Julia Cisneros

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### EDUCATION

PhD candidate, Geology, University of Illinois Urbana-Champaign, Champaign, Illinois

*The formation and dynamics of alluvial dunes* Proposed Completion May 2020

PhD advisor: Professor Jim Best

B.S., Geology (minor Geographic Information Systems), Texas A&M University, College Station, Texas

Major GPA: 3.87 Cumulative GPR: 3.78 May 2015

*Morphologic and computational fluid dynamic analysis of sand dune-topographic obstacle interactions on Earth and Titan.* Submitted April 2015

Advisor: Associate Professor Ryan Ewing

**EXPERIENCE:**

**Student Vice President and Outreach Liaison, Dept of Geology May 2019-May 2020**

*Elected graduate student vice president and outreach liaison. Duties include representing students in faculty meetings, communicating between faculty and students, leading graduate student discussion with an external review committee (September 2019), and delegating outreach activities among students.*

**Visiting Researcher, Utrecht and Delft, Netherlands, July-August 2018**

*Investigated bedform-flow hysteresis in the Waal River, Netherlands for 3 months working with researchers from Delft University of Technology, Utrecht University, and Deltares.*

**Teaching Assistant, University of Illinois Urbana Champaign January-May 2017**

*Taught the laboratory section of the upper-level undergraduate course Sedimentology and Stratigraphy.*

**Field Researcher, Amazon River, Manaus, Brazil and Tefé, Brazil June 2016 & November 2017**

*Conducted two-week river field surveys by deploying acoustic Doppler current velocimeter (ADCP) and multibeam echosounder (MBES) systems and conducting sedimentological investigation of riverbanks on the Amazon River during the wet and dry season.*

**Field Researcher, Huang He (Yellow) River, Huayuankou, China July 2016**

*Conducted a two-week river field survey deploying parametric echosounder (PES) and MBES on the Huang He River during the wet season.*

**Teaching Assistant, Dept of Geology, Texas A&M University May 2015**

*Taught the 6-week field methods camp for upper-level undergraduates.*

**Visiting researcher, Cornell University, Ithaca, NY** **July 2014**

*Worked with astronomers in developing methods to predict dune orientation from wind flow data and published this work in a peer-reviewed undergraduate journal (below).*

**Cisneros, J.,** McDonald, G. D., Hayes Jr., A. G. and Ewing, R. C. (2014), Sand Dunes: the Clue to Titan's Climate, Explorations: The Texas A&M Undergraduate Journal.

**PUBLICATIONS**:

Galeazzi, C., Almeida, R., Mazoca, C., Best, J., Freitas, B., Ianniruberto, M., **Cisneros, J.,** Tamura, L. (2018). The significance of superimposed dunes in the Amazon River: Implications for how large rivers are identified in the rock record. *Sedimentology*, *65*(7), 2388-2403.

**Cisneros, J.** et al., (2020), Dunes in the World’s big rivers are characterized by low-angle leeside slopes and a complex shape, *Nat. Geosci.,* 13, 156–162.

Baar, A., **Cisneros, J.** (2020), Influence of grain size-dependent bedform morphology on flow and transverse slope in river bends, *J. Geophys. Res. Earth Surf.*, Submitted, reviewed, and in revision*.*

**Cisneros, J.,** Guhlincozzi, A. R (2020), A framework for addressing the lack of diversity in the Geosciences through evaluating the current structure of institutional efforts, Invited to submit and submitted a full paper in a special issue at *GeoJournal.*

**Cisneros, J.,** Best, J., van Dijk, T., Mosselman, E., Klienhans, M., (2020) Dune morphology and hysteresis in alluvial channels during long-durations floods revealed using high temporal-resolution MBES bathymetry, In preparation for submission to *J. Geophys. Res. Earth Surf.*

**FELLOWSHIPS, GRANTS, AND SCHOLARSHIPS:**

NSF Graduate Research Fellowship ($138,000) August 2017 to Present

Marine and River Dune Dynamics International Travel Student Award (€500) April 2019

NSF Graduate Research Opportunities Worldwide ($5,000 + €4,500) June 2018

Outstanding Women Geology Graduate Student ($2,000) April 2018

UIUC Graduate College Distinguished Fellowship ($75,000) August 2015 to August 2017

GSA Graduate Research Grant ($1,550) March 2017

International Association Of Sedimentologists Research Grant (€1,000) July 2016 to August 2016

Marine and River Dune Dynamics International Travel Student Award (€500) April 2016

