



## East Carolina University | Board of Trustees University Affairs Committee Meeting | September 24, 2015 Agenda

- I. Approval of April 23, 2015 Minutes Action
  
- II. Research, Economic Development & Engagement
  - A. BOG Recommendations on Centers and Institutes Action
  
- III. Academic Affairs
  - A. Annualized Schedule for Metrics Action
  - B. Enrollment & Retention Update
  - C. Intercollegiate Athletics Survey
  - D. History Curriculum Update
  
- IV. Student Affairs
  - A. Student Affairs Fall Update

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Kieran Shanahan, Chair
Agenda Item	I.
Item Description	Approval of Minutes – April 23, 2015
Action Requested	Approval
Disposition	
Notes	

Minutes of the Meeting of the  
**University Affairs Committee**  
**East Carolina University Board of Trustees**  
April 23, 2015 at 3:15pm  
East Carolina Heart Institute

Board Members Attending: Danny Scott (chair for meeting), Robert Brinkley, Carol Mabe, Jake Srednicki

Others in Attendance: Keiren Shanahan, Vern Davenport, Bob Plybon, Steve Jones, Max Joyner, Ron Mitchelson, Virginia Hardy, Michael Van Scott, and Steve Ballard

Meeting began 3:07pm

Mr. Scott opened the meeting by reading the conflict of interest statement.

The minutes from the previous meeting were approved.

- **Student Affairs - Virginia Hardy - Review of Greek Life Community at ECU**
  - Dr. Hardy shared some information from the national landscape regarding Greek Life and some recent situations occurring on ECU's campus over the last five years. She shared some growth numbers at ECU with several chapters returning campus since 2010 as well as membership numbers since spring 2011. The GPA's for Greek women is comparable to non-Greek women and Greek men are just below the non-Greek men average grade point. Greek Life will have an external review conducted in Sept. 2015.
  - The presidents of the four Greek Councils answered questions from the Board members. Questions included:
    - What are your top two priorities within each Council?
      - Raise visibility
      - Safety
      - Making sure our members are doing things the right way
      - Community Service.
    - How do you communicate with the chapters to reinforce the policies in place to get in front of someone getting in trouble or detrimental to someone's health
      - Panhellenic has monthly roundtables among the chapters to communicate and share on related/important topics.
      - NPHC goes to a retreat out of town each January to get on the same page and then take back to their members. Also take leadership to national conferences to learn and share.
      - IFC aims to be an advocate for the 17 chapters to offer positive options and ideas and serve as a resource.
    - Do you get enough support from the administration to be successful??
      - IFC – Greek Life Office is a great office and offers amazing support
      - NPHC – the issue is getting members to go to the speakers and attend risk management events/opportunities.
      - Panhellenic – Great support from the university and Erik Kneubuehl has been a great addition to the university in Student Involvement and Leadership to be progressive and proactive with Greeks.
    - With all the bad press, how do the students sell themselves positively on campus to non-Greek students? How can we help you?
      - NPHC – you gain characteristics in Greek orgs that far exceed what you would get out of your college experience.

- IFC – biggest perceptions are usually misperceptions. The more they learn about who we are and what we do, the more they appreciate what we are about.
- Panhellenic – Internal marketing leads to external marketing. We need to share our stories within our councils before we can share it publicly.
- MGC – being out in front of the community and showing them who we really are will help dispel some of the rumors about what Greek Life is and isn't.

Ms. Mabe made a motion to go into Closed Session and was seconded by Mr. Srednicki at 3:41pm.

University Affairs returned to open session at 4:23pm

#### **Academic Affairs - Ron Mitchelson**

- Conferral of Degrees – **Motion presented by Mr. Srednicki and seconded by Mr. Mabe. This motion was approved without dissent.**
- Update of History Curriculum – Provost Mitchelson shared pieces of progress for this project. There will be a digital historical video documentary focused on ECU. Faculty on campus from the Department of History and School of Art are producing the video project. Another option would be to require it as part of a course, but there is an FTE issue associated with that. It could be offered as an elective instead of a requirement. Doing the video allows this to be a mandated piece across campus. The request would be to provide regular updates at future Board meetings about the video project and other pieces tied to Heritage Hall and Aycock Hall.

#### **Research and Graduate Studies - Michael Van Scott**

- Implementation of BOG Centers and Institutes Report Recommendations
  - Discontinuation of the Center for Applied Computational Studies – needs to be decided by the board before July 1, 2015. The NC Center for Biodiversity will come up in the fall for review and then three other centers for discontinuation will be reviewed in the fall 2015 and spring 2016. For clarification, the centers/institutes would be closed, but the work being done by these groups will be able to continue in another unit/group/department. Dr. Van Scott said these are called system wide centers and if they aren't functioning as such they shouldn't be named system wide centers. Dr. Van Scott shared the history of the Center for Applied Computational Studies dating back to 2003. The center's operations will move to the Department of Chemistry with maintenance funding included.
  - **A motion was made by Ms. Mabe to discontinue the center and seconded by Mr. Srednicki. The motion was approved without dissent.**

Meeting Ends at 4:45 pm

Respectfully submitted by Christopher Stansbury

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. Michael Van Scott, Interim Vice Chancellor for Research, Economic Development and Engagement
Agenda Item	II. A.
Item Description	Board of Governors Recommendations on Centers and Institutes
Action Requested	Approval
Disposition	
Notes	



## Division of Research & Graduate Studies

2200 South Charles Blvd  
Mail Stop 157  
Greenville, NC 27858-4353

Michael R. Van Scott, PhD  
Institutional Official &  
Chief Research Officer;  
Associate Vice Chancellor, Interim  
252-328-9471  
252-328-2769 fax  
vanscottmi@ecu.edu

## Memorandum

**To:** ECU Board of Trustees

**From:** Michael R. Van Scott *MRS*

**Date:** August 11, 2015

**Subject:** BOG mandated review of centers and institutes

In a memorandum from Kevin FitzGerald and Christopher Brown to Chancellor Ballard dated March 25, 2015, UNCGA mandated that ECU consider discontinuation of the centers for **Health Systems Research and Development, Natural Hazards Research, Center for Diversity and Inequality Research, and the NC Center for Biodiversity**. Subsequent to review and campus-wide discussions, the centers for Biodiversity, Health Systems Research and Development, and the Center for Diversity and Inequality Research have requested discontinuation as UNC centers and taken steps to reorganize as departmental entities. The requests have been approved by the chairs and deans of the respective departments and colleges, the ECU Centers and Institutes Review Committee, and Chancellor Ballard. The requests are attached to this memorandum for consideration of approval by the Board of Trustees.

Chancellor's Executive Council has also reviewed the Center for Natural Hazards Research (CNHR) and recommends maintaining its status as a UNC center. The recommendation is based on a favorable return on investment, the role of CNHR in integrating activities across disciplines and departments, continuing education activities, and the importance of the center's work in the proposed School of the Coast.

ECU invests \$130k annually in CNHR to support operations, and generated \$560k in extramural grants and contracts in FY2015. The return on investment peaked in 2011 at 10.8:1 and fell to a low in FY2015 to 4.4:1. While the return on investment has decreased in recent years, it is still positive; the director has been tasked with developing a plan for strengthening the leadership within CNHR and returning the center to the higher levels realized in recent years.

Funding to CNHR was received by affiliated faculty members with administrative homes in the departments of Economics, Geology, Geography, Anthropology, and Biology; and the projects required collaboration and integration of activities with the Institute of Coastal Science and Policy and the UNC Coastal Studies Institute. Integrating the different disciplines from within a department would be difficult.

