

# Lindsey Kraatz

## Education

PhD Student, 2005-Present, VIMS, College of William and Mary, Marine Science  
Major Advisor: Dr. Carl Friedrichs ~Department of Physical Sciences  
2003-2005, University of North Carolina, Wilmington, Geology, (transferred)  
B.S., 2003, Eckerd College, Marine Science concentration in Geology

## Professional Experience

|               |                                                                         |                             |
|---------------|-------------------------------------------------------------------------|-----------------------------|
| 2009          | <i>VIMS/York County High School</i>                                     | <i>Gloucester Point, VA</i> |
|               | NSF "VIMS Perfect" GK-12 Fellow                                         |                             |
| 2008          | <i>College of William and Mary</i>                                      | <i>Williamsburg, VA</i>     |
|               | Introduction to Geology (GEO160) Teaching Assistant                     |                             |
| 2008          | <i>VIMS</i>                                                             | <i>Gloucester Point, VA</i> |
|               | Coastal and Estuarine Processes Research (MSCI 502L) Teaching Assistant |                             |
| 2005– Present | <i>VIMS</i>                                                             | <i>Gloucester Point, VA</i> |
|               | Research Assistant                                                      |                             |
| 2004– 2005    | <i>UNCW</i>                                                             | <i>Wilmington, NC</i>       |
|               | NSF GK-12 Fellow                                                        |                             |
| 2003– 2004    | <i>UNCW</i>                                                             | <i>Wilmington, NC</i>       |
|               | Research Assistant                                                      |                             |
| 2002          | <i>Eckerd College</i>                                                   | <i>St. Petersburg, FL</i>   |
|               | Earth Structure (MS 306) Teaching Assistant                             |                             |
| 2001– 2003    | <i>USGS/Center for Coastal and Watershed Studies</i>                    | <i>St. Petersburg, FL</i>   |
|               | Research and GIS Intern for the National Coastal Assessment Project     |                             |

## Honors, Prizes, and Awards

2006, Best Paper Award ~ International Society of Photogrammetry and Remote Sensing Symposium  
2005, Fulbright Finalist for the United Kingdom  
2004, Victor A. Zullo Award for Outstanding Graduate Research  
2003, Eckerd College Lifetime Achievement/Outstanding Student Award  
2003, Inducted into Sigma Xi  
2001, Inducted into Omicron Delta Kappa (National Leadership Society)

## Professional Memberships

Coastal Estuary and Research Federation (ERF), student member, 2004 - Present  
The American Geophysical Union, student member, 2004-present  
Geological Society of America (GSA), student member, 2004 - Present  
Association of American Geographers (AAG), student member, 2004 - Present  
American Academy of Underwater Sciences (AAUS), student member, 2004 -Present  
Sigma Xi, student member, 2003-Present  
Omicron Delta Kappa, 2001-Present

## Scientific Publications

- Kraatz, L.M., McNinch, J.E., Friedrichs, C.T., and Trembanis, A.C., 2008. Geomorphic changes of fine-grained sedimentary furrow: insight into sediment transport and deposition in the York River estuary. 2008 Ocean Sciences Abstract with Programs, Orlando, Florida, 2-7 March.
- Petrone, C.J., Brodie, K.L., Foxgrover, A.C., Jones, D.O.B., Kraatz, L.M., Lake, S.J., Relles, N.J., Rodriguez-Calderon, C., Shen, T., Spier, C.R., Sturdivant, S.K., and Patterson, M.R., 2008. Lessons from Project SeaCamel: Integrating Science Education and Ocean Observing Systems (OOS) Technology. 2008 Ocean Sciences Abstract with Programs, Orlando, Florida, 2-7 March.
- Halls, J. and Kraatz, L.M. 2006. A spatio-temporal assessment of back-barrier salt marsh change: a comparison of multirate aerial photography and spatial landscape indices. International Society of Photogrammetry and Remote Sensing's Mid-Term Symposium "Remote Sensing: From Pixels to Processes" Abstracts and Papers with Programs, 8-11 May, Enschede, Netherlands.
- Halls, J. and Kraatz, L.M. 2006. Estimating error and uncertainty in change detection analyses of historical aerial photographs. 7th International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, 5-7 July, Lisbon, Portugal.
- Kraatz, L. M.; Halls, J. N.; Leonard, L. A., 2005. An assessment of back-barrier salt marshes in southeastern North Carolina using Geographical Information Systems. Estuarine Research Federation Abstract with Programs, October 16-20 Norfolk, VA.
- Kraatz, L.M., Reimer, B., Halls, J.N., and Leonard, L.A. 2005 Historical Analysis of Marsh Area Distribution in Southeastern North Carolina. Association of American Geographers Abstract with Programs, April 4-9 Denver, CO.
- Kraatz, L.M. 2003. Historical Shoreline Change of Honeymoon and Caladesi Islands, West-Central Florida. Undergraduate Honors Thesis. Eckerd College, St. Petersburg, FL.