ExxonMobil Field Camp Scholar Award ($2,000) May 2014

Will Rogers Memorial Scholarship August 2014 to May 2015

Murry D Page Endowed Scholarship August 2014 to May 2015

B P Loughnane Scholarship Fund August 2013 to May 2015

Michael K Endowed Scholarship August 2012 to May 2013

Geosciences Department Scholarship August 2011 to May 2015

Texas Top 10% Award ($8,000) August 2011 to May 2015

Devon Energy Corporation Foundation Excellence Award August 2011 to May 2015

**HONORS:**

University Of Illinois Urbana-Champaign:

NSF Graduate Research Fellow August 2017 to Present

Young Researcher Spotlight - AGU EPSP (nominated award) July 2019

Award for Best Presentation at the Marine and River Dune Dynamics Conf. April 2019

Academic Excellence through Office of Diversity, Equity & Inclusion March 2018

Ranked as Outstanding (top 10%) TA by students May 2017

Campus Insights student representative for Board of Trustees dinner April 2017

Graduate College Distinguished Fellow August 2015 to August 2017

Academic Excellence through Office of Diversity, Equity & Inclusion March 2017

ASPIRE Graduate Student Panelist for students underrepresented in academia August 2016

Co-Chair at Marine and River Dune Dynamics Workshop April 2016

Texas A&M University:

Magna Cum Laude May 2015

Undergraduate Research Scholar May 2015

College Of Geosciences Distinguished Student Award May 2015

Geology And Geophysics Outstanding Senior Award For Academic Excellence May 2015

Keynote Speaker at Geology and Geophysics Scholarship Dinner Banquet May 2015

2nd Place Best Paper Award for Undergraduate Research Scholar Thesis May 2015

1st Place Geology And Geophysics Department Research Symposium Oral April 2015

1st Place Geology And Geophysics Department Research Symposium Poster April 2014

**SERVICE, OUTREACH AND PUBLIC ENGAGEMENT:**

**Mentor, CU One-to-One Program, Champaign, IL August 2015 – Present**

*Mentor a young, middle-school aged girl once a week during the school year through the CU One-to-One mentoring program. Attend yearly mentorship training to learn how to be a dedicated adult and confidant in her life in order for her to feel confident in school and graduate.*

**Hydro-Geo Discussion Group Leader, University of Illinois August 2017 – Present**

*Lead a weekly discussion group between Geology, Geography, and Hydrosystems departments. This discussion group is meant to foster real collaboration and academic/personal relationships among those working on fluvial related topics on campus, by having a regular, student-driven discussion group. Duties include moderating discussion, confirming dates and speakers, and sending weekly reminders.*

**Created, organized and led the Geoscience Camp for Girls August 2019**

*Developed the first ever Geoscience Camp for Girls, recruited 30 girls to attend camp, and c. 70 girls to take an IRB approved survey focused on young girl’s interest and knowledge levels of Geoscience in order to increase diversity and inclusion in Geoscience at the School of Earth, Society and Environment at the University of Illinois at Urbana Champaign (see story below).*

LAS News (2019) ‘Getting more girls into geoscience - Students organize unique summer camp for middle schoolers’, news article, University of Illinois College of Liberal Arts and Sciences, (<https://las.illinois.edu/news/2019-08-16/getting-more-girls-geoscience>), Aug.

**Science exhibitor, Engineering Open House, University of Illinois March 2017, 2018, and 2019**

*Created the ‘Journey through the Amazon’ exhibit to share my research about the Amazon River with young kids and non-science adults.*

**Peer mentor, Sloan UCEM, University of Illinois August 2017 - May 2018**

*Peer mentor to an incoming graduate student through the Sloan University Center of Exemplary Mentoring (UCEM) at Illinois. Met with mentee twice a semester to check in and offer advice or resources. Attended workshops, presentations, and mini-conferences related to diversity and inclusion, professional development, and effectively mentoring.*

**Invited speaker, Campus Insights, University of Illinois April 2017**

*I was the first ever student invited to share my research via Pecha Kucha style presentation to the President, the Chancellor, and the Board of Trustees of the University of Illinois at the annual Campus Insights event. This event is meant share the learning, research, public engagement and social activities on campus. YouTube link:* [*https://www.youtube.com/watch?v=q3MUCgaogBs*](https://www.youtube.com/watch?v=q3MUCgaogBs)

**Science communicator, University of Illinois Urbana Champaign November 2017**

*Wrote a blog (link below) and did a ‘snapchat takeover’ about my field work in the Amazon River to share with students and alumni at the University of Illinois Urbana Champaign.*

LAS News (2017) ‘Journey to the riverbank and back in time’, news article, University of Illinois College of Liberal Arts and Sciences’ (https://las.illinois.edu/news/blog/2017-02-20/journey-riverbank-and-back-time), Feb.