The center serves an important training function for students and adult learners. In FY2015, CNHR awarded 250 continuing education training credits for emergency managers and provided courses for almost 1,000 undergraduate and graduate students.

The activities of CNHR are expected to be an important component of the proposed joint Ph.D. program with UNC Wilmington and the proposed School of the Coast being considered at ECU. The Board of Governors has tasked UNCGA with reviewing coastal programs across the State, and progress on the ECU coastal initiatives will be impacted by that process. It is rational to forego decisions on discontinuing and restructuring CNHR until the fate of the coastal program at ECU is decided.

It is therefore recommended that CNHR continue as a UNC center.

**From:** Downs, William M  
**Date:** July 7, 2015  
**To:** Michael Van Scott, Chair, Centers and Institutes Review Committee  
**Subject:** Discontinuation of North Carolina Center for Biodiversity

Approval for discontinuation has been received from Dean William Downs relative to the North Carolina Center for Biodiversity (NCCB).

See attached memo.

---

**ECU Centers and Institutes Review Committee (CIRC) recommendation:**

Approve       Disapprove       Other

Michael R. Van Scott      8/3/15  
CIRC Chair      Date

---

**Academic Council recommendation:**

Approve       Disapprove       Other

Ron Mitchelson      8/3/15  
Ron Mitchelson      Date  
Phyllis Horns      8/3/15  
Phyllis Horns      Date  
Michael R. Van Scott      8/3/15  
Michael R. Van Scott      Date

---

**Chancellor's Executive Council recommendation:**

Approve       Disapprove       Other

D. Ballard      8/11/15  
Chancellor      Date

Department of Biology  
Thomas Harriot College  
of Arts and Sciences  
Howell Science Complex  
East Carolina University  
Greenville, NC 27858-4353

252-328-6718 office  
252-328-4178 fax  
[www.biology.ecu.edu](http://www.biology.ecu.edu)



June 18, 2015

Dear Dean Downs:

In accordance with the Board of Governors' and UNC General Administration's recommendations, the Department of Biology hereby requests that the North Carolina Center for Biodiversity be discontinued as a University of North Carolina authorized Center. The activities currently conducted within the Center are integral to the teaching, service, and research missions of the Department. To insure continuation of these critical functions, the faculty, students, and external partners that constitute the Center will be organized into a collaborative called the East Carolina Biodiversity Initiative. The Initiative will be administered by Drs. David Chalcraft and Heather Vance-Chalcraft from within the Department of Biology. We anticipate that funding for the East Carolina Biodiversity Initiative will be provided through the Department, with supplemental support from the College as available and from external funding agencies contingent upon successful submissions.

Thank you for considering this request.

Sincerely,



Jeffrey S. McKinnon, Chair  
[mckinnonj@ecu.edu](mailto:mckinnonj@ecu.edu)

Approved.  
Wes Jones  
6/20/15



**From:** Downs, William M  
**Date:** July 7, 2015  
**To:** Michael Van Scott, Chair, Centers and Institutes Review Committee  
**Subject:** Center for Diversity and Inequality Research Discontinuation

Approval for discontinuation has been received from Dean William Downs relative to the Center for Diversity and Inequality Research (CDIR).

See attached memo.

---

**ECU Centers and Institutes Review Committee (CIRC) recommendation:**

Approve       Disapprove       Other

Michael R. Van Scott      8/3/15  
CIRC Chair      Date

---

**Academic Council recommendation:**

Approve       Disapprove       Other

Ron Mitchelson      8/3/15  
Ron Mitchelson      Date

Phyllis Horns      8/3/15  
Phyllis Horns      Date

Michael R. Van Scott      8/3/15  
Michael R. Van Scott      Date

---

**Chancellor's Executive Council recommendation:**

Approve       Disapprove       Other

Ballard      8/11/15  
Chancellor      Date

MAY 29 2015



Department of Sociology  
Thomas Harriot College of Arts and Sciences  
East Carolina University  
A-416 Brewster Greenville, NC 27858-4353  
252-328-6883 office 252-328-4837 fax

RECEIVED



May 29, 2015

Dr. William Downs  
Dean  
Thomas Harriot College of Arts and Sciences  
East Carolina University

Dean Downs:


The recommendations resulting from the Board of Governors review of UNC-system Centers this past academic year increased the reporting and review requirements, and the expectations for extramural support, for all UNC-authorized centers. The Board of Governors also specifically recommended that ECU review the **Center for Diversity and Inequality Research** for possible discontinuation. Upon review of the Center's activities and the resources available to conduct those activities, the Department of Sociology in consultation with the Interim Associate Vice Chancellor for Research, Dr. Van Scott, have determined that research on social inequality is important to the University's mission and the region, and that these activities should continue, but that the activities can be conducted more efficiently as a collaborative administered by and accountable to the Department of Sociology. We therefore request that the Center for Diversity and Inequality Research (CDIR) be discontinued as a University of North Carolina authorized Center and continue operations as the Collaborative for Diversity and Inequality Research.


CDIR was established in 2008 to conduct applied research, public service, and education on sources and impacts of inequality in eastern NC as a region characterized by persistent poverty. Twenty faculty and 160 students from 10 departments across campus participate in the center's activities. The Center is financially supported by the Harriot College of Arts and Sciences and the Department of Sociology. Thomas Harriot College of Arts and Sciences provides a stipend for the director and a small operating budget (\$3,200 annually) that is used in part to seed research projects. The Department of Sociology supports CDIR by providing its administrative support and course releases for the Director. Upon its opening two endowment gifts totaling \$466,000 were promised to the Center as part of estate plans by Dr. Jesse Peele.


The Department of Sociology remains committed to addressing diversity and inequality issues in our region, but at the present time, we feel that the activities of CDIR would be more efficiently administered at the department level as an interdisciplinary collaborative of faculty and students who are actively working on diversity and the sources and impacts of inequality, as opposed to the current structure that requires board of trustee-level oversight. To insure continuation of the important work conducted by the Center, we request that the funds currently budgeted to support

CDIR operations continue to flow to the Department of Sociology. With regard to the promised endowments, the Department will work with the donor who has promised the estate funds to insure that the gifts will be available to support activities in the future.

Thank you for considering this request,

  
Marieke Van Willigen, PhD  
Associate Professor and Interim Chair of Sociology

  
James P. Mitchell, PhD  
Professor of Sociology and Director of the Center for Diversity and Inequality Research

  
Bob Edwards, PhD  
Professor and Incoming Chair (July 1, 2015)

Approved.  
W. Lee Jones  
6/30/15

cc. Michael Van Scott, Interim Associate Vice Chancellor for Research

**From:** Paul R. G. Cunningham  
**Date:** May 11, 2015  
**To:** Michael Van Scott, Chair, Centers and Institutes Review Committee  
**Subject:** Discontinuation of the Center for Health Systems Research and Development

Approval for discontinuation has been received from Dean Paul R. G. Cunningham relative to the Center for Health Systems Research and Development (CHSRD).

See attached memo.

