

Stephan O'Brien

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Division of Marine Science
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PERSONAL

Born 09/18/1984, Citizen of Trinidad and Tobago

EDUCATION

August 2011 to Present: Ph.D. in Marine Science with emphasis in Hydrographic Science, Division of Marine Science, The University of Southern Mississippi, Stennis Space Center, MS, USA.
July 2010: Masters in Hydrographic Science, The University of Southern Mississippi, Stennis Space Center, MS, USA.
June 2007: Bachelor of Science in Surveying and Land Information (First Class Honors), The University of the West Indies, St. Augustine, Trinidad and Tobago.

PROFESSIONAL EXPERIENCE

08/2011 – Present Graduate Research Assistant, Division of Marine Science, The University of Southern Mississippi
09/2010 – 12/2010 Part Time Lecturer, Dept. of Geomatics Engineering and Land Management, The University of the West Indies
08/2008 – 07/2010 Graduate Research Assistant, Division of Marine Science, The University of Southern Mississippi
08/2007 – 07/2008 Junior Land Surveyor, Marine Construction Dept., Capital Signal Company Limited

PROFESSIONAL SOCIETIES

American Geophysical Union
Marine Technology Society
The Hydrographic Society of America

COMMITTEES

- Spring 2014 – Spring 2015 Chair, The University of Southern Mississippi Marine Technology Society Student Section
- Spring 2012 – Spring 2014 Treasurer, Division of Marine Science Student Oceanographic Society
- Spring 2012 – Spring 2013 Committee member, Division of Marine Science Student Seminar Committee

AWARDS

Marine Technology Society, Gulf Coast Chapter Scholarship, August 2016.

The University of Southern Mississippi, Division of Marine Science, Outstanding Doctoral Graduate Student 2015 - 2016, May 2016.

Marine Technology Society, Gulf Coast Chapter Scholarship, August 2015.

Marine Technology Society Graduate Student Scholarship, June 2015.

Marine Technology Society, Gulf Coast Chapter, Student Recognition Award, August 2013.

Northern Gulf Coastal Hazards Collaboratory 2013 Annual Meeting Graduate Student Poster Competition, First Place, June 2013.

Northern Gulf Coastal Hazards Collaboratory 2012 Annual Meeting Graduate Student Poster Competition, Second Place, May 2012.

PUBLICATIONS

Dodd, D., B. Mehaffey, G. Smith, K. Barbor, S. O'Brien and M. Van Norden. (2009). Chart Transfer Using a GPS Tide Gauge Buoy in Chesapeake Bay. *The International Hydrographic Review* 2:39-51

PUBLICATIONS IN CONFERENCE PROCEEDINGS

O'Brien, S., D. Dodd, J. Davis and J. Wiggert. (2013). Development of a Bathymetric Dynamic Digital Elevation Model in the Northern Gulf of Mexico. *Proceedings of the U.S. Hydro 2013 Conference*. New Orleans, Louisiana.

INVITED TALKS AND PRESENTATIONS

O'Brien, S.J., P. Fitzpatrick, B. Dzwonkowski, S. Dykstra, D.J. Wallace, I. Church and J.D. Wiggert. Suspended sediment research in Mississippi Sound. Consortium for oil spill and exposure pathways in coastal River-Dominated Ecosystems (CONCORDE) Teacher Workshop: Spill Science I, Ocean Springs, Mississippi March 2016.

O'Brien, S. Development of a Bathymetric Dynamic Digital Elevation Model in the Northern Gulf of Mexico. Division of Marine Science Spring 2013 Seminar Series, The University of Southern Mississippi, Stennis Space Center, Mississippi March 2013.

O'Brien, S. Bathymetric Dynamic Digital Elevation Model Update. 2012 Fall Retreat, Northern Gulf Coastal Hazards Collaboratory, Lafayette, Louisiana October 2012.

MEETING ABSTRACTS

O'Brien, S.J., P. Fitzpatrick, B. Dzwonkowski, S.L. Dykstra, D.J. Wallace, I. Church and J.D. Wiggert. (2016). Multivariate analysis of the influences of oceanic and meteorological processes on suspended particulate matter distributions in Mississippi coastal waters. 2016 Ocean Science Meeting, New Orleans, Louisiana February 2016.

Dykstra, S., B. Dzwonkowski, G. Lockridge, S. O'Brien and J. Wiggert. (2016). Lagrangian observations of an ebb tidal plume under low discharge conditions, Main Pass, Mobile Bay, Alabama. 2016 Ocean Sciences Meeting, New Orleans, Louisiana February 2016.

