergency Dispatch Consolidation Project aimed at improving interdepartmental emergency response communication.
- Generate and maintained extensive database with thousands of new addresses for MSU campus buildings to improve location accuracy for emergency responders.
- Maintain spatial and non-spatial Oracle and PostgreSQL databases for multiple projects.

TEACHING AND ADVISING**Programme Aide, July 2017 – August 2017**

College Station, TX, USA

Department of Geography, Texas A&M University

Responsibilities

- Teach *GNSS in the Geosciences* by immersing students in a multi-cultural study abroad through Europe.
- Facilitate a three-week study abroad through Poland, Germany, and Denmark focused on developing applied geospatial skills using GNSS.

Aggie Research Leader, January 2016 – May 2017

College Station, TX, USA

Aggie Research Leadership Program, Texas A&M University

Responsibilities

- Mentor two diverse multi-disciplinary teams of 15 total undergraduate researchers. Research projects are independent of my dissertation research and heavily student-driven, with my guidance.

Accomplishments

- 14 Undergraduate student researchers presented research as posters and papers at local, regional, national, and international conferences.

Course Instructor, January 2014 – December 2016

College Station, TX, USA

Texas A&M University, Department of Geography

Responsibilities

- Develop new content integrate theory with practical applications of GPS and GIS.
- Develop high-level test questions using Bloom's Taxonomy.

Accomplishments

- Flipped a traditional course (*GNSS in the Geosciences*) to a hybrid and online course structure to more effectively engage students in active learning.
- Revised course content to emphasize theory through real-world applications.
- Student enrollment increased from 41 students in 2014 to 98 students in 2016.

Graduate Teaching Assistant, June 2016 – August 2016

College Station, TX, USA

Department of Geography, Texas A&M University

Responsibilities

- Teach *GNSS in the Geosciences* to 10 undergraduate students about geospatial concepts during a two-week trip through Poland, Germany, and Denmark.
- Guide students in developing and presenting independent research projects throughout Europe field trip.

Course Instructor, August 2015 – December 2015

College Station, TX, USA

Department of Geography, Texas A&M University

Responsibilities

- Develop a freshman seminar on *To Interpret the Earth: 10 Ways to be Wrong* to teach students about the scientific method, common pitfalls, and ways to avoid those pitfalls.
- Facilitate weekly in-class discussions about interdisciplinary scientific research.

Graduate Teaching Assistant, August 2013 – December 2013

College Station, TX, USA

Department of Geography, Texas A&M University

Responsibilities

- Instruct and graded labs for GPS in the Geosciences and Field Geography.
- Assist in updating course content and resources.

Graduate Teaching Assistant, January 2012 – May 2012

East Lansing, MI, USA

Department of Geography, Michigan State University

Responsibilities

- Assist with locating new course content and resources.
- Meet with struggling students to help them better understand course content.

PUBLICATIONS

(Graduate student authors are single-underlined; Undergraduate student authors are double-underlined)

Articles in Prep*For more information on articles in the final stages of prep, please contact me directly.*

Articles in Review

- (16) **Wernette, P.**, C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (In Review) Long-range dependence in framework geology: Asymmetries and implications for barrier island resiliency. Submitted to *Earth Surface Dynamics*.

Articles Accepted or in Press

Published Articles

- (15) Weymer, B., M. Everett, **P. Wernette**, and C. Houser. (2018) Statistical modeling of the long-range-dependent structure of barrier island framework geology and surface geomorphology. *Earth Surface Dynamics*, 6: 431-450.
- (14) **Wernette, P.** (2018) PhDs and undergraduate research projects. *Inside Higher Education*, Published 5 June 2018 <www.insidehighered.com/advice/2018/06/05/advantages-phds-supervising-team-based-undergraduate-research-projects-opinion>.
- (13) **Wernette, P.**, C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (2018) Influence of a spatially complex framework geology on island geomorphology. *Marine Geology*, 398:151-162.
- (12) **Wernette, P.**, S. Thompson, R. Eyler, H. Taylor, C. Taube, C. Decuir, A. Medlin, and C. Houser. (2018) Defining dunes: Evaluating how dune feature definitions impact dune interpretations from remote sensing. *Journal of Coastal Research*, pre-print.
- (11) Houser, C., **P. Wernette**, and B. Weymer. (2018) Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea-level rise. *Geomorphology*, 303:362-374.
- (10) Houser, C., M.P. Bishop, and **P. Wernette**. (2017) Short Communication: Multi-scale anisotropy patterns on a barrier island. *Geomorphology*, 297(15):153-158.
- (9) **Wernette, P.**, A. Shortridge, D. Lusch, and A.F. Arbogast. (2017) Accounting for positional uncertainty in historical shoreline change analysis without ground-reference information. *International Journal of Remote Sensing*, 38(13):3906-3922.
- (8) Weymer, B., M. Everett, C. Houser, **P. Wernette**, and P. Barrineau. (2016) Differentiating tidal and groundwater dynamics from barrier island framework geology: Testing the utility of portable multi-frequency EMI profilers. *Geophysics*, 81(5):E347-E361.
- (7) **Wernette, P.**, C. Houser, and M.P. Bishop. (2016) An automated approach for extracting barrier island morphology from digital elevation models. *Geomorphology*, 262(1):1-7.
- (6) Houser, C., **P. Wernette**, T. Rentschler, H. Jones, and B. Hammond. (2015) Post-storm beach and dune recovery: Implications for barrier island resilience. *Geomorphology*, 243:54-63.