---

**ECU Centers and Institutes Review Committee (CIRC) recommendation:**


Approve       Disapprove       Other

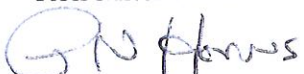
  
CIRC Chair      5/3/15  
Date


---

**Academic Council recommendation:**

Approve       Disapprove       Other

  
Ron Mitchelson      8/3/15  
Date

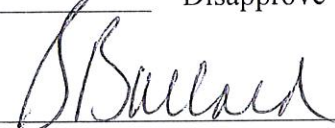
  
Phyllis Horns      8/3/15  
Date

  
Michael R. Van Scott      Date

---

**Chancellor's Executive Council recommendation:**

Approve       Disapprove       Other

  
Chancellor      8/11/15  
Date

**Department of  
Public Health**

Brody School of Medicine  
Lakeside Annex,  
Buildings 7 and 8  
600 Moyer Boulevard  
Mail Stop 660  
East Carolina University  
Greenville, NC 27834-4354

252-744-5185 office  
252-744-4008 fax  
www.ecu.edu/dph

May 11, 2015

Paul R. G. Cunningham, MD  
Dean, Brody School of Medicine  
Senior Associate Vice Chancellor for Medical Affairs

Dean Cunningham:

The Department of Public Health hereby requests that the Center for Health Systems Research and Development be discontinued as a University of North Carolina authorized Center. This Center was established in 1979 to inform the development of health care delivery systems in eastern North Carolina subsequent to the opening of the Brody School of Medicine. Since the creation of the Department of Public Health in 2008, the faculty, staff, and functions of the Center have become an integral part of the graduate program and research within this department, and its capacities are expected to be very important as we move toward establishment of a School of Public Health. We therefore request that the Center be discontinued as a UNC authorized Center and that its resources be fully integrated into the Department of Public Health and focused on the development of this program.

Thank you for considering this request,



Maria Clay, PhD  
Professor and Interim Chair of Public Health



Chris Mansfield, PhD  
Professor of Public Health and Director of the Center for Health Systems  
Research and Development



Paul R. G. Cunningham, MD  
Dean, Brody School of Medicine  
Senior Associate Vice Chancellor for Medical Affairs



East Carolina University.  
Tomorrow starts here.

**Ten Years of Research,  
Teaching, and Service  
2004-2005  
2014-2015**

**CNHR**

---

**CENTER FOR NATURAL HAZARDS RESEARCH**

© 2015  
Center for Natural  
Hazards Research



Ten Years of Research,  
Teaching, and Service  
2004-2005  
2014-2015

A graphic for the CNHR logo consisting of a yellow circular swirl pattern.

**CNHR**

***CENTER FOR NATURAL HAZARDS RESEARCH***

Jamie Brown Kruse, Director  
Thomas Harriot College of Arts and Sciences  
East Carolina University  
Brewster A-116  
Greenville, NC 27858  
(252) 328-5718

[www.ecu.edu/hazards](http://www.ecu.edu/hazards)

July, 2015





# TABLE OF CONTENTS

Vision.....	I
Mission.....	I
Activities.....	I
<b>Creating the Vision: CNHR People .....</b>	<b>2</b>
Center leadership and staff.....	2
Faculty research associates .....	2
Selected awards & recognition.....	3
Collaborating institutions & researchers.....	3
Selected partnering organizations .....	4
<b>Accomplishing the Mission: Research.....</b>	<b>5</b>
Grant funding generated .....	5
Grants pending .....	5
State Funded Projects.....	6
Federally Funded Projects .....	8
<b>Disseminating Research: CNHR Publications .....</b>	<b>13</b>
Professional publications .....	13
Selected refereed journal articles .....	13
Selected refereed book chapters.....	25
Selected proceedings & abstracts.....	26
Working papers.....	27
Reports.....	30
Presentations, symposia, workshops, talks .....	31
<b>Engaging the Next Generation: Teaching and Learning .....</b>	<b>45</b>
ECU Courses that include natural hazards content .....	45
Students supported in natural hazards-related research .....	46
Selected accomplishments of former students.....	47
<b>Serving Communities: Engagement &amp; Outreach.....</b>	<b>48</b>
Annual NCEM/ECU Hurricane Conference .....	48
Hurricane Floyd Symposium.....	49
Selected outreach and training activities.....	49



## Vision

---

The Center for Natural Hazards Research (CNHR) fosters a multidisciplinary research community that seeks to understand and thereby improve our ability to predict, respond to, and recover from adverse events caused by the natural processes.

## Mission

---

The CNHR promotes research and analysis that ultimately reduces the harm caused to life, communities, and the environment by natural forces.

## Activities

---

The Center's scope of research is all hazards and all phases of disaster planning, response, and recovery including risk assessment and decision making. The Center's primary research focuses on the interactions among people, communities, and the physical processes (atmospheric and geologic) in coastal areas. In particular, our research and engagement centers on the impacts of storms, coastal erosion, flooding, and other environmental conditions affecting North Carolina.

CNHR researchers investigate, report on, and teach about the relationships among physical, social, and economic aspects of natural hazards affecting our region, North Carolina, the U.S., and the international community.

To carry out our mission, the Center initiates and facilitates interdisciplinary research across East Carolina University (ECU) and across institutions. Areas of active research include improved understanding of

- atmospheric and geologic hazards and their relationships with physical, biological, built, and social environments;
- GIS as a means to assess and communicate hazards;
- financial impacts of hurricanes and floods;
- effective and efficient management of coastal erosion;
- relationships between human behavior, land use, and natural hazards;
- individual behavior, community projects, and government policies for mitigating and managing risk of natural hazards;
- economic valuation of risk-reducing public and private projects;
- individual and household risk and response decisions; and
- effective ways of communicating about these issues.



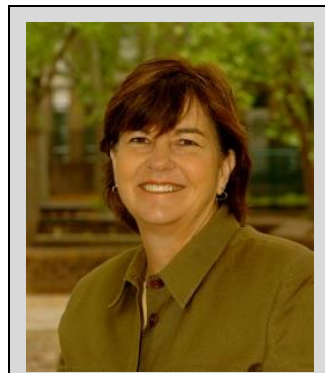
## Creating the Vision: CNHR People

---

The Center brings together people from various disciplines working on similar issues across disciplines at East Carolina University and other public and private institutions and organizations around the region and the globe. Over the ten years the Center has been active, CNHR faculty have cultivated many fruitful partnerships.

### Center leadership and staff

**Jamie Brown Kruse**, Economics, Director  
**Scott Curtis**, Atmospheric Science/Geography,  
Assistant Director  
**Donna Kain**, English/Technical & Professional  
Communication, Co-Assistant Director  
**Craig Landry**, Economics, Assistant Director, 2010–  
2014\*\*  
**Chris Jackson**, Administrative Associate



*Jamie Brown Kruse*  
*Director, CNHR*  
*Professor, Economics*

### Faculty research associates

**Tom Allen**, Geography  
**John Bishop**, Economics  
**Don Bradley**, Sociology  
**Okmyung (Paul) Bin**, Economics  
**John Bishop**, Economics  
**D. Reide Corbett**, Geology,  
Institute for Coastal Science and  
Policy (ICSP), Coastal Studies  
Institute (CSI)  
**Tom Crawford**, Geography\*\*  
**Steve Culver**, Geology  
**Bob Edwards**, Sociology  
**Richard Ericson**, Economics  
**Paul Gares**, Geography  
**Greg Howard**, Economics  
**John Howard**, Communication  
**Mohammad Jahan-Parvar**,  
Economics\*\*  
**Jeffrey C. Johnson**, Sociology, ICSP\*\*  
**Andrew Keeler**, Economics, CSI  
**Timothy R. Kelley**, Health Education  
& Promotion  
**Jonathan Lee**, Economics  
**Eduardo Liorri**, Geology  
**Haiyong Liu**, Economics  
**Patrick T. Long**, Director, Center for  
Sustainable Tourism