## Presentations

- Kraatz, L.M., 2008. Geomorphic changes of fine-grained sedimentary furrows: insight into sediment transport and deposition in the York River estuary. DPS Spring Seminar Series.
- Kraatz, L.M. 2008. Coastal Geology and the VA Eastern Shore. VIMS REU Guest Lecture.
- Kraatz, L.M., 2007. The sound of mud: plans for acoustic seabed surveying in the York River. DPS Spring Seminar Series
- Kraatz, L. M.; Halls, J. N.; Leonard, L. A., 2005. An assessment of back-barrier salt marshes in southeastern North Carolina using Geographical Information Systems. ERF Abstract with Programs, October 16-20 Norfolk, VA.
- Kraatz, L.M. 2005 Historical Aerial Photo Rectification and Image Analysis. UNCW Guest Lecture ~ Intro to GIS
- Kraatz, L.M., Reimer, B., Halls, J.N., and Leonard, L.A. 2005 Historical Analysis of Marsh Area Distribution in Southeastern North Carolina. AAG Abstract with Programs, April 4-9 Denver, CO
- Kraatz, L.M. 2004. Caladesi Island: Past, Present, and Future. USF Guest Lecture ~ Intro. to Environmental Science
- Kraatz, L.M. 2003. Historical Shoreline Change of Honeymoon and Caladesi Islands, West-Central Florida. Undergraduate Honors Thesis Defense. Eckerd College, St. Petersburg, FL.

## Committees

2009- Present, Department of Physical Science Faculty Committee (student rep), VIMS  
2008-Present, Awards Committee Representative, VIMS  
2008- Present, Seminar Series Representative, VIMS  
2007-2008, Faculty University Priorities Committee, College of William and Mary  
2006- Present, VIMS Graduate Student Association (President & Vice-President), VIMS  
2006- Present, Green Team, VIMS  
2006-2008, Graduate Council (President), College of William and Mary  
2005-Present, Honor Council, College of William and Mary  
2003-2005, UNCW Graduate Association, UNCW  
2001-2003, Environmental Affairs Committee, Eckerd College

## **Outreach and Volunteering**

2008, Boys & Girls Club/VIMS GSA Halloween Event, VIMS  
2007 - Present, VIMS Booth at the Gloucester County Daffodil Festival, VIMS  
2006 - Present, VIMS Marine Science Day, VIMS  
2006 - Present, Virginia Blue Crab Bowl Volunteer, VIMS  
2004 - 2005, Science Olympiad Coach, New Hanover County Middle Schools, NC  
2003 - 2005, New Hanover County, NC Science Fairs Judge, UNCW  
2003 – 2005, Science Olympiad Judge, UNCW

## **Certifications**

U.S. Coast Guard Boating Skills and Seamanship Certification  
CPR and First Aid Certification  
Marine First Aid Certification  
AAUS Research Scientific Diver Certification  
Radioisotope Certification  
Digital x-radiograph Certification  
GEOTEK Core Logger Certification