- (5) Arbogast, A., M. Luehmann, B. Miller, **P. Wernette**, K. Adams, J. Waha, G. O'Neil, Y. Tang, J. Boothroyd, C. Babcock, R. Hanson, and A. Young. (2015) Late-Pleistocene paleowinds and aeolian sand mobilization in north-central Lower Michigan. *Aeolian Research*, 16:106-116.

Book Chapters

- (4) Houser, C., P. Barrineau, B. Hammond, B. Saari, E. Rentschler, S. Trimble, **P. Wernette**, B. Weymer, and S. Young. (2018) "Role of the foredune in controlling barrier island response to sea level rise" in Barrier Dynamics and Response to Changing Climate (L. Moore and B. Murray, eds).
- (3) Barrineau, P., **P. Wernette**, B. Weymer, S. Trimble, B. Hammond, and C. Houser. (2015) "Critical zone of coastal barrier systems" in Principles and Dynamics of The Critical Zone (C. Houser and R. Giardino, eds). Elsevier.

Professional Interpretive Displays

- (2) **Wernette, P.** and A. Wernette. (2014) "Ludington State Park Trail Map". *Ludington Newspaper*, Ludington, MI, USA.
- (1) **Wernette, P.**, A. Wernette, and E. Wolfe. (2011) "Changing Beaches: rise and fall of Lake Michigan beaches". On display at Ludington State Park, Ludington, MI, USA.

Conference Proceedings

- (13) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, B. Reece, and M.P. Bishop. (2017) Developing a multidisciplinary understanding of barrier island evolution. *Geologic Society of America Abstracts with Programs*, 49(6):34-2.
- (12) Smart, N., L. Tuttle, D. Taylor, B. Ferguson, J. Lehner, and **P. Wernette**. (2017) Interactions between vegetation and geologic framework in barrier island evolution. *Geologic Society of America Abstracts with Programs*, 49(6):72-3.
- (11) Tuttle, L., C. Mohkami, **P. Wernette**, and C. Houser. (2017) Investigating barrier island evolution through sediment core analysis and geophysical surveys. *Geologic Society of America Abstracts with Programs*, 49(6):72-6.
- (10) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) Assessing the role of framework geology on barrier island geomorphology. *Geologic Society of America Abstracts with Programs*, 49(1):14-4.
- (9) **Wernette, P.**, C. Houser, J. Nunez, and C. Quick. (2017) Promoting diversity and inclusion in the geosciences: Recruitment, team-based multidisciplinary research scholarship, and service learning. *Geologic Society of America Abstracts with Programs*, 49(1):21-2.
- (8) Tuttle, L., **P. Wernette**, and C. Houser. (2017) Mapping the geologic framework of Padre Island National Seashore using geophysical surveys. *Geologic Society of America Abstracts with Programs*, 49(1):8-46.
- (7) Houser, C., **P. Wernette**, and B. Weymer. (2017) Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise. *19th European Geophysical Union Proceedings*, p. 2643.

- (6) **Wernette, P.**, C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (2016) The role of geologic framework in barrier island geomorphology at Padre Island National Seashore, Texas. *Geologic Society of America Abstracts with Programs*, 48(7):271-3.
- (5) Lehner, J., **P. Wernette**, M.P. Bishop, and C. Houser. (2016) Application of topographic anisotropy for assessing barrier island morphology. *Geologic Society of America Abstracts with Programs*, 48(7):333-7.
- (4) Smart, N., **P. Wernette**, L. Tuttle, D. Taylor, B. Ferguson, and J. Lehner. (2016) Establishing relationships between vegetation dynamics in context of geologic framework along Padre Island National Seashore, Texas, USA. *Geologic Society of America Abstracts with Programs*, 48(7):333-12.
- (3) Decuir, C., R. Eyler, H. Taylor, **P. Wernette**, C. Taube, and S. Thompson. (2016) What is a dune? Evaluating current methods of extracting coastal dunes from DEMs. *Geologic Society of America Abstracts with Programs*, 48(7):333-13.
- (2) **Wernette, P.**, A. Shortridge, D. Lusch, and A. Arbogast. (2013) Accounting for positional uncertainty in shoreline change analysis. *Geological Society of America Abstracts with Programs*, 45(7):472.
- (1) Arbogast, A., M. Luehmann, B. Miller, and **P. Wernette**. (2012) Late-Pleistocene wind-flow patterns and dune formation in north-central Lower Michigan. *Geological Society of America Abstracts with Programs*, 44(7):106.