**David Mallinson**, Marine Geology  
**Alex Manda**, Geology  
**Ernie Marshburn**, Research &  
Graduate Studies  
**Ron Mitchelson**, Geography,  
ECU Provost  
**Burrell Montz**, Geography  
**Anuradha Mukherji**, Geography  
**Michael O'Driscoll**, Geology  
**Enrique Reyes**, Biology, ICSP  
**Tom Rickenbach**, Geography  
**Stan Riggs**, Geology (Emeritus)\*  
**Roger Rulifson**, Biology, ICSP  
**John Rummel**, Biology, ICSP  
**Catherine Smith**, English (Emerita)\*  
**Hans Vogel song**, Recreation &  
Leisure Studies  
**J.P. Walsh**, Geology, ICSP, CSI  
**Kenneth Wilson**, Sociology\*

\*Retired

\*\*No longer at ECU

### *Selected awards & recognition*

- Jamie Kruse**, Lifetime Excellence in Research & Creativity, 2012; Harriot College of Arts and Sciences (HCAS) Distinguished Professorship, 2012; Women of Distinction, 2011
- Roger Rulifson**, Lifetime Achievement in Research & Creativity 2013; ECU Scholar-teacher Award, 2011
- Craig Landry**, 5-Year Excellence in Research & Creativity, 2012
- Michelle Covi**, Walter B. Jones Memorial Awards for Coastal and Ocean Resource Management, 2012
- Thomas Crawford**, ECU Scholar-teacher Award, 2011
- Scott Curtis**, 5-Year Excellence in Research & Creativity, 2010
- Steve Culver**, HCAS Distinguished Professorship, 2008
- Jeffrey Johnson**, Lifetime Achievement Research & Creative Activity Award, Distinguished Research Professor of Sociology, 2007
- David Reide Corbett**, 5-Year Excellence in Research & Creativity, 2006
- Stan Riggs**, HCAS Distinguished Professorship, 2000



*Michelle Covi, PhD,  
Coastal Resources  
Management, is now a  
research faculty member  
at Old Dominion  
University in Virginia*

### Collaborating institutions & researchers

- |   |   |
|---|---|
| Azlina Abd. Aziz, Universiti<br>Malaysia Terengganu                             | Jennifer Dorton, University of<br>North Carolina at Wilmington                              |
| Robert F. Adler, University of<br>Maryland, NASA Goddard Space<br>Flight Center | Christopher Dumas, University of<br>North Carolina at Wilmington                            |
| Thomas Barker, Texas Tech<br>University   | Bradley Ewing, Texas Tech<br>University   |
| Tom Birkland, North Carolina<br>State University                                | Scott Farrow, University of<br>Maryland, Baltimore County                                   |
| Brian Blanton, Renaissance<br>Computing Institute (RENCI)                       | Kathleen Farrell, North Carolina<br>Geodetic Survey   |
| Rex Caffey, Louisiana<br>State University                                       | Dave Foster, US Geological Survey<br>Woods Hole Field Center                                |
| Todd Cherry, Appalachian<br>State University                                    | Doug Gamble, University of North<br>Carolina Wilmington                                     |
| Keith Coble, Mississippi State<br>University                                    | Guojun Gu, University of Maryland-<br>Baltimore County, NASA<br>Goddard Space Flight Center |
| Susan Cutter, University of<br>South Carolina                                   | Scott Halladay, New York<br>University  |
| Rachel Davidson, University of<br>Delaware                                      | Ed Hauser, University of North<br>Carolina at Charlotte                                     |
| Dakshina de Silva, Texas Tech<br>University                                     | Scott Hein, Texas Tech University   |
| Menno DeJong, University of<br>Twente   | Paul Hindsley, Eckerd College   |
|   | Yang Hong, University of<br>Oklahoma  |

## Ten Years of Research, Teaching, and Service

Ben Horton, University of Pennsylvania  
George J. Huffman, SSAI, NASA Goddard Space Flight Center  
Carolyn Kousky, Resources for the Future  
Craig Landry, University of Georgia  
Jingyuan Li, University of Delaware  
Daan Liang, Texas Tech University  
Andreas Lange, University of Maryland  
George List, North Carolina State University  
John List, University of Chicago  
Rick Leuttich, UNC Institute for Marine Science  
Stan Locker, University of South Florida  
Farooq Malik, University of Southern Mississippi  
Duncan McGregor, University of London  
Suriyani Muhamad, Universiti Malaysia Terengganu  
Nik Hashim Mustapha, Universiti Malaysia Terengganu  
Linda Nozick, Cornell University  
Margery Overton, North Carolina State University  
Thomas O'Rourke, Cornell University

Dan Petrolia, Mississippi State University  
James Porto, University of North Carolina at Chapel Hill  
Ben Poulter, Potsdam Institute for Climate Impact Research, Germany  
Carla Prater, Texas A& M  
Michael Price, University of Tennessee  
Jack Rink, McMaster University  
Nur Azura Sanusi, Universiti Malaysia Terengganu  
Gavin Smith, University of North Carolina at Chapel Hill  
Sharon Sullivan, Outreach, Dare County Schools  
Dan Sutter, Troy University  
Rob Thiele, US Geological Survey Woods Hole Field Center  
Mark Thompson, Texas Tech University  
Al Wallace, Rensselaer Polytechnic Institute  
Yongsheng Wang, Washington & Jefferson College  
John Wehmiller, University of Delaware  
John Whitehead, Appalachian State University

### Selected partnering organizations

Federal Emergency Management Agency (FEMA)  
National Institute for Standards and Technology (NIST)  
National Oceanic & Atmospheric Administration (NOAA)  
National Science Foundation (NSF)  
National Weather Service (NWS)  
National Hurricane Center (NHC)  
North Carolina Department of Environment & Natural Resources  
North Carolina Department of Insurance  
North Carolina Department of Public Safety, Division of Emergency Management (NCEM)  
North Carolina Sea Grant  
US Army Corps of Engineers (USACE)  
US Dept. of Homeland Security (DHS)  
US Geological Survey (USGS)



## Accomplishing the Mission: Research

---

One of the most significant benefits of the Center is that it provides a hub for faculty to connect with other researchers across disciplines who investigate similar issues from different perspectives. The ability to collaborate with researchers from various fields and institutions brings fresh insights and approaches to identifying problems, working on solutions, and developing the expertise scholars share with colleagues, communities, stakeholders, and students.

The importance of such cross-disciplinary opportunities has been recognized in a number of ways by funding agencies, for example the National Science Foundation as they seek to support more “cross-cutting” initiatives. Understanding the implications of risks from natural hazards requires investigating the relationships among the physical and social contexts in which people deal with and make decisions about risks. No single discipline has all the answers.

The Center gives faculty an infrastructure to bring critical intellectual resources to problems and demonstrates to potential funders that we have the capacity to conduct research effectively and to disseminate and use the results of that work.

### Grant funding generated

Over the last ten years, faculty affiliated with the center have been successful in generating research funds averaging over a million dollars per year in federal, state, and other grants. The grants listed in this section include 8 submitted and currently pending; 36 funded by State sources, including state agencies and universities; and 67 funded by sources external to the state, including international, national, and federal sources.

