

Chris Houser  
Dean, Faculty of Science, University of Windsor  
Professor, School of the Environment  
401 Sunset Avenue, Windsor, Ontario, Canada  
Email: chouser@uwindsor.ca

## EDUCATION

- Ph.D. Scarborough College Coastal Research Group  
Department of Geography, University of Toronto at Scarborough  
September 1999 – June 2003  
*Thesis: Feedback mechanisms in the morphodynamics of multiple-barred nearshores*  
*Griffith Taylor Award*
- M.Sc. Department of Geography, University of Guelph  
September 1997 – May 1999  
*Thesis: Atmospheric emission of PM<sub>10</sub> from clay-crustured surfaces by saltation abrasion*  
*Governor General's Academic Gold Medal*
- B.Sc. Environmental Science, Social & Applied Human Sciences, University of Guelph  
September 1993 – May 1997  
*Area of Emphasis: Hydrology*
- Administrative Courses  
Centre for Higher Education Research and Development (CHERD)  
Senior University Administrators Course (SUAC)  
Winnipeg, June 2019
- Council for Advancement and Support of Education  
Advanced Development for Deans and Academic Leaders  
Phoenix, January 2020

## ADMINISTRATIVE POSITIONS

- Dean of Science, July 2016- present  
Renewed for 2<sup>nd</sup> Term: May 2020  
Faculty of Science, University of Windsor  
***Direct and Indirect Reports***  
Associate Dean for Graduate Affairs and Research  
Associate Dean for Undergraduate Affairs  
Associate Dean for Student and Faculty Engagement  
Assistant to the Dean (Budget Coordinator)  
Chair of the EDI in Science Taskforce  
Recruitment and Retention Officer  
Communications Coordinator  
Advancement Officer (Major Gift Officer)

Science Academic Advisor  
Head, Biomedical Sciences Department  
Head, Chemistry & Biochemistry Department  
Director, School of Computer Science  
Director, School of the Environment  
Head, Economics Department  
Director, Forensic Sciences  
Head, Integrative Biology Department  
Head, Mathematics & Statistics Department  
Head, Physics Department  
Executive Director, Canadian Centre for Alternatives to Animal Methods  
Executive Director, The Great Lakes Institute for Environmental Research  
Executive Director, WE-SPARK Institute  
Executive Director, Institute for Diagnostic Imaging and Research  
Animal Care Committee and Staff  
130 permanent faculty lines (filled and open budget lines)  
53 academic and research staff

**Budget:** ~\$68,643,000 (projected for 2021/22 budget year)

**Enrolment:** 2816 Undergraduate Students, 981 Graduate Students (Fall 2021)

### ***Responsibilities***

- Provide strategic leadership, management, and direction for the Faculty of Science
- Foster a positive workplace climate and environment that encourages excellence in learning, teaching, and research
- Act as an advocate for the Faculty, both within the University and externally, securing the resources to advance the education and research mission
- Encourage development and improvement of academic programs
- Grow and sustain undergraduate and graduate student enrolment through the recruitment and the retention of high-caliber students
- Sustain a high-quality academic environment for students through the promotion and recognition of teaching excellence, and through appropriate mentoring for students
- Manage Institutional Quality Assurance Process (IQAP) in the Faculty of Science and support cyclical review of programs, new program development and the program approval process
- Engage the Faculty of Science community in a constructive dialogue to build a consensus around strategic initiatives that will bring the Faculty to an even higher level of achievement
- Develop and implement a communication and outreach strategy that will enhance the profile of the Faculty
- Exploit the potential for internal and external partnerships, to improve research capacity and enhance undergraduate and graduate opportunities
- Establish effective strategies for faculty development, retention, and renewal
- Implement fundraising strategy for the Faculty and actively engage in institutional fundraising campaigns

### *Accomplishments*

- **Research:** Created a research portfolio under the Associate Dean for Graduate Studies to ensure that my office supported research. One of the new programs developed by the now Associate Dean for Graduate Studies and Research is a mock review panel system that has increased the success rate of our faculty applying to NSERC, SSHRC and CIHR. Specifically, implementation of this program resulted in a >30% increase in tri-council funding that does not include more than \$21,000,000 in large grants. Implemented a graduate enrollment incentive fund to help both new and mid-career faculty build their research teams and increase success in receiving tri-council funding. Through this program, we provide faculty with >\$125,000 in annual research support, with additional support provided through Research at Risk Initiative that links funding for equipment and infrastructure in need of repair or replacement to annual undergraduate enrollment growth. To date we have provided >\$500,000 to faculty through this program. The result has been a >\$11,000,000 (122%) increase in annual research support with annual support exceeding \$20,000,000.
- **Community and Industry Partnerships:** Developed partnerships with industry in Windsor-Essex through the Extension Science program and in collaboration with the Windsor-Essex Economic Development Corporation (WEEDC). Implemented and steering Extension Science program to support local industry including nutraceuticals, pharmaceuticals, wineries, breweries, distilleries, and greenhouses. Supporting the creation of an industry liaison position for the Faculty of Science to commence Fall 2021 in collaboration with WEEDC, Libro Credit Union, City of Leamington and the VPRI. Introduced revisions to ByLaw 20 to create new Professor of Practice definition in addition to Clinical Professors and Indigenous Scholars. Community and industry funding has increased by >180% since 2016. Active member of the University of Windsor Carnegie Community Partnership committee.
- **Infrastructure:** Steered successful Strategic Innovation Fund (SIF) project for the new Centre for Research (CORE) that officially opened in summer 2019. Supporting new infrastructure project (WinCity) to move graduate computer science programs to downtown core to provide greater opportunities for community and industry partnerships as part of the University's commitment to regional economic development. Responsible for >150,000 sq. ft of space over 6 buildings.
- **Undergraduate and Graduate Recruitment:** Implemented programs to increase undergraduate and graduate applications and registrations through a refocused and proactive (Destination Science) recruitment strategy focused on high impact learning experiences highlighted in school visits, parent's night, welcome booklet, and Science by the Numbers advertisement. The growth at the undergraduate level was the result of an increase in undergraduate applications and first-choice registrations in an increasingly competitive Provincial environment. Total Growth: 940 undergraduate students (+50%) and 476 graduate students (+94%) between 2015 and 2021 resulting in >\$22,000,000 in additional tuition to the Faculty of Science.
- **Budget:** Eliminated historical deficit of >\$4,000,000 through enrollment growth in undergraduate, research-based graduate and professional graduate programs

- despite 10% tuition cut and international deferrals due to COVID-19 while growing research and increasing the number of tenure-track and permanence-track faculty.
- **Faculty Growth:** Chaired and or supported the hiring of more than 34 faculty between 2016 and 2020 from both the SPF 50 program at the University of Windsor (21 hires) and retirement replacements (13 hires). Total permanent faculty compliment has increased from 109 in 2016 to 130 in 2020 while we were able to address the historical deficit position of the faculty. The growth in faculty has balanced our undergraduate enrollment growth to allow us to maintain a 1:17 faculty to undergraduate student ratio as a competitive advantage in Ontario.
  - **High Impact Learning Experiences:** Introduced new undergraduate research programs that increase opportunities for undergraduate students while also providing mentoring and management training for senior graduate students, and HQP support for faculty. We have also increased participation in study abroad programs, created new internship and externship programs, and service-learning opportunities for academic credit. These opportunities are incentivized through our LEAD Medallion Scholars program, which in turn supports achievement of our SMA3 targets, student satisfaction and future-donor development. In support of the expanded number and diversity of high impact learning experiences, AAS faculty members were hired to coordinate our recruitment and retention programs.
  - **Faculty Development:** Implemented a Faculty Onboarding program to ensure that our junior professors are aware of University and Faculty policies, as well as understand the opportunities to develop high impact learning experiences that also support research funding. We have also introduced incentives and provided necessary resources for faculty to participate in high impact learning experiences for students. A Faculty seminar series (PEARL) provides faculty with training in developing online and flipped courses, authentic engagement and outreach opportunities, and high impact experiences for students that can be used as “broader impacts” for federal grants. Developed and steered the development of new faculty designations of Clinical Professor, Professor of Practice, and Indigenous Scholar.
  - **Advancement:** Implemented a holistic advancement strategy that defines all other initiatives. Created outreach and engagement programs (e.g., Science OnTap) for Faculty and Students to highlight the research they are conducting to the local community. Hired Communications Coordinator as part of an Advancement Team with the Major Gift Officer, AAS in High Impact Learning Experiences, and Industry Liaison (forthcoming). This change in strategy and reorganization of the Dean’s Office has resulted in >\$1,700,000/yr (+400%) in annual philanthropic gifts and endowments to the Faculty of Science in 2019/2020, including the largest philanthropic gift in support of research to the University of \$1,000,000 for the Canadian Centre for Alternatives to Animal Methods (CCAAM). Building a culture of philanthropy with Heads and Directors in support of a (post-COVID) capital campaign (Science Matters) as well as strengthening alumni support through student experience (LEAD) and outreach activities (Usci and LinkedIn). Increasing alumni connection and future support through high impact learning activities and support programs (including LinkedIn future alumni strategy).
  - **Curriculum Innovation:** Steered and supported new program development

including 8 Certificates, Master of Engineering Materials Chemistry (G), Translational Health (G), Actuarial Sciences (UG), and Interdisciplinary Health Sciences (UG), and supporting the development of forthcoming programs in Data Science (G), GIS (G), Regulatory Science (G) and Applied IT (UG) for additional enrolment growth by >300 students per year by 2022. Also acting as institutional lead for the development of an Interdisciplinary Health Sciences undergraduate program with an anticipated start date of fall 2022 (enrolment growth of ~100 students). Further developed 2+2 and 3+1 block transfer streams in Environmental Science, Economics, Chemistry and Forensic Science, with additional 2+2 block transfer streams in Environmental Studies and Biology forthcoming. The articulation strategy that we have employed will allow us to be the most transfer-friendly science program in the Province of Ontario. Currently developing 4+1 undergraduate and graduate pathways and developing Advancement Placement (AP) opportunities for local students. Curriculum innovation has involved a critical assessment of our program development and approval process, and implementation of new expedited processes. Designed and implemented institutional Competency Based Learning policy.