AWARDS, HONORS, AND GRANTS

Doctoral Dissertation Research Improvement (DDRI) Award

2016-2018 **\$15,444**

National Science Foundation – Geography and Spatial Sciences Program

High-Impact Learning Experiences Grant

2016-2017 **\$20,000**

Texas A&M University College of Geosciences

Graduate Grant-in-Aid of Research

2016-2017 **\$1,700**

Texas Sea Grant

Excellence in Teaching Award

2016 **\$400**

Texas A&M University Department of Geography

Conference Travel Award

2015 **\$500**

Texas A&M University Graduate and Professional Student Council

1st Place Earth Sciences Graduate Division

2014 **\$300**

Texas A&M University Student Research Week

1st Place Graduate Student Paper Competition

2014 **\$280**

11th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences

PROFESSIONAL AND TEACHING DEVELOPMENT WORKSHOPS

Teaching Dossier Academy	Centre for Teaching and Learning, University of Windsor	May 2018
High impact experiences are not just for the benefit of the student	Centre for Teaching and Learning, University of Windsor	Dec. 2017
Presence and presentation: Engaging your students in the classroom	Centre for Teaching and Learning, University of Windsor	Nov. 2017
Pedagogy Workshop – Using hand-held technology in the classroom	Undergraduate Studies, Texas A&M University	Apr. 2017
Teaching methods and approaches to engage students	Center for Teaching Excellence, Texas A&M University	May 2016
Facilitating effective group work and projects	Center for Teaching Excellence, Texas A&M University	Apr. 2016
Dean of Faculties Mentoring Series – Expanding and implementing mentorship at Texas A&M	Center for Teaching Excellence, Texas A&M University	Apr. 2016
Online course design (2 part workshop)	Center for Teaching Excellence, Texas A&M University	Mar. 2016
Lecturing well	Center for Teaching Excellence, Texas A&M University	Feb. 2016
Feel free to use your phone in class: Leveraging mobile devices for teaching and learning	Center for Teaching Excellence, Texas A&M University	Nov. 2015
Simple, free, and easy ways to integrate technology into your teaching	Center for Teaching Excellence, Texas A&M University	Nov. 2015
Technology-enhanced approaches for engaging students in large classes	Center for Teaching Excellence, Texas A&M University	Nov. 2015
Designing writing assignments with a lower workload and better results	Center for Teaching Excellence, Texas A&M University	Sept. 2015
Syllabus design	Center for Teaching Excellence, Texas A&M University	Aug. 2015
Learning outcomes and teaching strategies	Center for Teaching Excellence, Texas A&M University	July 2015
Mentoring undergraduate researchers: A workshop for graduate students	Honors and Undergraduate Research, Texas A&M University	Sept. 2014
8 easy ways to integrate technology in your classroom	Center for Teaching Excellence, Texas A&M University	June 2014
Philosophy of teaching statement	Center for Teaching Excellence, Texas A&M University	May 2014
Teaching assistant training	Center for Teaching Excellence, Texas A&M University	Aug. 2013

UNDERGRADUATE STUDENTS MENTORED

(Undergraduate students mentored as part of the Texas A&M University Aggie Research Programs are underlined)

<u>Alexander Medlin</u>	2017	<u>Caleb Taube</u>	2016 - 2017
<u>Cassie Mohkami</u>	2017	<u>Jacquelyn (Bri) Ferguson</u>	2015 - 2017
<u>Matthew Tran</u>	2017	<u>Nick Smart</u>	2015 - 2017
<u>Jessica Martin</u>	2017	<u>Aden Mohammad</u>	2016
<u>Jacob Lehner</u>	2016 - 2017	<u>Tyler Rozelle</u>	2016
<u>Dawan Taylor</u>	2016 - 2017	Adrian Curry	2016
<u>Larry Tuttle</u>	2016 - 2017	<u>Rachel Eyler</u>	2016
<u>Hannah Taylor</u>	2016 - 2017	<u>Claire Decuir</u>	2016
<u>Laura Gloria</u>	2016 - 2017	Matthew Snow	2014
<u>Stephanie Thompson</u>	2016 - 2017	Patrick Hourahan	2013

PROFESSIONAL SERVICE

Listserv Moderator

Geomorph-List moderator, 2016 – present

An email distribution list connecting over 2200 worldwide professional and academic geomorphologists for the International Association of Geomorphologists.

Manuscript Reviews (Since 2013)

Reviewed 9 articles for 5 different journal articles since 2013.

Earth Surface Processes and Landforms (1)

Geomorphology (2)

Geophysics (1)

Journal of Coastal Research (4)

Transactions in GIS (1)

Book Proposal Review

Remote Sensing of Geomorphology

National Science Foundation Review Panel

EAR REU Panel Review, 2017

University of Windsor GIS Day

Organizing Committee

Conference Organization

2018 *American Geophysical Union*

Co-convenor: *Coastal Geomorphology and Morphodynamics*

Association of American Geographers

Co-Coordinator and Session Chair: *Hurricanes III: Coastal Geomorphology and Paleotempestology*

Co-Coordinator and Session Chair: *Hurricanes IV: The 2017 Hurricane Season*

2017 Canadian Association of Geographers Ontario (CAGONT)
Coordinator and Chair: *Multidisciplinary Perspectives on Coastal Research and Management*