Total State Funded Research	\$ 5,153,588
Total Federal and Externally Funded Research	\$ 10,278,973
<b>Total funding generated by CNHR faculty and partnerships</b>	<b>\$15, 432,561</b>

### *Grants pending*

2015. **Corbett, D. R. & Walsh, J. P.** Linking Measurements & Modeling of Sediment Transport & Oil Degradation Along Shelf & Slope Dispersal Pathways, Co-Principal Investigator, Gulf of Mexico Research Initiative. **\$2,568,846**
2014. **Kruse, J., Walsh, J. P., & Corbett, D. R.** Hazards SEES: Process, Function, & Value of Barrier Islands for Disaster Risk Reduction, National Science Foundation (NSF). **\$1,784,651**
2014. Peralta, A., **Manda, A.**, Ardon, M., & Curtis, W. Managing Aquatic Ecosystems in a Changing Climate: Effects of Drought & Subsequent Re-flooding on Wetland Sediment Nutrient Flux, National Science Foundation (NSF), **\$996,049.**
2014. **Corbett, D. & Walsh, J. P.** Monitoring of Oregon Inlet Terminal Groin & Beach Nourishment Projects at Pea Island National Wildlife Refuge, Co-Principal Investigator, US Fish & Wildlife. (\$1,500,000) **\$486,395 to ECU**



## Ten Years of Research, Teaching, and Service

5. 2014. **Corbett, D. R. & Walsh, J. P.** Predicting the Ecological Responses of Sea-Level Rise Scenarios: A Multidisciplinary Approach to Assess Future Conditions & Adaptation in North Carolina, Co-Principal Investigator, UNCW. (\$597,532) **\$229,637 to ECU**
6. 2015. **Corbett, D. R., Walsh, J. P., & Allen, T. R.** Predicting the Impacts of Sea Level Rise, Co-Principal Investigator, NOAA Office of Sponsored Coastal Ocean Research. **\$99,306**
7. 2014–2015. **Crawford, T.** (PI), Salahuddin, A., **Curtis, S. & Mukherji, A.** Asia Pacific Network Project Title: Human Response to Catastrophic Monsoon Events in South Asia. **\$15,000**
8. 2014. **Howard, G.,** Peralta, A., Ardon, M., **Reyes, E., & Griffith, D.** CNH-L: An integrative analysis of perceptions, policy, & land use impact on ecosystem services in a coastal plain watershed facing climate change, National Science Foundation (NSF). **\$368,986**  
**Total Grants Pending: \$6,548,870**

### *State Funded Projects*

1. 2015. **Corbett, D. R. & Walsh, J.** Influence of Submarine Groundwater Discharge on Nearshore Water Quality: Student Training & Research. Surfrider, \$1,000
2. 2015. **Corbett, D. R., Walsh, J., White, N., & Richards, N.** Research to support design & siting of deposition areas for dredge material. NC Department of Transportation, **\$371,010**
3. 2015. **Manda, A. K. & Bean, E.** Coastal Sustainable Stormwater Management. Resilience through Spatially Distributed Infiltration, Principal Investigator. Center for Sustainability 2015 Interdisciplinary Summer Research Award competition, **\$11,608**
4. 2014-2015. **Allen, T. & Walsh, J. P.** North Carolina Coastal Atlas: Linking Research to Management, Co-Principal Investigator, *NC DENR*, **\$70,000**
5. 2014-2015. **Allen, T.R. & Kain, D.** Visualization & Communications Tools to Help North Carolina Communities Plan for Sea Level Rise. *NC Sea Grant*. **\$22,500**
6. 2014-2015. **Manda, A.** Impact of Climate Change & Sea-Level Rise on Groundwater Inundation in Coastal Regions. *ECU Interdisciplinary Research Grant*, **\$12,256**
7. 2014-2015. **Manda, A. & Allen, T. R.** Coastal Ground Water Watch. *NC Sea Grant & NC Water Resources Research Institute*, **\$39,929**
8. 2014. **Manda, A. K.** Leveraging Community-Based Research to Explore Perceptions of Flooding & Environmental Change Among Citizen Scientists, *ECU Engagement & Outreach Scholar Awards*, **\$11,000**.
9. 2013. **Allen, T. R. & Walsh, J. P.** Planning & Implementing NC Coastal Atlas. *North Carolina DENR Division of Coastal Management*, **\$35,000**
10. 2012-2014. Zhu, Y., **Avenarius, C.** Develop a Genetic Model and Procedure for Sterilizing Invasive Vertebrates. *NC Biotechnology Center*, **\$67,500**
11. 2012-2014. **Wilson, K.** NC Broadband Rigor in Mapping: Citizen Surveys. *North Carolina Rural Economic Development Center*, **\$32,870**
12. 2012-2013. **Landry, C. E. & Whitehead, J.** Economic Values of Coastal Erosion Management. *North Carolina Sea Grant*, **\$46,664**
13. 2012. Humphrey, C., O'Driscoll, M., & **Mallinson, D.** Non-Intrusive Geophysical Characterization of Wastewater Plumes in Coastal North Carolina. North Carolina Water Resources Research Institute, **\$30,000**

14. 2011-2012. **Allen, T., Walsh, J., Crawford, T., Landry, C., Kain, D., R Corbett.** Sea-Level Rise in North Carolina: RENCI@ECU Assessment for Adaptation to a Chronic Coastal Hazard. *Renaissance Computing Institute (RENCI)*, **\$206,780**
15. 2011. **Allen, T., Walsh, J., Crawford, T., Kain, D., Landry, C., R Corbett.** Coastal Erosion Hazards in North Carolina: Spatially Integrated Scientific Measurement, Modeling, & Visualization UNC Chapel Hill (RENCI). *Renaissance Computing Institute*, **\$200,000**
16. 2010-2012. **Kain, D. & Covi, M.** Risk Communication & Perception of Climate Change & Adaptation in Northeastern North Carolina. *North Carolina Sea Grant Mini-grant*, **\$5,500**
17. 2010-2012. **Montz, B.** Prototypes of Weather Information Impacts on Emergency Management Decision Procedures. *North Carolina State University*, **\$112,896**
18. 2010-2011. **Allen, T.** Mapping Potential Sea-Level Rise Inundation for the Town of Plymouth, NC. NC Sea Grant, **\$7,490**
19. 2010. **Allen, T.** Shoreline Change & Sea Level Rise Assessment & Visualization for the Town of Plymouth, NC. *North Carolina Sea Grant*, **\$8,000**
20. 2010. **Long, P., Hao, H., Landry, C., Crawford, T., & Singleton, Y.** Tourism Impacts & Second Home Development in Coastal Communities. *North Carolina Sea Grant*, **\$69,652**
21. 2009-2012. **Allen, T. R., J.P. Walsh, E. Reyes, D. Kain, J. Kruse.** Renaissance Computing Institute RENCI ECU Engagement Center: Coastal Hazards Research on Sea-Level Rise, **\$1,179,537**
22. 2009-2010. **Mitchelson, R.** UNC System Pre-Disaster Mitigation Planning for Campuses of Eastern NC. *UNC Charlotte*, **\$30,847**
23. 2008-2011. **Marcucci, D., Crawford, T., & Blizzard, A.** Mid-Currituck Bridge Study. *North Carolina Department of Transportation*, **\$126,199**
24. 2008-2009. **Landry, C.** Wind Turbines and Recreation Demand: An Application of Conjoint Analysis and Visualization Wall Tech. *Appalachian State University*, **\$28,000**
25. 2008-2009. **Walsh, J.P., Corbett, D.** Estuarine Shoreline Mapping: Creating a Digital Shoreline for the Albemarle-Pamlico Estuarine System. *North Carolina DENR*, **\$106,770**
26. 2008-2009. **Landry, C., Allen, T., Cherry, T., Whitehead, J.** Benefits & Costs of Offshore Windfarms. Survey research on visual recreational disamenity impact of windfarm development offshore of the Outer Banks, NC. *Appalachian Energy Institute*, **\$35,000**
27. 2008-2009. **Wilson, K.** Changing Levels of Internet Access in North Carolina: 1999–2008. *North Carolina Rural Development Center*, **\$25,000**
28. 2008. **Culver, S., & Mallinson, D.** Towards Integration of Estuarine Observing. *University of North Carolina General Administration*, **\$15,000**
29. 2007-2008. **Culver, S., Riggs, S., Allen, T., Ames, D. Corbett, R., Crawford, T., Dumas, C., Jahan-Parvar, M., Landry, C., Mallinson, D., O'Driscoll, M., Vogelsong, H., Walsh, J.P., White, N., Whitehead, J., & Young, R.** North Carolina Coastal Hazards: Economic Implications of Severe Storms & Sea Level Rise. *University of North Carolina Research Competitiveness Fund*, **\$288,694**
30. 2007. **Riggs, S., Culver, S., & Mallinson, D.** Stratigraphic Evaluation of the Buckridge Coastal Preserve. *North Carolina-DENR*, **\$11,000**