- **Workplace Climate:** Supported and implemented recommendations of a Workplace Climate report commissioned in 2015 to understand and tackle legacy workplace climate issues in the Faculty of Science. This included many structural changes across the Faculty, increased communication, open and transparent budgeting, and clear and consistent policies for decision-making. This and other changes in the Faculty of Science were made possible through the adoption of an open-door and accessible leadership model to build moral and pride in the Faculty of Science by Faculty, Staff and Students- the changes we have made in enrolment, budget, advancement, and faculty recruitment would not have been possible if I had not adopted this unique and non-traditional leadership approach.
- **EDI and Indigenous Initiatives:** Increased opportunities for women and (self-identified) LGBT and racialized faculty to develop leadership experience as part of a broader succession planning exercise. Established Science EDI Taskforce to ensure we are meeting our commitment to the NSERC Dimensions Charter, supported by an EDI in Science Postdoctoral Fellow to provide evidence-based decisions. Supporting the Indigenization of our curriculum through the establishment of our Common Ground strategy supporting research and academic partnerships, and the creation of the Indigenous Scholars designation as well as the first Indigenous Knowledge Keeper for the University of Windsor. Also supporting Black, Indigenous and People of Color (BIPOC) faculty and student development through our Future Faculty Fellows program and scholarships for undergraduate and graduate students.
- **Student Support Programs:** Implemented new student programs and partnerships through our USci Network including PASS (Preparation for Academic Success in Science), LEAD Medallion Scholars, SMART (Science Meets Art), Living Learning Communities, Careers in Science, Women in Science (WinS), Parents Night, Sci of Relief Mental Health Strategy, and the Common Ground Indigenous Strategy. We are expanding this to include the hiring of staff Academic Advisors to provide proactive advising for students across cognate areas in the Faculty.

Associate Dean for Academic Affairs and Faculty Development, Sept. 2014-June 2016  
College of Geosciences, Texas A&M University

***Direct and Indirect Reports***

Senior Academic Advisor II for College of Geosciences  
6 Academic Advisors of Undergraduate and Graduate programs  
Director of Recruitment and Retention  
High Impact Programs Coordinator

***Budget:*** \$250,000 base budget + \$410,000 salaries for direct and indirect reports

***Responsibilities***

- Coordinate undergraduate curricula and programs: scheduling and monitoring courses and degree programs, registration blocks, readmission, Q and no grade drops, New Student Conferences, UCC Chair
- Lead college-wide curriculum innovation: QEP activities, on-line learning, and new degrees, minors and certificates.
- Coordinate degree programs, certificates and undergraduate minors and supervise academic advising in college
- Oversee processes and activities related to recruitment, admission, and retention of a diverse group of FTIC and transfer students with Director of Recruitment
- Coordinate assessments of student learning. Acts as Assessment Liaison to the University Assessment Committee and co-chairs College Assessment Committee
- Coordinate High Impact Experiences for undergraduate students including study abroad, REEPs, field trips and experiences, internships, etc.
- Coordinate nomination processes associated with faculty, staff and student awards. Co-chair scholarship committee
- Initiate and coordinate faculty development activities. Oversee faculty course loads, and College Grievance Committee
- Counsel students on academic progress and career goals of students, handle student complaints and inform students of University rules and policies

***Accomplishments***

- ***Recruitment:*** Refocused recruitment on transfer students from 2-year community colleges through the development of strategic relationships with colleges in Houston, Dallas-Fort Worth and San Antonio, and repaired relationships with Prospective Student Centers and Transfer Admissions Office. Recruitment programs for freshman, transfer and change of major students were built around a *Pathway to the Geosciences* mapping program that provided students with clear pathways to an undergraduate degree in the geosciences. The result was a >30% increase in undergraduate majors through a 107% increase in transfer admissions.
- ***Diversity:*** Ensured that recruitment programs not only maintained diversity of students at 26% under-represented minorities, but also increased diversity of incoming students to 34% under-represented minorities. The national average for geoscience programs in the United States is <7%.
- ***Retention:*** Introduced new retention programs based on a detailed assessment of student success and historical retention problems in the college including a free tutoring program for students (GeT; Geosciences Tutors) and a freshman bridge

program (GAP; Geosciences Academic Preparation Program). Intentional participation in retention programs and high impact learning experiences was also incentive through a Medallion Scholars Program.

- **Academic Advising:** Restructured academic advising to increase the effectiveness of academic advising in the college and to address problems associated with reporting lines, expectations, uneven distribution of responsibilities and scope of work.
- **High Impact Programs:** Introduced new undergraduate research programs that increase opportunities for undergraduate students while also providing mentoring and management training for senior graduate students through a hierarchical mentoring program that starts with Freshman Seminars. Increased participation in study abroad programs with over 10% of undergraduates studying abroad each year in addition to institutionalizing internship and externship programs, and introducing the first service learning opportunities for students in the college.
- **Faculty Development:** Introduced faculty workshop and seminar series to provide faculty with training in developing online and flipped courses, authentic engagement and outreach opportunities, and high impact experiences for students that can be used as “*broader impacts*” for federal grants. Also, developed mentoring program for the Department of Geology & Geophysics, faculty onboarding program, and incentives for faculty to provide High Impact Experiences for undergraduate students.
- **Aggie Research Scholars:** Provided opportunities for senior PhD students to develop essential skills in mentoring and managing undergraduate students in research.
- **Faculty Development Policies:** Development of policies for Academic Professional Track (APT) faculty, engagement of research scientists from the International Ocean Discovery Program (IODP), and Development Leave.

Global Faculty Ambassador, September 2012- June 2016

Office of the Provost, Texas A&M University

**Responsibilities**

- Develop and implement strategic plan for international partnerships in Latin America in support of the student experience and faculty research
- Faculty liaison between the Office of the Provost and the rest of main campus, to support the development of research and education programs at the Soltis Center for Research and Education in central Costa Rica

**Accomplishments**

- Facilitated the development and implementation of international research and education programs at Texas A&M University (main campus), TAMU Corpus Christi, TAMU Kingsville and TAMU Commerce as well a
- Responsible for an increase of over 2500 student nights (or ~\$137,500 per year) at the Soltis Center for Research and Education through academic programs and over \$1,500,000 in external research funding to faculty from Texas A&M University (main campus)
- Successfully identified and pursued development and endowment opportunities for the Soltis Center through the Office of the Provost and the Texas A&M Foundation

- Developed strategic plan to sustain and increase research, education and outreach programs at the Soltis Center

Undergraduate Director, September 2013-2014

Department of Geography, Texas A&M University

***Responsibilities***

- Responsible for management of the undergraduate program with a specific focus on maintaining course enrollment during core curriculum transition and increasing the number of majors entering as freshman students through outreach and the development of a high-school pipeline program (iGIS) to support a new GIST program.

***Accomplishments***

- Successfully steered proposal for a new GIST major through to approval by Faculty Senate and currently steering proposals for a revised GIST minor and University Studies Area of Concentration. Had enrollment of 99 students within first year.
- Lead the creation of special sections of GEOG 201 for the College of Engineering that are linked to their ABET accreditation self-evaluation process
- Created special sections of GEOG 202 to increase and sustain enrollment of students from Veterinary Medicine & Biomedical Sciences

NSF REU Site Director: Ecohydrology of a Tropical Montane Forest, 2010-2013

Soltis Center for Research and Education, Costa Rica (<http://costaricareu.tamu.edu/>)

- Administrator of an interdisciplinary REU program at the Soltis Center for Research and Education in Central Costa Rica involving 10 students per year mentored by 12 faculty from 5 departments and 3 colleges

Graduate Director, January September 2004-July 2007

Department of Environmental Science, University of West Florida

- Responsible for the management of a new graduate (MS) program (started August 2004) at the University of West Florida that grew to include 18 thesis track students and 27 non-thesis track students by July 2007

## ACADEMIC POSITIONS

Professor, July 2016-present

School of the Environment

Member: Great Lakes Institute for Environmental Research (GLIER)

Faculty of Science, University of Windsor

Professor, January 2016- June 2016

Department of Geography, Texas A&M University

Department of Geology and Geophysics, Texas A&M University

Associate Professor, September 2011 – January 2016

Department of Geography, Texas A&M University

Department of Geology and Geophysics, Texas A&M University

Assistant Professor, September 2007 – August 2011  
Department of Geography, Texas A&M University

Assistant Professor, September 2004 – August 2007  
Department of Environmental Studies, University of West Florida

Adjunct Professor, 2003-2012  
Department of Geography, University of Victoria

Associate Lecturer, June 2003- August 2004  
Department of Environmental Science, Royal Roads University

Postdoctoral Fellow (October 2003 - September 2004)  
Geological Survey of Canada- Pacific Geoscience Centre  
NSERC Postdoctoral Fellowship in a Canadian Government Laboratory (\$40,800)

Doctoral Candidate/Graduate Research Associate (June 1999 – October 2003)  
Scarborough College Coastal Research Group, University of Toronto at Scarborough  
Natural Sciences and Engineering Research Council PGS (A) Award (\$34,600)  
Natural Sciences and Engineering Research Council PGS (B) Award (\$38,200)  
William G. Dean Graduate Scholarship (\$15,000)

## TEACHING AND RESEARCH GRANTS

### **Currently Submitted Grants**

NSERC CREATE. \$1,650,000. Canadian Coastal Careers Training Network (Canadian COTE Canadienne), 2022-2027.

### **Research Grants (Total: >\$2,500,00 CDN awarded)**

Faculty of Engineering, Sustainability Grant. \$25,000. Impacts of Climate Change and land-use change on rainforest hydrology. Tirupati (PI), Houser. 2022-2023.

MITACS Accelerate. \$260,000. Socially and physically based surf warning system to improve beach safety, C. Houser (PI), K. Souci, D. Menard. 2022-2025.

MITACS Accelerate. \$45,000. Quantifying Environmental and Anthropogenic Impacts on Coastline Instability at Point Pelee National Park (PPNP) and Peninsula, 2021-2022.