Professional Organizations

Association of American Geographers
Coastal and Marine Specialty Group
American Geophysical Union
Earth and Planetary Surface Processes Section
Canadian Association of Geographers
Canadian Geophysical Union
Council on Undergraduate Research
Geological Society of America

Honor Societies

Gamma Theta Upsilon International Geographic Honor Society (Michigan State University chapter)
St. George's Geographical Society

Certifications

SSI Open Water Diver
SSI Dry Suit Diver

SKILLS AND EXPERIENCE

Spatial Data Analysis & Geostatistics	Geomorphology
Digital Terrain Analysis	Coastal Processes and Geomorphology
LiDAR Data Processing	Soil Geomorphology
Remote Sensing	Geographic Information Systems (GIS)
Programming	GIS Modelling & Geocomputation
Database Management	Cartography & Web-GIS
Geophysics (EMI, GPR, seismic, etc.)	Algorithm Development
Online Course Development	Curriculum Development

SOFTWARE AND PROGRAMMING LANGUAGES

ArcGIS	C/C++	R	HTML
SAGA GIS	Python	PHP	CSS
GRASS	Javascript	JQuery	

INVITED TALKS

- (8) **Wernette, P.**, C. Houser, B. Weymer, and M. Everett. (2018) “Multidisciplinary approaches to understanding coastal geomorphology.” Invited talk at the University of Windsor Department of Earth and Environmental Sciences, Windsor, ON, Canada.
- (7) **Wernette, P.** (2017) “Implications of Hurricane Harvey for the Texas Coast.” Invited talk at the University of Windsor GIS Day 2017, Windsor, ON, Canada.
- (6) **Wernette, P.** (2017) “Toward a multidisciplinary/multiscale understanding of coastal evolution.” Invited talk at Texas State University Department of Geography, San Marcos, TX, USA.
- (5) **Wernette, P.** (2017) “Developing a multiscale understanding of coastal evolution.” Invited talk at The University of Melbourne, Melbourne, Victoria, Australia.
- (4) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, B. Reece, and M.P. Bishop. (2017) “Spatially variable framework geology as a driver of barrier island development.” Invited talk at the Canadian Geophysical Union Annual Meeting, Vancouver, BC, Canada.
- (3) **Wernette, P.** (2017) “Undergraduate research.” Seminar hosted by the Texas A&M University Supporting Women in Geography. College Station, TX, USA.
- (2) **Wernette, P.** (2017) “Writing an abstract.” Workshop hosted by the Texas A&M University Aggie Research Programs. College Station, TX, USA.
- (1) Weymer, B., M. Everett, C. Houser, and **P. Wernette**. (2015) “Mapping large-scale barrier island hydrogeology: Why use EMI?”. Invited talk at University of Kiel/GEOMAR, Germany.

PAPERS AT PROFESSIONAL MEETINGS OR SYMPOSIA

(Graduate student authors are single-underlined; Undergraduate student authors are double-underlined)

- (40) **Wernette, P.**, C. Houser, and J. Lehner. (2018) “Insights into barrier island evolution: Past, present, and future”. Accepted at the Coastal Zone Canada Conference, St. John’s, Newfoundland, Canada.
- (39) Houser, C. and **P. Wernette**. (2018) “Scale-dependent behavior of the foredune: Implications for barrier island response to storms and sea-level rise”. Accepted at the Coastal Zone Canada Conference, St. John’s, Newfoundland, Canada.
- (38) **Wernette, P.**, C. Houser, and A. Evans. (2018) “Management implications of Hurricane Harvey for Padre Island National Seashore”. Presented at the Association of American Geographers Annual Meeting, New Orleans, LA, USA.
- (37) **Wernette, P.** and C. Houser. (2018) “Enhancing professional development through vertically-tiered undergraduate research”. Presented at the Association of American Geographers Annual Meeting, New Orleans, LA, USA.

- (36) **Wernette, P.**, C. Houser, and A. Evans. (2017) “Coastal erosion at Padre Island: Insights from UAV surveys after Hurricane Harvey”. Presented at the American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- (35) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Asymmetries in barrier island geomorphology: Controls on coastal evolution”. Presented at the American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- (34) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Developing a multidisciplinary understanding of barrier island evolution”. Presented at the Geological Society of America Annual Meeting, Seattle, WA, USA.
- (33) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Management implications of Hurricane Harvey for Padre Island National Seashore”. Presented at the Canadian Association of Geographers Ontario Meeting, Kingston, Ontario, Canada.
- (32) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, B. Reece, and M.P. Bishop. (2017) “Framework geology as a driver of barrier island geomorphology”. Presented at the Canadian Association of Geographers Annual Meeting, Toronto, ON, Canada.
- (31) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, B. Reece, and M.P. Bishop. (2017) “Spatially variable framework geology as a driver of barrier island development”. Presented at the Canadian Geophysical Union Annual Meeting, Vancouver, BC, Canada.
- (30) Houser, C., **P. Wernette**, and B. Weymer. (2017) “Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise”. Presented at the European Geophysical Union General Assembly, Vienna, Austria.
- (29) **Wernette, P.**, C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Spatially variable framework geology as a driver of barrier island development”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (28) Houser, C., **P. Wernette**, and B. Weymer. (2017) “Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (27) Taylor, H., S. Thompson, T. Rozelle, C. Taube, A. Medlin, and **P. Wernette**. (2017) “What is a dune: Expanding automated approaches of dune extraction and LiDAR processing”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (26) Lehner, J., **P. Wernette**, M.P. Bishop, and C. Houser. (2017) “Multi-temporal assessment of barrier island evolution in context of framework geology”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (25) Tuttle, L., **P. Wernette**, and C. Houser. (2017) “Updating the framework geology information at Padre Island National Seashore: Validation of Geophysical Surveys through sediment cores”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.