## Ten Years of Research, Teaching, and Service

31. 2007-2009. **Rummel, J.** A Citizen's Water Quality Monitoring Program for the Albemarle-Pamlico Estuary. *North Carolina DENR*, **\$69,730**
32. 2006-2009. **Smith, C., Kain, D., & Wilson, K.** Risk Perceptions & Emergency Communication Effectiveness in Coastal Zones. *North Carolina Sea Grant*, **\$164,037**
33. 2006-2009. RENC@ East Carolina University Engagement Center. *Renaissance Computing Institute*, **\$1.5 mil.**
  - Director 2006-2008 **J. Kruse**, Associate Director **T. Allen**
  - Director 2009-2012 **T. Allen**, Associate Director **J. P. Walsh**
  - Director of Outreach & Communication 2006-2012. **D. Kain**
34. 2006-2008. **Crawford, T.,** Bradley, D. & Edwards, B. Linking Demographic Patterns to Landscape Indicators of Coastal Development. *North Carolina Sea Grant*, **\$122,119**
35. 2006-2008. **Landry, C.,** Dumas, C., Hatcher, T., Herstine, J., Whitaker, R., & Whitehead, J. Recreation Value & Economic Impacts of the North Carolina For-Hire Recreational Fishing Fleet. (Lead Institution UNC Wilmington). *North Carolina Sea Grant Fisheries Research Grant*, **\$77,500**
36. 2006. **Bin, O.** Measuring the Impacts of Climate Change on North Carolina Coastal Resources. *Appalachian State University*, **\$12,500**

**Total State Funded Research: \$ 5,153,588**

### *Federally Funded Projects*

1. 2015-2018. **Mitra, S.** Collaborative Research: Dissolved pyrogenic organic matter dynamics in the environment. *National Science Foundation*, **\$89,815**
2. 2014-2017. **Kruse, J.** Collaborative Research: An Interdisciplinary Approach to Modeling Multiple Stakeholder Decision-Making to Reduce Regional Natural Disaster Risk. *National Science Foundation (NSF)*, **\$67,612**
3. 2014-2017. Brody, S. (PI) Texas A&M., **J. Kruse** (Mentor). Travel grant. Enabling the Next Generation of Hazards & Disasters Researchers. *NSF*, **\$2,000**
4. 2014-2016. **Landry, C.** Schnier, K., & Whitehead, J. Joint Estimation of Revealed & Stated Preference Recreational Data for Evaluation of the Economic Effects of the Allocation of Harvest. *National Oceanic & Atmospheric Administration (NOAA)*, National Marine Fisheries MARFIN Program, **\$109,323.**
5. 2014-2016. **Allen, T. R. & Walsh, J.P.** Synthesis of High & Low Marsh Habitat Mapping. *Southern Atlantic Landscape Conservation Cooperative*, **\$287,000 .**
6. 2014-2016. **Walsh, J.P., Corbett, D.** Assessing sand resources on the northeastern North Carolina continental shelf. *BOEM*, **\$200,000**
7. 2014-2015. **Montz, B.** They Had the Facts, Why Didn't They Act?: Understanding and Improving Response to NWS Coastal Flood Forecasts. *The Nurture Nature Center*, **\$50,666.**
8. 2014. **Walsh, J.P., Corbett, D.** Evaluation of Shoreline Erosion Mitigation by Constructed Oyster Reefs: Student Training and Research (STaR). *Nature Conservancy*, **\$3,672**
9. 2013-2015. **Allen, T. R., Crawford, T., Montz, B., & Walsh, J.P.** Identifying Cultural Resources Sites Affected by Sea Level Rise at Cape Hatteras National Seashore. *US Department of Interior, National Park Service*, **\$67,000.**

10. 2013-2015. **Rummel, J.** Planetary Protection Research, Plans, and Activities. *SETI Institute*, **\$264,992**.
11. 2013–2014. **Landry, C.** Economic Values of Coastal Erosion Management. *NOAA Federal Sea Grant*, **\$77,500**.
12. 2010–2014. **Kruse, J.,** Davidson, R., & Nozick, L. Modeling Natural Disaster Risk Management: A Stakeholder Perspective. Collaborative Grant with University of Delaware, National Institute for Standards & Technology, Department of Commerce, (**\$750,000**) **\$125,290** to ECU.
13. 2013. **Crawford, T.,** Salahuddin, A., **Curtis, S., Allen, T., & Mukherji, A.** Vulnerability & Climate Change in Bangladesh. Asia-Pacific Research Foundation, **\$74,089**.
14. 2013. **Allen, T.** Climate Change Impacts on Water Infrastructure: Vulnerability to Sea-Level Rise and Coastal Storm Surges. *USC Carolinas Integrated Sciences and Assessments*, **\$19,148**.
15. 2013. **Allen, T. R.** & Garner, M. Marsh Mapping, Vulnerability, & Responses to Sea-Level Rise in Rachel Carson NC Estuarine Research Reserve. NOAA, NC Sea Grant & NC National Estuarine Research Reserves Fellowship Program for Ms. Margaret Garner. **\$5,000**.
16. 2012–2015. **Curtis, S.** & Popke, J. Collaborative Research: Vulnerability & Resilience Among Small Farmers in Jamaica: Climate Change, Economic Stress, & the Role of Water Management Strategies. *NSF*, **\$180,555**.
17. 2012-2015. **Corbett, D., Walsh, J.P.** Collaborative Research: Submarine Groundwater and Freshwater Inputs along the Western Antarctic Peninsula. *NSF*, **\$344,037**
18. 2012-2015. **Montz, B.** Flood Risk and Uncertainty: Assessing NWS Forecast and Warning Tools. *NOAA*, **\$38,954**.
19. 2012-2015. **Montz, B.** Social and Behavioral Influences on Weather-Driven Decisions. *NOAA*, **\$50,038**.
20. 2012-2014. **Walsh, J.P., Corbett, D.** Supporting Coastal and Marine Spatial Planning in the South Atlantic through User Engagement, Comprehensive Data Management, and Development of Spatial Decision Support Tools. *Southeast Coastal Ocean Observing Regional Association*, **\$10,091**.
21. 2012–2013. **Allen, T. R.** Maps, Marshes, & Management Applications: Ecological Effects of Sea-Level Rise in North Carolina. *NOAA Cooperative Institute for Climate & Satellites*, **\$90,000**.
22. 2012–2013. **Landry, C. E.** Welfare Economics of Beach Nourishment Projects Using OCS Sand Resources. US Army Corp of Engineers/Department of Interior Bureau of Ocean Energy Management, **\$102,378**.
23. 2012–2013. **Allen, T. R., Walsh, J.,** Morris, J., & Alexander, C. Synthesis of High & Low Marsh Habitat Mapping, Vulnerability & Responses to Sea-Level Rise in the South Atlantic Region. Atlantic Landscape Conservation Cooperative (via CESU Mississippi State U.), *US Department of Interior, Fish & Wildlife Service*, **\$281,631**.
24. 2012. **Culver, S. J., Corbett, D. R. , Leorri, E., Mallinson, D., S. Mitra, J. Walsh.** Initiating a New Collaboration between East Carolina University & Universiti Malaysia Terengganu: Post–Glacial Variations in the East Asian Monsoon. *NSF*, **\$49,974**.
25. 2012. **Crawford, T.,** Ahmed, A., Mishra, A., Premalal, K., Salahuddin, A., **Curtis, S. Allen, T., Mitchelson, R.,** Bradley, D., **Mukerji, A.** Human Responses to Catastrophic Monsoon Events in South Asia: Designing a Spatially Explicit Model in Low-Lying Coastal Bangladesh & India, Asia Pacific Network. *Asia-Pacific Research Foundation*, **\$43,457**.