Natural Science and Engineering Research Council of Canada. \$20,000. Communicating Science. C. Houser (PI), 2020-2021.

Natural Science and Engineering Research Council of Canada. \$195,000. Discovery Grant. Analytical Reasoning and Fuzzy Cognitive Maps of Barrier Island Response to Natural and Anthropogenic Forcing. C. Houser (PI), 2017- 2022.

Natural Science and Engineering Research Council of Canada. \$120,000. Accelerator Supplement. Analytical Reasoning and Fuzzy Cognitive Maps of Barrier Island Response to Natural and Anthropogenic Forcing. C. Houser (PI), 2017- 2020.

Department of Defense- Army Corps of Engineers. \$43,262 US. BAA 16-0012 for Perceptions,

governance and stakeholder relationships along the Texas coast. C. Houser (PI), 2016.

National Science Foundation, \$15,444 US. Doctoral Dissertation Research: Assessing the Role of Geologic Framework on Barrier Island Geomorphology. C. Houser (PI), Wernette, P (PhD student), 2016.

Texas Sea Grant, \$19,990 US. Rip Current Survivor Story. C. Houser (PI), 2015.

Coastal Management Program, \$50,000 US. Geologic framework assessment of Follets Island. T. Dellapanna (PI), J. Fingus (Co-PI), C. Houser (Co-PI), 2014.

National Science Foundation, \$6,748 US. REU Supplement: Longitudinal study Role of Free and Forced Boundary Conditions on Beachface Evolution. C. Houser (PI), 2013.

National Science Foundation, \$60,636 US. Role of Free and Forced Boundary Conditions on Beachface Evolution. C. Houser (PI), 2013-2014, August 2013.

National Science Foundation, \$557,000 US. REU Site: Ecohydrology of a tropical montane cloud forest. C. Houser (PI) and A. Cahill, 2010-2013, January 2010.

Texas Sea Grant, \$137,900 US. Perception of the Rip Current Hazard on Galveston Island and South Padre Island. C. Houser (PI) and C. Brannstrom, 2012-2014.

National Science Foundation, \$71,437 US. Measurement of the Drag Coefficient for Seagrass at Tidal, Storm and Seasonal Scales. C. Houser (PI), 2012-2013.

National Science Foundation, \$11,970 US. REU Supplement: Longitudinal study of wave attenuation by seagrass. C. Houser (PI), 2012.

National Science Foundation, \$47,380 US. Synchronization of Beach-Dune Systems. C. Houser (PI), 2009-2011.

PADI Foundation, \$4,995 US. Undergraduate research assistant: Impact of boat wakes and wind waves on backbarrier seagrass beds. C. Houser (PI), 2011.

Florida Department of Transportation, \$94,859 US, Study of the effects of shoreline structures on nesting loggerhead turtles. M. Lamont (PI), C. Houser (Co-PI), 2011-2012.

National Park Service, \$25,800 US. Impact of oversand vehicles at Assateague Island National Seashore. C. Houser (PI), 2009-2011.

National Park Service, \$177,000 US. Geological Framework of Santa Rosa Island. C. Houser (PI), 2007-2011.

National Park Service, \$39,000 US. Boat wake erosion along the Savannah River. C. Houser (PI), 2008-2011.

NOAA: Florida Sea Grant, \$113,150 US. Rip current hazard at Pensacola Beach. C. Houser (PI), K Meyer-Arendt, 2008-2010.

Department of Defense, \$37,500 US. Hurricane Impacts at Eglin Air Force Base. C. Houser (PI), 2008-2012.

NOAA: Texas Sea Grant, \$9,000 US Controls on sedimentation in salt marshes, D. Cairns (PI), C. Houser, 2009-2010.

NOAA, \$84,000 US. Mortality associated with tropical cyclones, K. Meyer-Arendt (PI), C. Houser, 2008-2010.

American Chemical Society, \$35,000 US. Sediment transport processes on the inner-shelf. C. Houser (PI), 2007-2008.

NASA, \$36,000 US. Estimation of spectral waves for Orion Lander. J. Kaihtu (PI), C. Houser, 2007-2008.

National Park Service, \$47,368 US. Mississippi Barrier Island Response to Hurricane Katrina. C. Houser (PI), 2005-2007.

National Park Service, \$8,717 US. Evolution of Overwash Deposits Following Katrina. C. Houser

(PI), 2005-2006.

National Park Service, \$9,000 US. Evaluation of vegetation for dune building. C. Houser (PI), 2005-2006.

University of West Florida Research Award, \$6,250 US. Wave Attenuation by Seagrass. C. Houser (PI), 2004-2005.

University of West Florida Faculty Scholarly and Creative Activity Award, \$2,000 US. Beach-Dune Interaction at Pensacola Beach, Florida. C. Houser (PI), 2004-2005.

### **Teaching Grants (Total: >\$2,600,000 CDN awarded)**

Universities Canada Global Skills Mobility Grant. \$500,000. Go Global STEPs. C. Houser (PI), C. Busch, J. Bornais, B. Oakley. August 2021.

Universities Canada Global Skills Mobility Grant. \$500,000. iWill Go Global. C. Busch (PI), C. Houser, J. Bornais, B. Oakley. August 2021.

ecampus Ontario [NGG-NFP-CAN] Program: Virtual Learning Strategy. \$74,729. C. Houser (PI). May 2021.

Ministry of Advanced Education and Skills Development, Province of Ontario. \$750,000. Extension Science. C. Houser (PI). May 2018.

Dean of Faculties, Tier One Program, Texas A&M University, \$275,034 US. Aggies commit to undergraduate research and graduate leadership. C. Quick (PI), C. Houser, S. Datta and S. Bloomfield. July 2015.

Dean of Faculties, Tier One Program, Texas A&M University, \$269,400 US. A vision for the Soltis Center: An interdisciplinary study abroad research program through integrated project delivery. J Kim (PI), J. Kang, S. Shafer and C. Houser. July 2015.

College of Geosciences, Texas A&M University, \$63,000 US. Engaging Students Early Through Field-Based Experiences in Introductory Courses. C. Houser (PI), Brannstrom, Ewers, Frauenfeld, Houser, Quiring, Roark, January 2012.

College of Geosciences, Texas A&M University, \$61,000 US. Enhancing Research Intensive Capstone Courses with More Fieldwork. Collins (PI), Ewers, Frauenfeld, Houser, Quiring, Roark, January 2012.

College of Geosciences, Texas A&M University. \$11,445 US. Weather stations for study abroad courses at the Soltis Center for Research and Education. C. Houser (PI), S. Quiring, September 2010.

College of Geosciences, Texas A&M University, \$6,000 US. Personal GPS units for GEOL/GEOG 352 GPS in the Geosciences. C. Houser (PI), January 2010.

Texas A&M University Freshman Study Abroad Program, \$22,500 US. GEOG 203 Planet Earth Freshman Experience in Costa Rica. C. Houser, S. Quiring, March 2009.

Texas A&M University Freshman Seminar Series, \$2,000 US. The Science of Surfing. C. Houser, August-December 2009.

Texas A&M University International Programs Grant, \$1,686 US. Geomorphology at the Soltis Center. C. Houser, March 2009.

### **Other Awards**

Texas A&M University, Honors and Undergraduate Research. 2015 Betty M. Unterberger Award, May 2015.

Texas A&M University, Department of Geography, \$800. Meritorious Research Performance Bonus. September 2010.

College of Geosciences, Dean's Distinguished Achievement Award for Teaching, December 2013.

#### PUBLICATIONS (h index=36 from Google Scholar, May 2022)

*Undergraduate student authors have double underline*

*Graduate Student authors have single underline*

#### Submitted Articles

1. Menard, A.D., Cavallo-Medved, D., Jaffri, S., and **Houser**, C. (*Submitted*). Stress, coping, and campus program use among self-identified sexual minority group students in science. Submitted to *Anxiety, Stress and Coping*, March 2021.
2. Chittle, L., Kustra, E., & **Houser**, C., (*Submitted*). "The entire budgeting system is anti-interdisciplinary": An examination of faculty members' perceptions of challenges with interdisciplinary curriculum development. Submitted to *The Canadian Journal for the Scholarship of Teaching and Learning*, December 2020.
3. Chittle, L.; King, A., Sood, S., Hinch, I., **Houser**, C., and Cavallo-Medved, D. Fostering students as partners: A faculty-wide examination of science undergraduate and graduate student's perspectives of pedagogical partnerships. Submitted to *Canadian Journal of STEM*, May 2022.
4. Lunardi, B., Smith, A., George, E., Lehner, J., and **Houser**, C. (*Submitted*). Scale-dependent variation of beach-dune morphology within and between sites. Submitted to *Geomorphology*, June 2022.
5. Chittle, L., Coyne, P., King, A., Sood, S., **Houser**, C., and Cavallo-Medved, D. (*Submitted*). Do they agree? Examining difference in science faculty and student perceptions of the presence of Student Partnership values.
6. **Houser**, C., Smith, A., Lehner, J., and George, E. (*Submitted*). Perception of Coastal Barrier Landscapes. Submitted to *Geomorphology*, August 2022.

#### Published and Accepted Articles

1. **Houser**, C., Smith, A., Lehner, J., Lunardi, B., and George, L. (*Accepted with Revisions*). Is there a representative and scale-invariant beach-dune profile? Accepted to *Canadian Geographer*, June 2022.
2. Smith, A., **Houser**, C. (*Accepted with Revisions*). Perspectives on Great Lakes Coastal Management: A Case Study of the Point Pelee Foreland, Canada. Accepted to *Ocean and Coastal Management*, May 2022.
3. Menard, D., Jafri, S., Soucie, K., Cavallo-Medved, D., **Houser**, C. (*In Press*) Awareness, use and value of student support programs through the lens of science students, faculty, and staff.

Accepted to *Journal of Canadian Journal of the Science of Teaching and Learning*, January 2022.