- (24) Talyor, D., B. Ferguson, L. Tuttle, J. Lehner, N. Smart, and P. Wernette. (2017) “Establishing relationships between vegetation dynamics in context of geologic framework along Padre Island National Seashore, Texas, USA”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (23) **Wernette, P.,** C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Framework geology as a driver of barrier island development: Implications for coastal management”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (22) Tuttle, L., C. Mohkami, P. Wernette, and C. Houser. (2017) “Updating the framework geology information at Padre Island National Seashore: Validation of geophysical surveys through sediment cores”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
** First place in Geosciences – Undergraduate Division*
- (21) Ferguson, B., J. Martin, L. Tuttle, D. Taylor, N. Smart, J. Lehner, M. Tran, C. Mohkami, L. Gloria, and P. Wernette. (2017) “Quantifying the interaction of vegetation and geologic framework along a Texas barrier island”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
** Second place in Geosciences – Undergraduate Division*
- (20) Lehner, J., P. Wernette, M.P. Bishop, and C. Houser. (2017) “Multi-temporal assessment of barrier island evolution in context of framework geology”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (19) **Wernette, P.,** C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Evaluating barrier island geomorphology in context of framework geology”. Presented at the fourth annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (18) **Wernette, P.,** C. Houser, B. Weymer, M. Everett, M.P. Bishop, and B. Reece. (2017) “Assessing the role of framework geology on barrier island geomorphology”. Presented at the Geological Society of America South-Central Section Meeting, San Antonio, TX, USA.
- (17) **Wernette, P.,** C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (2016) “The role of geologic framework in barrier island geomorphology”. Presented at the American Shore and Beach Preservation Association Annual Coastal Conference, Long Branch, NJ, USA.
- (16) **Wernette, P.,** C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (2016) “The role of geologic framework in barrier island geomorphology at Padre Island National Seashore, Texas”. Presented at the Geological Society of America Annual Meeting, Denver, CO, USA.
- (15) Houser, C. and **P. Wernette.** (2016) “Importance of the geologic framework along the Texas coast”. Presented at the American Shore and Beach Preservation Association Texas Chapter Symposium, Port Aransas, TX, USA.
- (14) **Wernette, P.,** C. Houser, B. Weymer, M.P. Bishop, and M. Everett. (2016) “Wavelet decomposition to assess development of Padre Island National Seashore, Texas, USA”. Presented at the American Shore and Beach Preservation Association Texas Chapter Symposium, Port Aransas, TX.

- (13) **Wernette, P.**, C. Houser, and M.P. Bishop. (2016) “Automating the extraction of beaches and dunes from digital elevation models”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (12) **Wernette, P.**, C. Houser, B. Weymer, M.P. Bishop, and M. Everett. (2016) “Wavelet decomposition to assess development of Padre Island National Seashore, Texas, USA”. Presented at the third annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (11) Houser, C., **P. Wernette**, and M.P. Bishop. (2015) “Scale dependent behavior of the foredune: implications for barrier island response to storms and sea-level rise”. Invited talk at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (10) **Wernette, P.**, C. Houser, and M.P. Bishop. (2015) “Extracting barrier island morphology from digital elevation models using an automated approach”. Presented at the annual meeting of Southeastern Division of the Association of American Geographers, Pensacola, FL, USA.
- (9) **Wernette, P.**, C. Houser, and M.P. Bishop. (2015) “Extracting barrier island morphology from digital elevation models using an automated approach”. Presented at the Texas Beach and Dunes: Science and Management Forum, Corpus Christi, TX, USA.
- (8) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, and M. Everett. (2015) “Integration of geophysics and LiDAR to assess the role of geologic inheritance in barrier island evolution”. Presented at the Association of American Geographers Annual Meeting, Chicago, IL, USA.
- (7) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, and M. Everett. (2015) “Application of GPR, EMI, and LiDAR to assess the role of antecedent geology in barrier island evolution”. Presented at the 28th edition of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Austin, TX, USA.
- (6) Weymer, B., M. Everett, C. Houser, **P. Wernette**, P. Barrineau, and J.R. Giardino. (2015) “Long-range dependence in EMI time series”. Presented at the 28th edition of the Symposium on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP), Austin, TX, USA.
- (5) **Wernette, P.** (2014) “Vertical error propagation in digital surface model differencing”. Presented at the 11th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, East Lansing, MI, USA.
- (4) **Wernette, P.** (2014) “Vertical error propagation in digital surface model differencing”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
*** First place in Earth Sciences, Geosciences, and Water Resources – Graduate Division**
- (3) **Wernette, P.**, A. Shortridge, D. Lusch, and A.F. Arbogast. (2013) “Accounting for positional uncertainty in shoreline change analysis”. Presented at the Geological Society of America Annual Meeting, Denver, CO, USA.
- (2) **Wernette, P.**, A. Shortridge, D. Lusch, and A.F. Arbogast. (2013) “Variability in shoreline position at four sites in Lower Michigan”. Presented at the Michigan Academy of Science Arts and Letters Annual Meeting, Holland, MI, USA.