**Campus infrastructure consultant, Texas A&M University July 2015**

*Conducted a GPS survey and GIS analysis of areas of disrepair on campus and published in a peer-reviewed undergraduate research journal (see below). Subsequently, this garnered interest of the university’s third-party contractor of campus infrastructure who asked to meet about our methods and offered funding to the Geography Society to continue our methods to produce a campus-wide map.*

Guhlin, A., Flores, J., and **Cisneros, J.** (2015), A Crumbling Campus, Explorations: The Texas A&M Undergraduate Journal

**PRESENTATIONS:**

**Cisneros, J.,** Best, J. L, Garcia, M. H. (2019), The Formation of Dunes under Unidirectional Flows in Coarse Silts and Fine Sands, accepted, American Geophysical Union Fall Conference, San Francisco, Ca, Dec.

**Cisneros, J.,** Guhlincozzi, A. R. (2019), Geoscience Camp! Methods for Introducing Geosciences to Middle School Girls, accepted, American Geophysical Union Fall Conference, San Francisco, Ca, Dec.

Guhlincozzi, A. R., **Cisneros, J.** (2019), Geoscience Camp! Methods for Introducing Geosciences to Middle School Girls, accepted, Latinx Excellence in the Midwest Conference, Iowa City, IA, October 13th.

**Cisneros, J.,** Best, J. L, van Dijk, T., Mosselman, E. (2019), Dune morphology and hysteresis in alluvial channels during long-duration floods revealed using high temporal-resolution MBES bathymetry, oral presentation, Marine and River Dune Dynamics Conference VI, Bremen, Germany, 1-3 Apr.

**Cisneros, J.,** Best, J. L, van Dijk, T., Mosselman, E. (2018), Dune morphology and hysteresis in alluvial channels during long-duration floods revealed using high temporal-resolution MBES bathymetry, oral presentation, American Geophysical Union, Washington DC, Dec.

**Cisneros, J.,** Best, J. L. (2018), Quantifying the morphology of dunes in big rivers, oral PICO presentation, European Geophysical Union, Vienna, Austria 8-13 Apr.

**Cisneros, J.,** Best, J. L. (2017), Quantifying the morphology of dunes in big rivers using automated bedform analysis, oral presentation, 11th International Conference on Fluvial Sedimentology, Calgary, Alberta, CA, 17-21 July.

**Cisneros, J.,** Best, J. L. (2016), Low-angle dunes in big rivers: morphology, occurrence and speculations on their origin, oral presentation, American Geophysical Union Fall Meeting, San Francisco, CA, Dec.

**Cisneros, J.,** Best, J. L. (2016), Low-angle dunes in big rivers: morphology, occurrence and speculations on their origin, oral presentation, Marine and River Dune Dynamics Conference V, Bangor, Wales, UK, 4-6 Apr.

**Cisneros, J.,** Best, J. L. (2016), Low-angle dunes in big rivers: morphology, occurrence and speculations on their origin, oral presentation, North Central GSA, Champaign, IL, 19 Apr.

**Cisneros, J.,** McDonald, G. D., Hayes Jr., A. G,. Smyth, T. and Ewing, R. C. (2015), Morphologic and Computational Fluid Dynamic Analysis of Sand Dune-Topographic Obstacle Interactions on Earth and Titan, oral presentation, Department of Geology and Geophysics Symposium, Texas A&M University, College Station, Texas, 10 Apr.

**Cisneros, J.,** McDonald, G. D., Hayes Jr., A. G., Smyth, T. and Ewing, R. C. (2015), Morphologic and Computational Fluid Dynamic Analysis of Sand Dune-Topographic Obstacle Interactions on Earth and Titan, Abstract 45756 oral presentation, Lunar and Planetary Science Conference, Houston, Texas, 16-20 Mar.

**Cisneros, J.,** McDonald, G. D., Hayes Jr., A. G. and Ewing, R. C. (2014), Morphologic and Computational Fluid Dynamic Analysis of Sand Dune-Topographic Obstacle Interactions on Earth and Titan, Abstract 18472 presented at 2014 Fall Meeting, AGU, San Francisco, Calif., 15-19 Dec.

**Cisneros, J.,** McDonald, G. D., Hayes Jr., A. G. and Ewing, R. C. (2014), Sand Dunes: the Clue to Titan's Climate, poster presentation, Department of Geology and Geophysics Symposium, Texas A&M University, College Station, Texas, Apr.

**Cisneros, J.,** Rivers, C., Skrla, B., Ortiz, M., Moore, C., Price, A. E., and Johnson II, H. (2013), Gaining International Experience through a Bi-National Mapping Team Approach between Texas A&M University and the University of Costa Rica: The Student Perspective, Abstract 125-16 presented at 2013 Fall Meeting, GSA, Denver, Colorado, 27-30 Oct.