4. **Houser**, C., Cavallo-Medved, D., and Bondy, M. (*In Press*). Impact of the Preparation for Academic Success in Science (PASS) high school to university transition program. Accepted to *The Canadian Journal for the Scholarship of Teaching and Learning*, December 2021.
5. **Houser**, C., and Bornais, M. (*In Press*). Student perceptions on the benefits and barriers to study abroad. Accepted to *The Canadian Journal for the Scholarship of Teaching and Learning*, Accepted February 2022.
6. Corchis-Scott, R.....**Houser**, C.,.....McKay, M. (*In Press*). Averting an outbreak of severe acute respiratory syndrome Coronavirus 2 (SARS-CoV-2) in a university residence hall through wastewater surveillance. Accepted to *Microbiology Spectrum*, August 2021.
7. Ellis, J., and **Houser**, C. (2022) Morphodynamic Systems: Beach and Dune Interaction. *In*: John F. Shroder (ed.) *Treatise on Geomorphology*. San Diego: Academic Press.
8. **Houser**, C., Lehner, J., and Smith, A. (2022). The Field Geomorphologist in a time of Machine Learning and Artificial Intelligence. Accepted to *Annals of the American Association of Geographers*, 1-18.
9. Wernette, P., and **Houser**, C. (2022). Geological controls on rip currents. *Physical Geography*, 43, 145-162.
10. **Houser**, C., Arbex, M., and Trudeau, C. (2021). Short Communication: Economic Impact of Drowning in the Great Lakes Region of North America. *Ocean and Coastal Management*, 212, 105847.
11. Locknick, S., and **Houser**, C. (2021). Correspondence of beach user management, lifesaving strategies and rip currents: Implications for Beach Management. *Coastal Management*, 6, 598-616.
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#### Books and Textbooks

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2. Giardino, R., and **Houser, C.** (Eds) (2015) *Principles and Dynamics of the Critical Zone*. Elsevier, p. 674.

## Book Chapters

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2. Smith, A., Lunardi, B., George, E., and **Houser**, C. (2020). Monitoring Storm Impacts on Sandy Coastlines with UAVs. In *Spatial Variability in Environmental Science-Patterns, Processes, and Analyses*. IntechOpen, 67-90.
3. Trimble, S., and **Houser**, C. (2018). Seawalls and signage: how beach access management affects rip current safety. In: *Beach Management Tools*, edited by O. Cervantes, Springer, 497-524.
4. **Houser**, C., Barrineau, P., Hammond, B., Saari, B., Rentschler, E., Trimble, S., Wernette, P., Weymer, B., and Young, S. (2018) Role of the foredune in controlling barrier island response to sea level rise. *Barrier Islands*, edited by Moore, L., and Murray, B., pp. 175-203.
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## Conference Proceedings

1. Weymer, B.A., Barrineau, P., **Houser**, C., Everett, M., and Jewell, M. (2013) Using GPR and EM to characterize barrier island transgression along the Texas Coast. *Coastal Geophysics Workshop*, Austin, Texas, September 2013.
2. Jewell, M., Weymer, B., **Houser**, C., Everett, M., and Barrineau, P. (2013) Characterizing coastal dune blowouts using GPR in combination with LiDAR and historical aerial

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#### Invited Conference Presentations

1. **Houser**, C. Alongshore Variation in Beach and Dune Coupling. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.

2. **Houser, C.**, Wernette, P., and Weymer, B. Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise. *European Geophysical Union Annual Meeting*, Vienna, April 16-20, 2017.
3. **Houser, C.**, Wernette, P., and Weymer, B. Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.
4. **Houser, C.** Post-storm recovery as a control on barrier island resilience and management. *Dune Management Challenges on Developed Coasts*, Kitty Hawk, North Carolina, October 26-28, 2015.
5. **Houser, C.** Impacts of driving on the beach at Padre Island National Seashore: Implications for island response to sea level rise. *Texas Beaches and Dunes: Science and Management Forum*, Corpus Christi, September 24-25, 2015.
6. **Houser, C.** Variation in coastal dune morphology: Implications for storm response. *Binhampton Geomorphology Conference*, Newark New Jersey, October 17-20, 2013.
7. **Houser, C.** Recovery as the key to barrier island resiliency. *NSF Workshop on Landscape Response to Climate Change*, Tuscon, Arizona, September 24-27, 2013.
8. **Houser, C.**, Weymer, B., Trimble, S., and Barrineau, P. Interaction of beach, dune and nearshore systems: implications for barrier island morphology. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2013.
9. **Houser, C.** and Hill, P. Wave attenuation and sediment transport over an intertidal sand flat on the Fraser River Delta. *American Geophysical Union Annual Meeting*, San Francisco, December 11-17, 2010.
10. **Houser, C.** Response and recovery of a barrier island to extreme storms. *Geological Society of America*, Denver, Colorado, October 31-November 4, 2010.
11. **Houser, C.**, Caldwell, N., and Meyer-Arendt, K. Hot times at Hot spots: The rip current hazard at Pensacola Beach, Florida. *First International Symposium on Rip Currents*, Miami, Florida, February 17-19, 2010.

#### Conference Presentations

1. Locknick, S., and **Houser, C.** Correspondence Between Beach User Perception and Rip Currents in Prince Edward Island. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
2. George, E., Lehner, J.D., Wernette, P., and **Houser, C.** Fuzzy Boundaries: Classifying the Beach-dune interface. *American Geophysical Union Annual Meeting*, San Francisco,

December 9-15, 2019.

3. Wernette, P., and **Houser**, C. Geologic Controls on Rip Current Location and Formation. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
4. Cherry, N., and **Houser**, C. Machine learning assessment of lifeguard perception of rip-risks. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
5. Lehner, J.D., Wernette, P., **Houser**, C. Identifying Foredune Morphometrics through a landform extraction machine learning approach. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
6. Smith, A., **Houser**, C., Chittle, B., Krueger, T. Collating and Predicting North American Beach-Dune Interactions through Time and Space. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
7. Lunardi, B., Lehner, J., **Houser**, C., Wernette, P., George, E. Alongshore coupling of eco-geomorphological variables of a beach-dune system. *American Geophysical Union Annual Meeting*, San Francisco, December 9-15, 2019.
8. Wernette, P., Lehner, J., and **Houser**, C. What is real? Identifying patterns of erosion and deposition in the context of spatially variable uncertainty. *American Association of Geographers Annual Meeting*, 2018.
9. Wernette, P., **Houser**, C., Lehner, J., and Evans, A. Human activity, framework geology and barrier island resiliency: Lessons from Hurricane Harvey. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2018.
10. Lehner, J., Wernette, P., and **Houser**, C. Machine learning approach to predicting foredune morphometrics. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2018.
11. **Houser**, C., Figlus, J., and Hammond, B. Post-storm recovery of the foredune: Implications for barrier island resiliency. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2018
12. **Houser**, C., and Trimble, S. Seawalls and signage: how beach access management affects rip current safety. *Canadian Coastal Conference*, 2018.
13. **Houser**, C., Wernette, P., and Weymer, B. Scale dependent behavior of the foredune: Implications for barrier island response to storms and sea level rise. *Canadian Coastal Conference*, 2018.
14. Locknick, S., Scaman, A., and **Houser**, C. A study of rip current warning dissemination methods. *American Association of Geographers Annual Meeting*, 2018.

15. Wernette, P., and **Houser**, C., Enhancing professional development through vertically tiered undergraduate research. *American Association of Geographers Annual Meeting*, 2018.
16. Burdett, H., Lehner, J., **Houser**, C, Let's get fuzzified. *American Association of Geographers Annual Meeting*, 2018.
17. Lehner, J., Wernette, P., and **Houser**, C. Machine learning approach to predicting coastal geomorphology. *American Association of Geographers Annual Meeting*, 2018.
18. Wernette, P., **Houser**, C., Evans, A. Management implications of Hurricane Harvey for Padre Island National Seashore. *American Association of Geographers Annual Meeting*, 2018.
19. Vlodarchyk, B., **Houser**, C., Lehner, J., and Wernette, P. Predicting drownings on the great lakes using machine learning. *American Association of Geographers Annual Meeting*, 2018.
20. **Houser**, C., and Locknick, S. Rip currents within the Canadian Curriculum. *American Association of Geographers Annual Meeting*, 2018.
21. Wernette, P., **Houser**, C., Weymer, B., Everett, M., Bishop, M., Reece, B. Spatially variable framework geology as a driver of barrier island development. *American Association of Geographers Annual Meeting*, 2017.
22. **Houser**, C., Wernette, P., and Weymer, B., Scale dependent of the foredune: Implications for barrier island response to storms and sea level rise. *American Association of Geographers Annual Meeting*, 2017.
23. Trimble, S., **Houser**, C., and Bishop, B. Degree of anisotropy as an automated indicator of rip channels in high resolution bathymetric models. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2017.
24. Evans, A., Wernette, P, and **Houser**, C. Coastal erosion at Padre Island: Insights from UAV Surveys after Hurricane Harvey. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2017.
25. Locknick, S., and **Houser**, C. Beach user perceptions of the rip current hazard on the Great lakes. *American Association of Geographers Annual Meeting*, 2017.
26. Burdett, H., and **Houser**, C. No speak, no hear, no see: Improving warning systems for rip currents on the Great Lakes. *American Association of Geographers Annual Meeting*, 2017.
27. Scaman, A., and **Houser**, C. Slap you in the face: A study of rip current warning dissemination methods. *American Association of Geographers Annual Meeting*, 2017.
28. Vlodarchyk, B, and **Houser**, C. Spatial and temporal variation in drownings on the Great Lakes: 2010-2016. *American Association of Geographers Annual Meeting*, 2017.