- (1) **Wernette, P.**, A. Shortridge, D. Lusch, and A.F. Arbogast. (2013) “Variability in shoreline position at four sites in Lower Michigan”. Presented at the Michigan State University Department of Geography Quaternary Landscapes Research Group Colloquium, East Lansing, MI, USA.

POSTERS AT PROFESSIONAL MEETINGS OR SYMPOSIA

(Graduate student authors are single-underlined; Undergraduate student authors are double-underlined)

- (41) Lehner, J., P. Wernette, and C. Houser. (2018) “Machine learning approach to predicting coastal geomorphology”. Presented at the Association of American Geographers Annual Meeting, New Orleans, LA, USA.
- (40) Vlodarchyk, B., C. Houser, J. Lehner, and **P. Wernette**. (2018) “Predicting drownings on the Great Lakes using machine learning”. Presented at the Association of American Geographers Annual Meeting, New Orleans, LA, USA.
- (39) Ferguson, B., N. Smart, J. Lehner, D. Taylor, L. Tuttle, and **P. Wernette**. (2017) “Relations between vegetation and geologic framework in barrier island geomorphology”. Presented at the American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- (38) Mohkami, C., L. Tuttle, **P. Wernette**, and C. Houser. (2017) “Refining the geochronological evolution of Padre Island National Seashore through near-surface geophysical surveys and sediment core analysis”. Presented at the American Geophysical Union Fall Meeting, New Orleans, LA, USA.
- (37) Tuttle, L., C. Mohkami, **P. Wernette**, and C. Houser. (2017) “Investigating barrier island evolution through sediment core analysis and geophysical surveys”. Presented at the Geological Society of America Annual Meeting, Seattle, WA, USA.
- (36) Smart, N., L. Tuttle, D. Taylor, B. Ferguson, J. Lehner, and **P. Wernette**. (2017) “Interactions between vegetation and geologic framework in barrier island evolution”. Presented at the Geological Society of America Annual Meeting, Seattle, WA, USA.
- (35) Gloria, L., N. Smart, **P. Wernette**, P. Knappett, and C. Houser. (2017) “The effects of saltwater intrusion on coastal aquifers and vegetation dynamics at Padre Island National Seashore, TX”. Presented at the Association of American Geographers Annual Meeting, Boston, MA, USA.
- (34) Cheetri, P., **P. Wernette**, J. Johnson, and D. Cairns. (2017) “Engaging undergraduates in geoscience research: A high impact learning experience”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (33) Taylor, H., S. Thompson, T. Rozelle, C. Taube, A. Medlin, and **P. Wernette**. (2017) “What is a dune: Expanding automated approaches of dune extraction and LiDAR processing”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (32) Tuttle, L., C. Mohkami, **P. Wernette**, and C. Houser. (2017) “Updating the framework geology of Padre Island National Seashore: Validation of geophysical surveys through sediment cores”. Presented at the fourth annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.

- (31) Talyor, D., B. Ferguson, L. Tuttle, J. Lehner, N. Smart, and P. Wernette. (2017) “Quantifying the interaction of vegetation and geologic framework along a Texas barrier island”. Presented at the fourth annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (30) Taylor, H., S. Thompson, T. Rozelle, C. Taube, A. Medlin, and P. Wernette. (2017) “Defining a dune: Management implications”. Presented at the fourth annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (29) **Wernette, P.,** C. Houser, J. Nunez, and C. Quick. (2017) “Promoting diversity and inclusion in the geosciences is vital to student success by developing a safe and effective learning community”. Presented at the Geological Society of America South-Central Section Meeting, San Antonio, TX, USA.
- (28) Tuttle, L., P. Wernette, and C. Houser. (2017) “Mapping the geologic framework of Padre Island National Seashore using geophysical surveys”. Presented at the Geological Society of America South-Central Section Meeting, San Antonio, TX, USA.
- (27) **Wernette, P.,** C. Houser, B. Weymer, M.P. Bishop, M. Everett, and B. Reece. (2016) “Framework geology as a driver of barrier island evolution.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (26) **Wernette, P.,** C. Houser, and C. Quick. (2016) “Team-based multidisciplinary research scholarship in the geosciences.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (25) Houser, C., M.P. Bishop, and **P. Wernette.** (2016) “Multi-scale topographic anisotropy patterns with post-storm barrier island recovery.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (24) Tuttle, L., P. Wernette, and C. Houser. (2016) “Updating the framework geology of Padre Island National Seashore: Validation of geophysical surveys through sediment cores.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (23) Lehner, J., P. Wernette, M.P. Bishop, and C. Houser. (2016) “Assessing barrier island resiliency through multi-scale topographic anisotropy distribution patterns.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (22) Ferguson, B., P. Wernette, J. Lehner, N. Smart, L. Tuttle, and D. Taylor. (2016) “Establishing relationships between vegetation dynamics in context of geologic framework along Padre Island National Seashore, Texas, USA.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (21) Taylor, H., C. Decuir, P. Wernette, C. Taube, R. Eyler, S. Thompson, T. Rozelle, and A. Mohammad. (2016) “What is a dune? Developing an automated approach to extracting dunes from digital elevation models.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.