## Ten Years of Research, Teaching, and Service

26. 2012. **Mukherji, A.** Fellowship Project Title: Negotiating Adaptation & Recovery through Land Use Change in Tohoku, Japan. Nominated by the Social Science Research Council (SSRC) to The Japan Foundation for the JSPS Short-Term Fellowship to conduct research in Japan in collaboration with the Center for Disaster Research Systems at Kyoto University from May to August 2012. *Japan Society for the Promotion of Science (JSPS)*, **\$16,000**
27. 2011-2014. **Rickenbach, T.** & Nieto-Ferreira, R. Physical & Dynamic Meteorology Program, Development of a Climatology of Precipitation System Organization in North Carolina to Improve Climate Precipitation Forecasts. *NSF*, **\$314,000**
28. 2011-2013. **Corbett, D. R.** Advanced Regional & Decadal Predictions of Coastal Inundation for the US Atlantic & Gulf Coasts. in collaboration with University of Pennsylvania. *NOAA*, **\$78,936**
29. 2011-2013. **Corbett, D.** Vulnerability Assessment for Coastal Counties and Developed Islands. *University of Georgia*, **\$63,904**
30. 2011-2013. Petrolia, D. **Landry, C.**, Coble, K., Madsen J., & Caffey, R. Toward an Understanding of Gulf Coast Resident Preferences & Perceptions on Risk & Restoration. *NOAA Northern Gulf Institute*, **\$483,680**
31. 2011-2013. **Mallinson, D.** Multidisciplinary Investigation of Coastal System Response to Sea-Level Rise, Climate Dynamics, & Geomorphic Change. *NSF*, **\$144,952**
32. 2011-2012. **Corbett, D. R.** & **Walsh, J. P.** Development & Application of New Geospatial Tools for a Regional Hazard Vulnerability Assessment of Ocean-Front & Estuarine Shorelines. *NOAA*, **\$73,500**
33. 2011-2012. **Montz, B.** Carolinas Integrated Sciences and Assessments. *University of South Carolina*, **\$42,902**
34. 2011-2012. **Walsh, J. P.**, **Corbett, D. R.** & **Mitra, S.** Collaborative Research: Signature of the 2011 Flooding on the Mississippi Subaqueous Delta. *NSF, RAPID*. **\$58,498**
35. 2011-2012. **Allen, T. R.** & Wang, Y. Investigating SAR Remote Sensing for Updating National Wetland Inventory in North Carolina. *US Department of Interior, Fish & Wildlife Service*, **\$20,000**
36. 2010-2014. **Kruse, J.**, Ewing, B. & Liang, D. Developing an Engineering-Economics Based Resiliency Model to Improve Disaster Mitigation & Recovery. Collaborative Grant with Texas Tech University, *NSF*, (\$350,000) **\$90,000** to ECU
37. 2010-2012. **Huffer, H.**, PhD student, CRM, **Kruse, J.** (advisor ) Graduate Research Fellowship Program, *NOAA*, **\$60,000** (est.)
38. 2010-2012. **Montz, B.** & **Smith, C.**, Prototypes of Weather Information Impacts on Emergency Management Decision Processes. (social science component). *National Weather Service*, (\$400,000) **\$125,000** to ECU
39. 2010-2011. **Mukherji, A.** Summer Research Publication Grant. *American Association of University Women, American Fellowships*, **\$6,000**
40. 2010-2011. **Mukherji, A.**, Ganapati, E., & Rahill, G. Re-housing Urban Haiti After the Earthquake: The Role of Social Capital. *NSF*, **\$45,000**
41. 2010-2011. **O'Driscoll, M.** Building Capacity to Investigate the Link between Wastewater, Groundwater Contamination, and Human Health: Onsite Wastewater Treatment Adjacent to a Nutrient Sensitive Estuary. *National Environmental Health Association*, **\$67,316**

42. 2010-2011. Richards, N. & **Allen, T. R.** The Battle of the Atlantic; An Archaeological Site Management & Environmental Risk Assessment Proposal. *US Department of Interior*, **\$79,000**
43. 2010. **Bin, O.**, Kousky, C., & Holladay, S. National. Distributional Consequences of the National Flood Insurance Program. *Wildlife Federation*, **\$4,000**
44. 2010. **Corbett, D. R. & Walsh, J. P.** Rates & Processes of Vital Wetland Habitat Loss in the APES. Albemarle-Pamlico National Estuarine Program. *Albemarle-Pamlico National Estuarine Program*. **\$58,440**
45. 2010. **Mallinson, D. J.** SMT Kingdom Suite Seismic Software for Education & Research, Seismic Micro-Technology. Inc., **\$524,874**
46. 2010. **Mallinson, D., Culver, S., & Riggs, S.** A Synthesis of Available Geological Data for the Duke Energy Wind Turbine Feasibility Study. *Duke Energy*, **\$35,175**.
47. 2009-2014. **Curtis, S.** Global Precipitation Analysis for Climate and Weather Studies. *University of Maryland*, **\$75,000**
48. 2009-2014. **Walsh, J.P., Corbett, D.** A Collaborative Proposal: Formation and Preservation of Fluvial and Marine Depositional Events, Waipaoa River Margin, New Zealand. *NSF*, **\$384,874**
49. 2009-2010. **O'Driscoll, M.** Building Capacity to Investigate Link Between Wastewater, Groundwater Contamination, & Human Health. *National Environmental Health Association*, **\$90,934**
50. 2008-2011. **Curtis, S.**, Huffman, G., & Gu, G. Global Precipitation Analysis for Climate & Weather Studies. National Aeronautics & Space Administration (NASA/GSFC), (\$1.452 million) **\$55,000** to ECU
51. 2008-2010. Birkland, T. NCSU, **Kruse, J.** (Mentor). Enabling the Next Generation of Hazards & Disasters Researchers. *NSF*, (total grant \$251,012) **\$3,000** (honorarium plus travel to ECU mentor).
52. 2008. **Mallinson, D. & Culver, S.** Refining the Quaternary Sequence Stratigraphic Framework of the Northeastern. *NSF*, **\$172,440**
53. 2008. **Walsh, J.P., Corbett, D.** Albemarle Sound Observing System. *US Army Corp of Engineers*, **\$11,500**
54. 2007-2012. **S. Culver, D. Mallinson, & S. Riggs.** North Carolina Coastal Geology Cooperative Research Program. *US Geological Survey*, **\$35,351**
55. 2007-2011. **Curtis, S.** A Citizen's Water Quality Monitoring Program for the Albemarle-Pamlico Estuary. *NSF*, **\$112,132**
56. 2007-2010. **Allen, T.** VISSTA: Vegetation, Impervious Surfaces, Soils, & Topographic Analysis Tools: Using Geospatial Technology to Promote Coastal Water Quality. *NOAA-UNH Cooperative Institute for Coastal & Estuarine Environmental Technology (CICEET)*, **\$159,631**.
57. 2007-2008. **Curtis, S.** Energy & Water Cycle Study: Global Precipitation Analysis for Climate & Weather Studies. National Aeronautics & Space Administration (NASA), **\$100,000**
58. 2007-2008. **Mallinson, D. J., Culver, S., Leorri, E., Mitra, S., Mulligan, R., & Curtis, S.** Collaborative Research & RUI: Physical Mechanisms Behind the Caribbean Mid-Summer Drought. *NSF*, **\$112,000**
59. 2007. **Bin, O.** East Carolina University, International Programs, Asian Studies Grant, *US Department of Education*, **\$4,000**