29. Barrineau, P., and **Houser**, C., Desertification and dune activity in South Texas. *American Association of Geographers Annual Meeting*, 2017.
30. Olivito, A., and **Houser**, C. Identifying beach and nearshore states at “Hot spots” drowning locations in the Great Lakes. *American Association of Geographers Annual Meeting*, 2017.
31. Wernette, P., **Houser**, C., and Quick, C. Team-based multidisciplinary research scholarship in the Geosciences. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
32. Lehner, J., Wernette, P., Bishop, M., and **Houser**, C. Assessing barrier island resiliency through multi-scale topographic anisotropy distribution patterns. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
33. Hartman, K., Trimble, S, Bishop, M., and **Houser**, C. Assessment of rip-current hazards using alongshore topographic anisotropy at Bondi Beach, Australia. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
34. **Houser**, C., Bishop, M., and Wernette, P. Multi-scale topographic anisotropy patterns with post-storm barrier island recovery. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
35. Flores, P., and **Houser**, C. Alongshore variation in the depth of activation: Implications of Oil Residence Time. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
36. Trimble, S., and **Houser**, C. Mapping and mitigating the international rip current health hazard. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
37. Wernette, P., **Houser**, C., Weymer, B., Bishop, M., Everett, M., and Reece, R. Framework geology as a driver of barrier island evolution. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
38. Tuttle, L., Wernette, P., and **Houser**, C. Updating the framework geology of Padre Island National Seashore: Validation of geophysical surveys through sediment cores. *American Geophysical Union Annual Meeting*, San Francisco, December 8-14, 2016.
39. Weymer, B., Everett, M.E., Wernette, P., and **Houser**, C. Statistical modeling of EMI spatial data series and LiDAR-derived morphometrics to understand the large-scale framework geology controls on barrier island transgression. *23<sup>rd</sup> Electromagnetic Induction Workshop*, Chiang Mai, Thailand, August 14-20, 2016.
40. Barrineau, P. and **Houser**, C. Deconstructing a Polygenetic Landscape Using LiDAR and Multi-Resolution Analysis. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.

41. Weymer, B., Everett, M., Wernette, P., and **Houser**, C. Is barrier island geologic framework fractal? Evidence from Padre Island National Seashore, Texas, USA. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.
42. Trimble, S., **Houser**, C., Brander, R., and Chirico, P. Identifying rip currents from remotely sensed imagery. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.
43. Bishop, M.P., **Houser**, C., and Lemmons, K. Transforming Undergraduate Education through the use of Analytical Reasoning (TUETAR). *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.
44. Wernette, P., Weymer, B., **Houser**, C., Bishop, M.P., Everett, M., and Reece, R. Using wavelet decomposition to assess the development of Padre Island National Seashore. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2015.
45. Wernette, P., **Houser**, C., and Bishop, M. Extracting barrier island morphology from Digital Elevation Models: An Automated Approach. *70<sup>th</sup> Annual Meeting of the Southeastern Division of the Association of American Geographers*, November 22-24, 2015.
46. **Houser**, C., Wernette, P., and Weymer, B. Scale dependent behavior of the fordune: Implications for barrier island response to storms and sea level rise. *70<sup>th</sup> Annual Meeting of the Southeastern Division of the Association of American Geographers*, November 22-24, 2015.
47. Trimble, S., **Houser**, C., and Brander, R. Perceptions of the rip current hazard and observations of beachgoer behavior on Bondi Beach, Sydney. *70<sup>th</sup> Annual Meeting of the Southeastern Division of the Association of American Geographers*, November 22-24, 2015.
48. **Houser**, C., Wernette, P., Rentschlar, E., Jones, H., and Hammond, B. Post-hurricane beach and dune recovery: implications for barrier island resilience. Association of American Geographers Annual Meeting, April 2015.
49. Wernette, P., Weymer, B., **Houser**, C., Bishop, M., and Everett, M. Integration of geophysics and LiDAR to assess the role of geologic inheritance in barrier island evolution. Association of American Geographers Annual Meeting, April 2015.
50. Hammond, B., and **Houser**, C. Using foredunes to quantify rate of recovery of Assateague Island, MD. Association of American Geographers Annual Meeting, April 2015.
51. Barrineau, P., and **Houser**, C., Using remotely sensed data and geophysical surveys to characterize stabilized Aeolian landscapes. Association of American Geographers Annual Meeting, April 2015.
52. Weymer, B.A., **Houser**, C., Giardino, J., Barrineau, P., Everett, M., and Bishop, M. The role of geologic inheritance on storm impacts along the south Texas Coast, USA. European

Geophysical Union Annual Meeting, Vienna.

53. Weymer, B.A., Barrineau, C.P., Bishop, M.P., Everett, M.E., Tchakerian, V.P., and **Houser**, C. Using mixed morphometrics and near-surface geophysics to characterize geomorphic evolution of the South Texas coastal zone. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2013.
54. Garcia, S., and **Houser**, C. Effectiveness of Geosciences Exploration Summer Program (GEOX) for increasing awareness and Broadening Participation in Geosciences. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2013.
55. **Houser**, C., Cahill, A., and Lemmons, K. A new approach to assess student perceptions of gains from a REU program. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2013.
56. Weymer, B.A., Barrineau, P., **Houser**, C., Everett, M., and Jewell, M. (2013) Using GPR and EM to characterize barrier island transgression along the Texas Coast. Coastal Geophysics Workshop, Austin, Texas, September 2013.
57. Jewell, M., Weymer, B., **Houser**, C., Everett, M., and Barrineau, P. (2013) Characterizing coastal dune blowouts using GPR in combination with LiDAR and historical aerial photographs. Coastal Geophysics Workshop, Austin, Texas, September 2013.
58. **Houser**, C., Bishop, M., Dobрева, I., Barrineau, P., and Weymer, B., Characterizing the instability of aeolian environments using analytical reasoning. *American Geophysical Union Annual Meeting*, San Francisco, December 9-13, 2013.
59. **Houser**, C. International Research Experiences for Undergraduates. *Southwestern Division of the American Association of Geographers*, October 24-26, 2013.
60. Mora, R., Giardino, J.R., Heaney, M.J., Price, A., Johnson, H., **Houser**, C., and Marcantonio, F. Geological mapping in the field through a unique bi-national approach to teaching: Texas A&M University and the University of Costa Rica. *Geological Society of America Meeting*, Denver, October 27-30, 2013.
61. **Houser**, C., Cahill, A., Gonzalez, E., Brooks, S., Frauenfeld, O, Miller, G., Moore, G., Rapp, A., Roark, B., Schade, G., Schmucaher, C., Washington-Allen, R., Brumbelow, K., and Lemmons, K.. Eco-hydrology of a tropical montane forest, a REU site hosted by Texas A&M University in Costa Rica. *Association for Tropical Biology and Conservation Annual Meeting*, San Jose, Costa Rica, June 24-27, 2013.
62. Washington, R.A., Buckwalter, E.H., Moore, G.W., Burns, J., Dennis, A.R., Dodge, O., Guffin, E.C., Morris, E.R., Oien, R.P., Orozco, G., Peterson, A., Teale, N.G., Shibley, N.C., Tourtellote, N., **Houser**, C., Brooks, S., Brumbelow, J.K., Cahill, A.T., Frauenfeld, O.W., Gonzalez, E., Hallmark, C.T., McInnis, K.J., Miller, G.R., Morgan, C., Quiring, S., Rapp, A., Roark, B., Delgado, A., Ackerson, J.P., and Arnott, R. Exploratory water budget analysis of a

transitional premontane cloud forest in Costa Rica through undergraduate research. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.

63. **Houser**, C., Cahill, A.T., and Lemmons, K. The role of the faculty mentor to the REU experience: insights from an international REU. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
64. Weymer, B.A., **Houser**, C., and Giardino, R. Alongshore variability in beach planform, grain-size distribution and foredune height of an embayed beach: Shoalwater Bay, Queensland, Australia. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
65. Arnott, R., and **Houser**, C. Determining rip current circulation patterns and velocities in the vicinity of a groin using GPS equipped drogues. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
66. Barrineau, C.P., Tchakerian, V., and **Houser**, C. Aeolian processes of the Pismo-Oceano dune complex, California. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
67. Jewell, M., and **Houser**, C., Holocene Development and progression of aeolian blowouts on Padre Island National Seashore. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
68. **Houser**, C., Sherman, D. and Ellis, J. Video analysis of Aeolian streamers. *American Geophysical Union Annual Meeting*, San Francisco, December 3-7, 2012.
69. Trimble, S., Brannstrom, C., **Houser**, C., Lee, H., and Santos, A. Perception of rip current hazard at Galveston Island. Annual Meeting of the *Southwest Division of the American Association of Geographers*, 25-27 October 2012, Las Cruces, NM
70. Jewell, M., and **Houser**, C., Holocene Development and progression of aeolian blowouts on Padre Island National Seashore. Annual Meeting of the *Geological Society of America*, Charlotte, North Carolina, November 4-7, 2012.
71. Weymer, B.A., **Houser**, C., and Giardino, J.R., The evolution of beach-dune morphology: Padre Island National Seashore Texas. Annual Meeting of the *Geological Society of America*, Charlotte, North Carolina, November 4-7, 2012.
72. **Houser**, C., Labude, B., Haider, L., and Weymer, B. Impacts of Driving on the Beach: Case Studies from Assateague Island and Padre Island National Seashores. Annual Meeting of the *Geological Society of America*, Charlotte, North Carolina, November 4-7, 2012.
73. **Houser**, C. and Saari, B., Biogeomorphic feedback in barrier island response and recovery to extreme storms, *21<sup>st</sup> Biennial Conference of the Coastal and Estuarine Research Federation*, November 6-10, 2011.