- (20) Taylor, D., J. Lehner, B. Ferguson, N. Smart, L. Tuttle, and P. Wernette. (2016) “Establishing relationships between vegetation dynamics in context of geologic framework along Padre Island National Seashore, Texas, USA”. Presented at the American Shore and Beach Preservation Association Annual Coastal Conference, Long Branch, NJ, USA.
- (19) Taube, C., S. Thompson, H. Taylor, R. Eyler, C. Decuir, T. Rozelle, and P. Wernette. (2016) “What is a dune? Evaluating current methods of extracting coastal dunes from DEMs”. Presented at the American Shore and Beach Preservation Association Annual Coastal Conference, Long Branch, NJ, USA.
- (18) Lehner, J., P. Wernette, M.P. Bishop, and C. Houser. (2016) “Application of topographic anisotropy for assessing barrier island morphology”. Presented at the Geological Society of America Annual Meeting, Denver, CO, USA.
- (17) Smart, N., J. Lenher, L. Tuttle, B. Ferguson, D. Taylor, and P. Wernette. (2016) “Establishing relationships between vegetation dynamics in context of geologic framework along Padre Island National Seashore, Texas, USA”. Presented at the Geological Society of America Annual Meeting, Denver, CO, USA.
- (16) Thompson, S., H. Taylor, R. Eyler, C. Taube, C. Decuir, T. Rozelle, and P. Wernette. (2016) “What is a dune? Evaluating current methods of extracting coastal dunes from DEMs”. Presented at the Geological Society of America Annual Meeting, Denver, CO, USA.
- (15) Weymer, B., M. Everett, **P. Wernette**, and C. Houser. (2016) “Statistical modeling of EMI spatial data series and LiDAR-derived morphometrics to understand the large-scale framework geology controls on barrier island transgression”. Presented at the 23rd Electromagnetic Induction Workshop, Chiang Mai, Thailand.
- (14) Lehner, J., L. Tuttle, N. Smart, D. Taylor, J. Ferguson, and P. Wernette. (2016) “Establishing relationships between vegetation dynamics in context of geologic framework on Padre Island National Seashore, Texas, USA”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
- (13) Decuir, C., R. Eyler, C. Taube, S. Thompson, H. Taylor, and P. Wernette. (2016) “What is a dune? Evaluating current methods of extracting coastal dunes from DEMs”. Presented at the Texas A&M University Student Research Week, College Station, TX, USA.
*** First place in Earth Sciences, Geosciences, and Water Resources – Undergraduate Division**
- (12) Lehner, J., L. Tuttle, N. Smart, D. Taylor, J. Ferguson, and P. Wernette. (2016) “Establishing relationships between vegetation dynamics in context of geologic framework on Padre Island National Seashore, Texas, USA”. Presented at the third annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (11) Decuir, C., R. Eyler, C. Taube, S. Thompson, H. Taylor, and P. Wernette. (2016) “What is a dune? Evaluating current methods of extracting coastal dunes from DEMs”. Presented at the third annual symposium of the Association of Geography Graduate Students, College Station, TX, USA.
- (10) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, M. Everett, and B. Reece. (2015) “Wavelet decomposition to assess the development of Padre Island National Seashore, Texas, USA”. Presented at the American Geophysical Union Fall Meeting, San Francisco, CA.