O'Brien, S.J., P. Fitzpatrick, B. Dzwonkowski, D.J. Wallace, I. Church and J.D. Wiggert. (2016). Influence of physical processes and meteorological parameters on the concentration of Suspended Particulate Matter derived from MODIS reflectance at 645 nm in the Mississippi Sound. 2016 Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, Florida February 2016.

Wiggert, J.D., P. Fitzpatrick, G.A. Jacobs, Y. Lau, S.J. O'Brien and E.E. Hofmann. (2016). CONCORDE: Modeling and Synthesis. 2016 Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, Florida February 2016.

Dykstra, S.L., B. Dzwonkowski, G. Lockridge, S.J. O'Brien and J. Wiggert. (2016). Drifter observations of an ebb tidal plume dispersion and circulation in a critical estuary-shelf environment, Main Pass, Mobile, AL. 2016 Gulf of Mexico Oil Spill & Ecosystem Science Conference, Tampa, Florida February 2016.

O'Brien, S.J., J.D. Wiggert and D.W. Dodd. (2014). A Circa 2011 Bathymetric Dynamic Digital Elevation Model for the Northern Gulf of Mexico. 2014 Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, Alabama January 2014.

O'Brien, S., J.D. Wiggert and D.W. Dodd. (2013). A Circa 2011 Bathymetric Dynamic Digital Elevation Model for the Northern Gulf of Mexico. Northern Gulf Coastal Hazards Collaboratory, 2013 Annual Meeting, Mobile, Alabama June 2013.

O'Brien, S.J., D.W. Dodd, J. Davis and J.D. Wiggert. (2013). Development of a Dynamic Digital Elevation Model in the Gulf of Mexico. Association of American Geographers' 2013, Annual Meeting, Los Angeles, California April 2013.

O'Brien, S.J., D. Dodd, J. Davis and J. Wiggert. (2013). Development of a Bathymetric Dynamic Digital Elevation Model in the Northern Gulf of Mexico. U.S. Hydro 2013 Conference, Biennial Meeting, New Orleans, Louisiana March 2013.

O'Brien, S., D. Dodd, J. Davis and J. Wiggert. (2013). Development of a Dynamic Digital Elevation Model for the Coastal Shelf Regions of Alabama, Mississippi and Louisiana. Mississippi Academy of Sciences, 77th Annual Meeting, Hattiesburg, Mississippi February 2013.

O'Brien, S., J.D. Wiggert and D. Dodd. (2012). Development of a Bathymetric Dynamic Digital Elevation Model for the Northern Gulf of Mexico. Northern Gulf Coastal Hazards Collaboratory, 2012 Annual Meeting, New Orleans, Louisiana May 2012.

TEACHING

THE UNIVERSITY OF THE WEST INDIES

- Fall 2010: Hydrographic Surveying (3 credit hours)
- Fall 2010: Hydrography (3 credit hours)

TEACHING ASSISTANT

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

- Spring 2016: Geological Oceanography Laboratory (1 credit hour)

OTHER ACTIVITIES

SEMINARS HOSTED

- January 2013. Germana Peggion. University of New Orleans. *Peggion presented "A Realtime Operational Modeling System: Data to Model - Model to Data"* at the Division of Marine Science, The University of Southern Mississippi, Stennis Space Center, MS.

- March 2012. Ioannis Georgiou. University of New Orleans. *Ioannis presented “Differential Sedimentation in a Mississippi River Crevasse Splay: upstream controls, bar stratigraphy, and implications for coastal restoration”* at the Division of Marine Science, The University of Southern Mississippi, Stennis Space Center, MS.

OUTREACH

- October 2016
Volunteer - Jones Park Site Captain
Mississippi Coastal Cleanup
- July 2016
Volunteer
Take Your Child to Work Day
Stennis Space Center, Mississippi
- June 2016
Presenter
Marine Science Day educational event
The University of Southern Mississippi, Division of Marine Science, Stennis Space Center, MS, USA
- October 2015
Volunteer
Mississippi Coastal Cleanup
- June 2015
Volunteer
CONCORDE / Ecosystem Impacts of Oil & Gas Inputs to the Gulf (ECOGIG) 2015
World Oceans Day educational event
- April 2015
Presenter
2015 Earth and Science Day Festival
Pontchartrain Elementary School, Mandeville, LA, USA
- February 2015
Science Fair Judge
Nicholson Elementary School, Picayune, MS, USA
- May 2014
Volunteer Judge
2014 National SeaPerch Challenge
- February 2014
Science Fair Judge
Nicholson Elementary School, Picayune, MS, USA
- October 2011
Volunteer
Mississippi Coastal Cleanup