74. Ezer, T., Heyman, W., and **Houser**, C., High-resolution simulations of flow-topography interactions near coral reefs and potential implications for Caribbean fish spawning aggregations, 3rd International Workshop on Modeling the Ocean, Jun 6-9, 2011, Qingdao, China.
75. **Houser**, C., Rip Current Hazard at Pensacola Beach. *Association of American Geographers 107<sup>th</sup> Annual Meeting*, Seattle, Washington, April 14-18, 2011.
76. **Houser**, C., Linking beach-dune interaction with barrier island transgression. *American Geophysical Union Annual Meeting*, San Francisco, December 11-17, 2010.
77. **Houser**, C., Flow separation over a prograding beach step. *Association of American Geographers 106<sup>th</sup> Annual Meeting*, Washington, DC, April 14-18, 2010.
78. **Houser**, C., Alongshore variation in dune morphology and storm impact in national seashores depends on the correspondence of transport potential and sediment supply. *Geological Society of America: Northeast*, Baltimore, March 13-15, 2010.
79. **Houser**, C., Rip Current Hazard at Pensacola Beach. *1<sup>st</sup> International Rip Current Symposium*, Miami, Florida, February 17-19, 2010.
80. **Houser**, C., Managing the natural recovery of coastal systems following extreme storms. *Annual Meeting of the George Wright Society*, Portland, Oregon, March 2-6, 2009.
81. **Houser**, C., Wave by wave changes in the swash zone. *Annual Meeting of the Geological Society of America*, Houston, Texas, October 5-10, 2008.
82. **Houser**, C., Post hurricane beach and dune recovery. *Association of American Geographers 104<sup>th</sup> Annual Meeting*, Boston, Massachusetts, April 15-19, 2008.
83. **Houser**, C., Linking Dune morphology on a barrier island to transverse Bars on the inner shelf. *Association of American Geographers 103<sup>rd</sup> Annual Meeting*, San Francisco, California, April 17-23, 2007.
84. Meyer-Arendt, K., Oravetz, J., and **Houser**, C., Response of the Mississippi barrier islands to Hurricane Katrina. *Association of American Geographers 103<sup>rd</sup> Annual Meeting*, San Francisco, California, April 17-23, 2007.
85. Hamilton, S., and **Houser**, C., LiDAR analysis of morphological changes from Hurricane Ivan *Association of American Geographers 103<sup>rd</sup> Annual Meeting*, San Fransisco, California, April 17-23, 2007.
86. **Houser**, C. Geologic controls on Hurricane Damage and Dune Recovery. *Geological Society of America, Southeast Division Annual Meeting*, Savannah, Georgia, March 29-30, 2007.
87. **Houser**, C., Hobbs, C., Saari, B. Post-hurricane airflow and sediment transport over a

recovering dune. *International Conference on Aeolian Research*, University of Guelph, Guelph, Ontario, July 24-28, 2006.

88. Hill, P, **Houser**, C., Lintern, G., Shaw, A., Sutherland, T., Levings, C., Butler, R., and Elner, R., 2005. Impacts of sea level rise on the tidal flats of the Fraser River Delta. *Natural Resources of Canada Climate Change Workshop*, Ottawa, Ontario, September 13-15, 2005.
89. **Houser**, C., Walker, I., and Abeyvirigunawardena, D. 2005. Formation and behaviour of intertidal bar morphology. *Annual Meeting of the Southeastern Division of the American Association of Geographers*, November 20-22, 2005.
90. **Houser**, C. and Hamilton, S., Geomorphological impacts of Hurricane Ivan on Santa Rosa Island, Pensacola, Florida. *Annual General Meeting of the Canadian Association of Geographers*, London, Ontario, May 31 – June 4, 2005.
91. **Houser**, C., and Hill, P. (2005) Fate of sediment from a proposed dredge disposal site on the Fraser River Delta. *Geological Society of America, Southeastern Division*, March 2005.
92. **Houser**, C. and Greenwood, B. (2003) Multivariate analysis of profile change in a lacustrine multiple barred nearshore. *Annual General Meeting of the Canadian Association of Geographers*, Victoria, British Columbia, May 29 – June 1, 2003.
93. **Houser**, C. (2002) Seasonal dynamics of a lacustrine multiple-barred nearshore, Pinery Provincial Park, Ontario. *Association of American Geographers 98<sup>th</sup> Annual Meeting*, Los Angeles, California, March 19-23, 2002.
94. **Houser**, C. (2001) The role of antecedent morphology and event sequencing in the morphodynamics of a swash bar. *American Association of Geographers 97<sup>th</sup> Annual Meeting*, New York City, February 27- March 3, 2001.
95. **Houser**, C. (2000) The importance of event sequencing in nearshore morphodynamics. *Annual General Meeting of the Canadian Association of Geographers*, Brock University, St. Catharines, Ontario, May 31 – June 3, 2000.
96. **Houser**, C. (2000) The emission of PM<sub>10</sub> from a clay-crust surface, and the use of shear velocity in emission models. *American Association of Geographers 96<sup>th</sup> Annual Meeting*, Pittsburgh, Pennsylvania, April 4-8, 2000.
97. **Houser**, C. (1999) Limitations on using shear velocity in dust emission research. *Canadian Association of Geographers Ontario Chapter*, Hamilton, Ontario, October 16, 1999.

#### Book Reviews

1. **Houser**, C. (2005) *The Coastal Zone: Papers in Honor of H. Jesse Walker*. *Southeastern Geographer*.

## Non-refereed Contributions

1. **Houser, C.**, (2020) The Scars of Lost Instruments and Parasites. *Journal of Coastal Research Special Issue*, No 101.
2. **Houser, C.**, (2017) Creating sustainable and scalable high impact experiences: Don't forget the faculty. *University Affairs*.
3. Bishop, M.P., and **Houser, C.** (2016) Geomorphological Mapping and Geospatial Technology. *Encyclopedia of Geography*.
4. **Houser, C.**, and Ellis, J. (2013) ESEX Commentary: A Tribute to the Influence of Dr. Robin Davidson-Arnott in Coastal and Aeolian Geomorphology. *Earth Surface Processes and Landforms*.
5. **Houser, C.** (2013) *Alongshore variation in nest and false crawl distribution of Loggerhead turtles along St. Joseph Peninsula, Florida*. Report to the University of Florida, 19 pp.
6. Hill, P R; Butler, R W; Elnor, R W; **Houser, C**; Kirwan, M L; Lambert, A; Lintern, D G; Mazzotti, S; Shaw, A; Sutherland, T; Levings, C; Morrison, S; Petersen, S; Solomon, S (2013). Geological Survey of Canada, Open File 7259, 71 pages, doi:10.4095/292672.
7. **Houser, C.** (2012) *Impacts of Oversand Vehicles at Assateague Island National Seashore*. Report to the National Park Services, 163 pp.
8. **Houser, C.** (2011) *Geologic framework assessment for Gulf Islands National Seashore*. Report to the National Park Services, 451 pp.
9. Meyer-Arendt, K.J., **Houser, C.**, and McKinney, N., (2010) *Direct and indirect mortality associated with tropical cyclones*. Report to NOAA, 25 pages.
10. **Houser, C.**, (2009) *Bathymetric Controls on Rip Currents along Perdido Key*. Report to Escambia County, 29 pages.
11. **Houser, C.**, (2009) Barrier Islands. *Encyclopedia of Geography*.
12. **Houser, C.**, (2008) *Role of Cargo Vessels in Salt Marsh Erosion at Fort Pulaski National Monument*. Report to Fort Pulaski National Monument, National Park Service, 38 pages.
13. **Houser, C.**, (2005) *Statistical verification of trends in water quality for selected British Columbia rivers*. Water, Air and Climate Change Branch, Ministry of Water, Land and Air Protection, 51 pages.
14. **Houser, C.**, (2003) *Statistical verification of trends in water quality for selected British Columbia rivers*. Water, Air and Climate Change Branch, Ministry of Water, Land and Air Protection, 57 pages.

15. Nickling, W.G., and **Houser, C.** (1999) *A methodology for the Estimation of vertical PM<sub>10</sub> fluxes from dust emission factors for different fugitive dust sources*. EPA contract 68-D70067 WA2-01, 25 pages.
16. **Houser, C.**, and Mason, S. (1995) *Lake Simcoe littoral zone study*. Lake Simcoe Fisheries Assessment Unit, Ontario Ministry of Natural Resources, 1995-3, 67 pages.

## TEACHING AND ADVISING

### **School of the Environment, University of Windsor**

Professor: 2016-present

#### *Courses Taught (Enrollment given in parentheses for Fall, Winter and Summer Semesters)*

ESCI-3745: Field Methods (F19: 7)

ESCI-8818: Special Topics (F19: 5)

ESCI-4808: Special Topics Geostatistics (W18: 15)

ESCI-4808: Special Topics (S17: 11, S18: 12, S19: 14)- Costa Rica

ESCI-3735: Field Methods in Environmental Science (S17: 11, S18: 12, S19: 14)- Costa Rica

#### *Current Graduate Students at University of Windsor*

Jacob Lehner (MSc): *Machine Learning approach to coastal landform identification and modeling*. August 2017-present.

Summer Locknick (MSc): *Correspondence of beach users and the rip hazard at Cavendish Beach, PEI*. August 2018- December 2020.

Brent Vlodych (MSc): *Machine learning approach to landslide prediction in Costa Rica*. August 2018-December 2020.

Brianna Lunardi (MSc): *Alongshore correspondence of nearshore, beach and dune morphology*. August 2018-present.

Elizabeth George (MSc): *Post-Dorian beach and dune recovery*. August 2019-present.

Jenny Gahrib (MSc): *Barrier breaching at Point Pelee*. August 2020- present.

Jamie Lilly (MSc): *Boat wake attenuation by aquatic vegetation*. August 2020-present.

#### *Post-doctoral Fellows*

Phil Wernette. *Geologic framework controls on beach-dune systems*. August 2017-December 2019.

Alex Smith, *Alongshore variation in beach-dune systems*. June 2019-present.

Laura Chittle, *Program and curriculum development*. May 2020-present.