- (9) Weymer, B., M. Everett, **P. Wernette**, and C. Houser. (2015) “Is barrier island geologic framework fractal? Evidence from Padre Island National Seashore, Texas, USA.” Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (8) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, M. Everett, and B. Reece. (2015) “Wavelet decomposition to assess the development of Padre Island National Seashore, Texas, USA”. Presented at the Texas A&M University Geosciences Research Week, College Station, TX, USA.
- (7) Weymer, B., **P. Wernette**, C. Houser, and M. Everett. (2015) “Is barrier island geologic framework fractal? Evidence from Padre Island National Seashore, Texas”. Presented at the Texas Beach and Dunes: Science and Management Forum, Corpus Christi, TX, USA.
- (6) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, and M. Everett. (2014) “Application of EMI and LiDAR to assess the role of antecedent geology on barrier island geomorphology”. Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, USA.
- (5) **Wernette, P.**, B. Weymer, C. Houser, M.P. Bishop, and M. Everett. “Application of GPR, EMI, and LiDAR to assess the role of antecedent geology in barrier island evolution”. Presented at the Texas A&M University Geosciences Research Week, College Station, TX, USA.
- (4) Weymer, B., **P. Wernette**, C. Houser, J.R. Giardino, P. Barrineau, M. Everett, and M.P. Bishop. (2014) “The role of geologic inheritance on storm impacts along the South Texas coast, USA”. Presented at the European Geosciences Union Annual Meeting, Vienna, Austria.
- (3) Arbogast, A.F., M Luehmann, B.A. Miller, and **P. Wernette**. (2012) “Late-Pleistocene wind-flow patterns and dune formation in north-central Lower Michigan”. Presented at the Geological Society of America Annual Meeting, Charlotte, NC, USA.
- (2) Arbogast, A.F., M. Luehmann, B.A. Miller, J. Waha, **P. Wernette**, K. Adams, G. Oneil, J. Boothroyd, Y. Tang, and C. Babcock. (2012) “Late-Pleistocene wind-flow patterns and dune formation in north-central Lower Michigan”. Presented at the Association of American Geographers Annual Meeting, New York, NY, USA.
- (1) **Wernette, P.** (2010) “Changing beaches: Rise and fall of Lake Michigan beaches”. Presented at the Improving Michigan’s Access to Geographic Information Networks Student Paper and Poster Competition, Livonia, MI, USA.

UNIVERSITY AND DEPARTMENTAL SERVICE

UWill Discover Conference Organizing Committee, University of Windsor

Chair (2017-present)

Collaborate with administrators, faculty, staff, and students to develop a University-wide multidisciplinary undergraduate conference to enhance student professional development and strengthen University connections with the broader Windsor community.

Solicit external business and community organizations as official conference sponsors to increase community outreach and engagement and increase the conference budget to support more students.

Expand conference to multiple days to highlight undergraduate and graduate research across all programs, inside the classroom and beyond the classroom.

Council of Principal Investigators, Texas A&M University

Graduate Student Representative (2016-2017)

Collaborated with administrators and Graduate and Professional Student Council to provide student input into research decisions impacting graduate and professional students throughout Texas A&M University.

Center for Teaching Excellence Faculty and Student Advisory Board, Texas A&M University

Graduate Student Representative (2016-2017)

Assessed the current state of teaching and mentorship throughout Texas A&M University through monthly meetings with representatives throughout Texas A&M.

Guided Texas A&M University Center for Teaching Excellence workshops and professional development opportunities to better meet the needs of students and faculty.

Aggie Research Programs, Texas A&M University (aggiresearch.tamu.edu)

Steering Committee (2016-2017)

Founding member of the Aggie Research Programs.

Collaborated with faculty, postdoctoral fellows, graduate and professional students, and undergraduate students to develop the Aggie Research Programs.

Evaluated the program status in monthly meetings to ensure that the program is achieving its goals and objectives.

Aggie Research Leader (2015-2017)

Mentored two diverse teams of undergraduates to address complex Geoscience problems.

Conducted weekly team meetings to ensure research was progressing adequately and address potential issues and concerns.

Participated in monthly team leader meetings to compare team leadership issues and strategies among other team leaders.

University Disciplinary Appeals Panel, Texas A&M University

Graduate Student Representative (2016-2017)

** Appointed by the Office of the President*

Adjudicated alleged cases of unfair grades, performance evaluations, and/or suspension/disciplinary action.

Aggie Honor System Office, Texas A&M University

Separation Appeal Panel Member (2016-2017)

** Appointed by the Office of the Provost*

Served on hearing panels to assess whether or not student separation (suspension/expulsion) from the university is warranted, based on previous academic dishonesty hearing sanctions

Honor Council Member, 2014-2016

Served on investigative and hearing panels to address cases of accused academic dishonesty.

Graduate and Professional Student Council, Texas A&M University

Research Committee Chair (2016-2017)

Directed team of graduate and professional students to advance graduate and professional student research.

Advocated for graduate and professional student research through multiple media outlets.

Developed human-subject recruitment and collaboration matching system.

Graduate Student Representative, 2014-2017

Served on Awards Committee responsible for distributing \$10,000 in graduate travel grants.

Department of Geography representative, tasked with enhancing professional development opportunities and the student experience through decisions impacting graduate and professional students at Texas A&M University.

College of Geosciences, Texas A&M University

GeoX High School Recruitment Program

GPR and GPS Instructor (2014-2017)

Facilitated GPR and GPS exercises for prospective High School students interested in the Geosciences at Texas A&M University.

Served as graduate student panelist for High School students.

iGEO High School Recruitment Program

GPS and Geophysics Instructor (2013-2015)

Facilitated GPS and GPR exercises for High School students interested in the Geosciences at Texas A&M University.

Geography Building Committee, Michigan State University

Graduate Representative (2012-2013)

Coordinated projects designed to improve the Michigan State University Geography Building. Scanned and prepared 12 historical maps for professional printing and display.