### **Department of Geography, Texas A&M University**

Assistant and Associate Professor: 2007-2016

#### *Courses Taught (Enrollment given in parentheses for Fall, Winter and Summer Semesters)*

GEOG 203: Planet Earth (S10: 23, F10: 170, F11: 300)

GEOG 203-526 Planet Earth: Study Abroad in Costa Rica (W09: 20)- new course  
 GEOG 205: Environmental Change (W11: 50, W12: 69, F12: 55, W14: 58)- new course  
 GEOG 205: Environmental Change study abroad (S15: 33)  
 GEOG 205: Environmental Change online (F15: 154)  
 GEOG 312: Data Analysis in Geography (F09: 9)- new course  
 GEOG 331: Geomorphology (F07: 18, F08: 21, F09: 18, F10: 25, F11: 20, W14:37)  
 GEOL/GEOG 352: GPS in the Geosciences (W09: 40, F12: 36, W13: 40)- new course  
 GEOG 370: Coastal Processes (W08: 21, W12: 55; F14: 52; F15: 50)  
 GEOG 450: Field Methods (S12 Study abroad: 15)  
 GEOG 489: Environmental Change (F08: 6)- new course  
 GEOG 611: Geography Research Design (W08: 9, W09: 15)  
 GEOG 666: Coastal Processes (W12: 20; F14: 8).  
 GEOG 604: Sedimentary Processes (W13: 9)  
 UPAS 181: Science of Surfing (F09: 13)- new course

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F07-S14	All Classes	Lower Division	Upper Division	Graduate
Average Evaluation (/5)	4.57	4.71	4.54	4.61

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*Current and Past Undergraduate Thesis Students*

Janelle Randolph: *Beachface sediment sorting in response to storms*, May 2012-May 2013, Texas A&M University.  
 Ryan Morales: *Wave attenuation through Seagrass*, September 2012-May 2013. Texas A&M University  
 Gemma Barrett: *Sediment transport and morphological change in the swash zone*, September 2008-May 2009, Texas A&M University.

*Past Graduate Students at Texas A&M University*

Sarah Trimble (PhD): *Morphometric signatures of estuarine and nearshore environments*, 2013-2017.  
 Phil Wernette (PhD): *Geologic framework assessment of barrier systems*. 2013- 2017.  
 Bradley Weymer (PhD): *Geologic Characterization of Padre Island National Seashore: Linking subsurface geology with remotely sensed imagery*. 2012- 2016 (Co-Chair with R. Giardino in Department of Geology)  
 Patrick Barrineau (PhD): *Relating small-scale processes to the geologic framework of the South Texas Sand Sheet*, June 2012-2017  
 Peggy Flores (MS) *Nearshore-beach envelope evolution: implications for oil spill detection*. August 2015-2017.  
 Elizabeth Renschler (MS): *Post-hurricane vegetation recovery on a barrier island*, 2012-2014.  
 Brianna Hammond (MS): *Rates and variability of post-storm dune recovery*, 2013-2015.  
 Christy Swann (PhD): *Controls on aeolian sediment transport*, Geography, 2010- 2014. (Co-Chair with D Sherman at University of Alabama).  
 Sarah Trimble (MS): *Geologic characterization of backbarrier shorelines*, 2011- 2013.  
 Mallorie Jewell (MS): *Development and persistence of blowouts along Padre Island National Seashore*, 2011- 2013.  
 Eugene Farrell (PhD, 2012): *Characterizing mass flux profiles in Aeolian saltation*,

Geography, Texas A&M University. (Co-Chair with D Sherman at University of Alabama). Postdoctoral Fellow at Rutgers University.  
Gemma Barrett (MS, 2011): *Longshore variation in bar morphology at Pensacola Beach, Florida: Implications for rip current development*. Present Position: Ship Curator for Integrated Ocean Drilling Program (IODP).  
Bradley Weymer (MS, 2011): *GPR analysis of beach-dune interface at Padre Island National Seashore*, August 2009-December 2012. (Co-Chair with R. Giardino in Department of Geology). Present Position: PhD Student at TAMU.  
Brian Labude (MS, 2012): *Impacts of Oversand Vehicles at Assateague Island National Seashore*.  
Daniel Labude (MS, 2012): *Morphodynamics of rip currents at Pensacola Beach, Florida*.

### **Department of Environmental Sciences, University of West Florida**

Assistant Professor, 2004-2007

#### *Courses Taught*

GEO1200: Physical Geography (Class and Online Class)  
GEO4990/5990: Geostatistics  
GEO4991/5991: Surf Science  
GEO3210: Geomorphology  
GEO4332: Senior Seminar  
GEO6118: Research Design  
GEO4225/5225: Coastal Morphology  
OCP4002: Physical Oceanography (Online Class)  
EVR6930: Special Topics: Sediment Transport through Vegetation  
EVR6930: Special Topics: Coastal Land Use

#### *Graduate Students*

Brooke Saari (MS): *Post-hurricane environmental gradients on a barrier island*, September 2005-May 2007, University of West Florida. Present Position: Okaloosa/Walton County Marine Science Agent, University of Florida, IFAS.  
John Oravetz (MS): *LiDAR analysis of Hurricane Katrina impacts within the Mississippi Section of the Gulf Islands National Seashore*, September 2005-May 2007. Present Position: Environmental Consultant: Zev Cohen and Associates.  
Kevin Bradley (MS): *Relative velocity of seagrass blades: implications for wave attenuation*, September 2005-May 2007, University of West Florida. Present Position: PhD Student at University of South Florida.  
Chasidy Hobbs (MS): *Morphodynamics of a constructed wetland*, September 2005-May 2007, University of West Florida. Present Position: Instructor, UWF.

### **Department of Geography, University of Victoria**

Adjunct Professor, 2003-present

#### *Courses Taught*

GEOG 376: Geomorphology I  
GEOG476: Geomorphology II

GEOG377: Applied Geomorphology  
EOS580: Directed Studies

*Undergraduate Thesis Students*

Danielle Jmieff: *Sediment transport and morphological change in Witty's Lagoon*,  
September 2003-May 2004, University of Victoria.

*Graduate Committees*

Dilumie Abeyesirigunawardena (PhD, 2010): *Impact of climate variability and change on  
sea level in Coastal B.C.*, Geography, University of Victoria.

**Department of Environmental Science, Royal Roads University**

Associate Lecturer, June 2003- August 2004

*Courses Taught*

ES430: Introductory Geomorphology  
ES414: Global Processes

**PROFESSIONAL SERVICE**

Editor-in-Chief

*Physical Geography*, Taylor & Francis  
January 2020- present

Associate Editor

*Earth Surface Processes and Landforms*  
December 2013-December 2018

Special Editor

*Earth Surface Processes and Landforms* special issue on Coastal and Aeolian  
Geomorphology in recognition of the career of Dr. Robin Davidson-Arnott

Manuscript Reviews (Since 2007)

Reviewed over 100 articles for 35 different journals since 2007 not including articles reviewed  
for ESPL as associate editor or Physical Geography as Editor-in-Chief.

*Marine Geology*  
*Geomorphology*  
*Journal of Geophysical Research- Atmospheres*  
*Journal of Geophysical Research- Earth Surface*  
*Journal of Geophysical Research- Oceans*  
*Geophysical Research Letters*  
*Treatise in Geomorphology*  
*Geologica Acta*  
*Journal of Waterway, Port, Coastal and Ocean Engineering*  
*Water Resources Research*

*Earth Surface Processes and Landforms- now Associate Editor*  
*Aeolian Research*  
*Journal of Coastal Research*  
*Marine Systems*  
*Southeastern Geographer*  
*GeoJournal*  
*Journal of Applied Geography*  
*Journal of Maps*  
*Marine Ecology Progress Series*  
*Singapore Journal of Tropical Geography*  
*Shore and Beach*  
*Sedimentary Geology*  
*Limnology and Oceanography*  
*Natural Resource Modeling*  
*Earth Science Review*  
*Estuarine, Coastal and Shelf Science*  
*Ocean and Coastal Management*  
*Estuaries and Coasts*  
*Journal of Geoscience Education*  
*Landscape Ecology*  
*Physical Geography*  
*State of the Total Environment*  
*Wetlands*  
*Natural Hazards*  
*Canadian Journal of Earth Science*  
*Journal of Geography in Higher Education*  
*Studies in Higher Education*  
*Journal of Sedimentary Research*  
*Journal of Coastal Conservation*  
*Journal of Geography*  
*Journal of Teaching in International Business*  
*Journal of Pedagogy in Higher Education*

Book Proposal Review

*Chanson, Tidal Bores*

Proposal Review

*National Science Foundation*  
*Natural Science and Engineering Research Council*  
*Georgia National Science Foundation*  
*Council for the Earth and Life sciences, The Netherlands*  
*Exploratory Research Programs, Romania*  
*Canada Foundation for Innovation*  
*National Park Service*

NSF Panel Review

*EAR REU Panel Review, November 2012*  
*EAR REU Panel Review, December 2018*

#### Textbook Reviews

Brooks/Cole *Essentials of Physical Geography*, 8e, Gabler/Petersen/Trapasso  
Freeman Key *Concepts in Geomorphology*, Bierman and Montgomery  
Camb. Univ. Press *Introduction to Coastal Process. and Geomorph.*, Davidson-Arnott  
Oxford Press *Physical Geography*, Blij (2)  
W.H. Freeman Press *Living Physical Geography*, Gervais (Chapter review)  
W.H. Freeman Press *Living Physical Geography*, Gervais (Technical review)

#### Conference Organization

2019 *50<sup>th</sup> Binghamton Geomorphology Conference*  
2013 *American Geophysical Union*  
Co-Coordinator: *Effective Strategies for Undergraduate Research Experiences I and II*  
2012 *American Geophysical Union*  
Co-Coordinator: *Coastal Processes and Landforms*  
2012 *Geological Society of America*  
Co-Coordinator: *Beach-Dune Interaction*  
2011 *American Association of Geographers*  
Co-Coordinator: *Coastal Geomorphology Sessions in Honor of Robin Davidson-Arnott* (5 sessions with 20 speakers)  
2010 *American Association of Geographers*  
Co-Coordinator: *Coastal Geomorphology and Management Sessions*  
2008 *Geological Society of America*  
Technical Session Coordinator: *Trends in Geomorphology*  
Technical Session Coordinator: *Coastal and Aeolian Geomorphology*  
*Kirk Bryan Memorial Field Trip Organizer and Lead*  
2006 *International Conference on Aeolian Research*  
Technical Session Coordinator: *Coastal Aeolian Processes*  
2001. *American Association of Geographers*  
Organizer and Chair: *Aeolian Processes and Landforms*

External Reviewer for United States Army Corp of Engineers (through Battelle)  
February 2011-Present: Mississippi River-Gulf Outlet (MRGO) IEPR  
September 2011- March 2012: Barataria Basin (BBBS) IEPR

#### Listserv Moderator

*Geomorph-List moderator*, June 2009- present  
An email distribution list connecting over 2400 professional and academic geomorphologists around the world for the International Association of Geomorphologists

#### Professional Memberships

American Geophysical Union

Geological Society of America  
Geomorphology and Quaternary Specialty Group  
American Association of Geographers  
Coastal and Marine Specialty Group of the AAG, Board Member (2008-2010)  
Coastal and Marine Specialty Group of the AAG, Treasurer (2010- 2011)  
Sigma Xi Research Society

## UNIVERSITY AND DEPARTMENTAL SERVICE

Board of Governors, University of Windsor  
September 2017-August 2021

Faculty of Senate  
July 2016- present

Dean, Faculty of Science, University of Windsor  
July 2016-present  
See Page 1 for full description

Associate Dean for Undergraduate and Faculty Affairs, Texas A&M University  
September 2014-June 2016  
Please see Page 1 for full description

Global Faculty Ambassador, Texas A&M University  
September 2012- June 2016  
Please see Page 1 for full description

Undergraduate Director, Department of Geography, Texas A&M University  
September 2013-August 2014  
Please see Page 1 for full description

Graduate Coordinator, Department of Environmental Studies, University of West Florida  
January September 2004-July 2007  
Please see Page 1 for full description

GeoX Program, College of Geosciences, Texas A&M University  
Faculty Lead (2010-2013), one-week pipeline program to introduce high-achieving high school juniors and seniors to the world of geosciences.  
Director (2014), responsible for the program following the departure of Dr. Sonia Garcia,  
Director of Recruitment

iGEO Program, College of Geosciences, Texas A&M University  
Director (2014), responsible for the program following the departure of Dr. Sonia Garcia,  
Director of Recruitment

NSF REU Site Director: Ecohydrology of a Tropical Montane Cloud Forest

September 2010-May 2014  
Please see Page 1 for full description

University Honor Council, Member  
September 2011-August 2014  
Investigator (6) and Disciplinary Panel Member (5)

#### Faculty Advisor

Geosciences Student Association Faculty Advisor (2007-2010)  
Aggies for Global Education (2013)

- Student-led program to bring engineering and science to middle and high school students in Costa Rica through the Soltis Center for Research and Education

#### Committees

##### *University*

Intellectual Property and Technology Transfer Committee (Windsor)  
Provost Council (Windsor)  
SMA EL Tagging Committee (Windsor)  
Carnegie Community Partnership Committee (Windsor)  
University Committee on Academic Promotion and Tenure (UCAPT, Windsor)  
Academic Operations Committee (AOC, TAMU)  
QEP Advisory Council, Office of the Provost (TAMU)  
IA3 Committee, Office of the Provost (TAMU)  
SACSCOC, Office of the Provost (TAMU)  
University Academic Appeals Committee (TAMU)  
University Curriculum Committee, Faculty Senate (TAMU)  
International Budget Committee, Office of the Provost (TAMU)  
Vice Provost Leadership Team, Office of the Provost (TAMU)  
Classroom Task Force, Office of the Provost (TAMU)  
Texas A&M University Diversity Scholarship Committee, Reviewer (TAMU)  
Marine Services Committee, Member (UWF)

##### *College*

Academic advisor II Search Committee, Chair (TAMU)  
Undergraduate Curriculum Committee (TAMU)  
Director of Recruitment, Selection Committee, Member (TAMU)  
iGEO Selection Committee, Member (TAMU)  
GEOX Selection Committee, Member (TAMU)  
Aggieland Saturday Committee, Member (TAMU)  
College of Geosciences Soltis Center Task Force, Lead (TAMU)  
TAMU, USP, UFPE Coordination, Team Lead (TAMU)  
College of Geosciences Scholarship Committee, Member (TAMU)  
College Safety Committee, Member (TAMU)  
College of Geosciences Dean Search Committee, Member (TAMU)  
Head of Geology and Geophysics Search Committee, Member (TAMU)  
Geology and Geophysics Sed./Strat. Search Committee, Member (TAMU)

### *Department*

Geography Undergraduate Committee, Director (TAMU)  
Senior and Junior GIS Search Committees, Member (TAMU)  
Ad-Hoc Tenure and Promotion Guidelines Committee, Member (TAMU)  
Ad-Hoc Strategic Plan for Research Committee for Geography, Member (TAMU)  
Faculty Hiring Committees (Hydrogeology and Phys. Geog.), Member (UWF)

Gulf Coast Cooperative Ecosystems Studies Unit  
Successfully applied for UWF membership in CESU, 2006  
University Coordinator, 2006-2007

Office of Undergraduate Research  
Panel on Undergraduate Research, September 2011

### OUTREACH

National Rip Current Messaging Team  
National Oceanographic and Atmospheric Administration  
June 2015-present

PEI Rip Current Taskforce  
Parks Canada  
June 2018-present

Invited Keynote Talks  
Study abroad benefits the faculty, Association of Texas Graduate Schools Banquet,  
September 24, 2015.  
Outreach and Engagement in Research, Student Research Week, Texas A&M University  
April 4, 2016  
Authentic Outreach and Engagement, Graduate Studies and Research Recognition  
Banquet, Texas A&M University- Central Texas, April 29, 2016

Invited Lectures/Presentations  
Water Safety and Drowning Prevention Webinar, UNA, June 2020  
Fuzzy Boundaries: The Beach-dune interface, Arizona State University, Jan 2020  
Rip current hazard in PEI, June 2019  
Rip current hazard in the Maritimes, Various Locations in NB, PEI, June 2018  
Authentic Engagement and Outreach, University of Windsor, April 2016  
Pathways to the Geosciences, University of North Carolina System, Jan. 2016  
Importance of Framework Geology to the Texas Coast, Baylor University, Jan. 2016  
Impacts of Driving on the Beach, Texas Beach and Dune Forum, September 2015  
Scales of barrier island resiliency, North Carolina Dune Forum, October 2015  
Barrier island recovery, University of West of Florida, September 2014  
Study abroad and research opportunities in the College of Geosciences, Jan. 2013  
Study abroad and research opportunities in the College of Geosciences, Nov. 2013  
Competing initiatives at the Soltis Center, Landscape Architecture, February 2014

Nearshore, beach and dune interaction, University of Puerto Rico, November 2013  
Barrier Island Management, TAMU ABS IGERT, April 2013  
Beach-Dune Recovery, TAMU Civil Engineering, March 2013  
Ecohydrology of a Cloud Forest, Geology, University of Costa Rica, July 2012  
Rip Current Hazard in Northwest Florida, TAMU Geography, September 2010  
Rip Currents at Pensacola Beach, University of West Florida, March 2010  
Barrier Island Response and Recovery, TAMU Geology, January 2010  
Bed elevation changes in the swash zone, TAMU Oceanography, October 2008  
Boat versus wind waves in bank erosion, Georgia Ports Authority, September 2008  
Hurricane Impact and Recovery, Leisure Learning Society, November 2006  
Geologic Controls on Road Damage, National Park Service, October 2006  
Geologic Controls on Island Geomorphology, National Park Service, September 2006  
Response and Recovery of Santa Rosa Island, Florida State University, June 2006  
Dune response and recovery to hurricanes, AWMA, May 2006  
Impact of Hurricane Ivan on Santa Rosa Island, Democratic Women Voters, April 2006

#### Local Environmental Issues

Dredging and spoil placement: Pensacola Pass, National Park Service, September 2006  
Post-hurricane designs for County Road 399, National Park Service, October 2006  
Gulf Islands National Seashore Scoping Summary, National Park Service, Ongoing

#### Media Presentations

##### The National

National Park visitors to take photos to track climate change (December 2021)

##### CBC Radio

Beach hazards in a time of COVID-19 (July 2020)

Shoreline erosion along Lake Erie (May 2020)

Rip Current Hazard in the Great Lakes and in the Maritimes (June 2018, 2019)

Multiple shows about programs in Faculty of Science

##### Weather Channel

Rip Currents, Driving on the Beach, Diving (August 2014)

##### National Public Radio

Post-Sandy dune recovery (December 2012)

##### Scientific American

The Science behind Superstorm Sandy's Crippling Storm Surge (November 2012)

<http://www.scientificamerican.com/article.cfm?id=how-to-protect-new-york-city-from-storm-surges>

##### Texas Sea Grant Monthly

Description of the rip current perception study

##### Science and the Sea

2 radio programs on rip currents related to rip current research

##### Pensacola News Journal

Fort Pickens Road: Crossroads, January 2007 (Lead Story)

Lonely Road to Recovery, November 2006

Erosion will get Worse, March 2006 (Lead Story)

##### WEAR-TV

Coastal erosion on Santa Rosa Island, March 2006

WUWF, National Public Radio

Cold front erosion versus Hurricane erosion, March 2006

WUWF-TV

Tsunamis and potential for the Gulf of Mexico, Inside UWF, January 2005

Coastal erosion along Santa Rosa Island, Being Green, January 2006

Project Greenshores, Inside UWF, January 2007

Impact of roads on dune recovery, Being Green, February 2007

University and College Media

Division of Marketing & Communications

High Impact Learning Experiences Abroad, September 2011

Texas A&M University, Foundation of Former Students

Pura Vida and Gig Em', November 2014.

Popular Media

University Affairs

How to get students to commit to high-impact learning (June 2018)

Study abroad experiences are not just for students (June 2017)

The Conversation

Why your tourist brain may try to drown you (March 2019)

How self-isolation fatigue may lead to more beach drownings (July 2020)

## REFERENCES

### **Pamela Matthews**

Former Vice Provost and Dean of the College of Liberal Arts (retired)

Texas A&M University

p-matthews@tamu.edu

### **Daniella Beaulieu**

Acting Vice President for Human Resources

University of Windsor

daniell2@uwindsor.ca

### **Marcello Guarini**

Former Dean of the Faculty of Arts, Humanities and Social Sciences

University of Windsor

mguarini@uwindsor.ca

### **Cheryl Collier**

Dean of the Faculty of Arts, Humanities and Social Sciences

University of Windsor

ccollier@uwindsor.ca

### **Judy Bornais**

Executive Director, Office of Experiential Learning

University of Windsor

Judy.Bornais@uwindsor.ca