## Ten Years of Research, Teaching, and Service

60. 2007. **Culver, S., Corbett, D. Mallinson, D. & Walsh, J. P.** North Carolina Coastal Geology Cooperative Research Program. *US Department of the Interior*, **\$121,955**
61. 2006-2008. **Kruse, J., Landry, C., Bin, O. Wilson, K., & Whitehead, J.** The New Orleans: Evaluating Preferences for Rebuilding Plans After Hurricane Katrina. Principal Investigator. *NSF*, **\$172,596**.
62. 2006. Dumas, C., **Bin, O.**, Poulter, B., & Whitehead, J. Climate Change Impacts on North Carolina Coastal Resources. *National Commission on Energy Policy*, **\$53,125**
63. 2005-2009. **Corbett, D., Walsh, J.P.** Shoreline Vulnerability and Habitat Dynamics in Response Sea Level Rise in the Albemarle-Pamlico Estuarine System. *NOAA*, **\$460,629**
64. 2005-2007. **Kruse, J.**, Ewing, B., Malik F., & Thompson M. Collection of Economic Impact Data: Implications for Disaster Area & Receiving Regions. *NSF*, **\$29,881**
65. 2005-2006. **Kruse, J.** Ewing, B., & Hein, S. Natural Disasters & Bank Performance. *Federal Deposit Insurance Corporation*, **\$10,000**
66. 2004-2005. **Kruse, J.** Consultant for Research Thrust C: Windstorm Economics. National Institute of Standards & Technology/Texas Tech University Cooperative Agreement, Wind Mitigation Initiative Year 7, **\$20,000**
67. 2003-2007. **Curtis, S.** Intraseasonal Variations In Precipitation From The Indian To Western Pacific Oceans As a Forcing Mechanism For El Nino/Southern Oscillation. *NASA*, **\$264,804**

Total Federal and Externally Funded Research: ECU total \$7,474,251

**Total including partners \$ 10,278,973**

## Disseminating Research: CNHR Publications

---

Through publications, reports, presentations, workshops, symposia, invited talks, and participation in community solutions, CNHR researchers work to make research results available, interpretable, and useful for peers, policy makers and the public. Selected professional publications listed here include:

Peer-reviewed journal articles	<b>191</b>
Peer reviewed book chapters	<b>6</b>
Abstracts and proceedings	<b>19</b>
Working papers	<b>44</b>
Reports	<b>17</b>
Presentations, symposia, workshops, talks, and seminars	<b>222</b>

### Professional publications

#### *Selected refereed journal articles*

1. Adler, R., Gu, G., Wang, J., Huffman, G., **Curtis, S.**, & Bolvin, D. (2008). Relationships between global precipitation & surface temperature on inter-annual and longer time scales (1979–2006). *Journal of Geophysical Research*, *113*, D22104, doi:10.1029/2008JD010536.
2. **Allen, T.**, Oertel, G. F., & Gares, P. (2012). Mapping coastal morphodynamics using geospatial techniques, Cape Henry, Virginia. *Geomorphology*, *137*(15), 138–149.
3. **Allen, T. R.** (2012). Estimating coastal lagoon tidal flooding and repletion with Multidate ASTER *Thermal Imagery*. *Remote Sensing* *4*(10) 3110–3126. <http://www.mdpi.com/2072-4292/4/10/3110>
4. **Allen, T. R.**, **Curtis, S.**, & Gamble, D. W. (2010). The mid-summer dry spell's impact on vegetation in Jamaica. *Journal of Applied Meteorology*, *49*, 1590–1595.
5. **Allen, T.** & Shellito, B. (2008). Spatial interpolation and image-integrative geostatistical prediction of mosquito vectors for arboviral surveillance. *Geocarto International* *23*(4) 311–325.
6. Altinanahtar, A., Crooker, J. R., & **Kruse, J. B.** (2008). Valuing human organs: an application of contingent valuation. *International Journal of Social Economics*, *35*(1/2), 5–14.
7. Bianchi, T., Wysocki, L., Schreiner, K., Filley, T., **Corbett, D. R.**, Kolker A. S. (2011). Sources of terrestrial organic carbon in the Mississippi plume region: Evidence for the importance of coastal marsh inputs. *Aquatic Geochemistry*, *17*, 431–456.
8. **Bin, O.** & **Landry, C.** (2013). Changes in implicit flood risk premiums: empirical evidence from the housing market. *Journal of Environmental Economics & Management*, *65*(3), 361–376.
9. **Bin, O.** & J. Czajkowski. (2013). The Impact of Technical & Non-Technical Measures of Water Quality on Coastal Waterfront Property Values in South Florida. *Marine Resource Economics* *28*(1) 43–63.
10. **Bin, O.**, Bishop, J. A., & Kousky, C. (2012). Redistributive Effects of the National Flood Insurance Program. *Public Finance Review* *40*(3) 360–380.





CNHR faculty **Craig Landry's** and **Paul Bin's** research about effects of Hurricane Sandy on the housing market has been cited in TIME Magazine's Business & Money section.

11. **Bin, O.**, Poulter, B. Dumas, C., & Whitehead, J. (2011). Measuring the impact of sea-level rise on coastal real estate: A hedonic property model approach. *Journal of Regional Science*, 15(4), 751–767.
12. **Bin, O.**, Hindsley, P., **Landry, C.**, Whitehead, J., & **Wilson, K.** (2011). Weathering the Storm: Measuring Household Willingness-to-Pay for Risk-Reduction in Post-Katrina New Orleans. *Southern Economic Journal*, 77(4), 991–1013.
13. **Bin, O.**, & Edwards, B. S. (2009). Social Capital and business giving to charity following a natural disaster: An empirical assessment. *Journal of Socio-Economics*, 38(4), 601–607.
14. **Bin, O.**, **Landry, C. E.**, & Meyer, G. F. (2009). Riparian buffers and hedonic prices: a quasi-experimental analysis of residential property values in the Neuse River basin. *American Journal of Agricultural Economics*, 91(4), 1067–1079.
15. **Bin, O.**, **Kruse, J.**, & **Landry, C.** (2008) Flood hazards, insurance rates, & amenities: evidence from the coastal housing market. *Journal of Risk & Insurance*, 75(1), 63–82.
16. **Bin, O.**, **Crawford, T.**, **Kruse, J. B.**, & Landry, C. E. (2008). Flood prone with a view: coastal housing market response to risk and amenity. *Land Economics*, 84, 434–48.
17. **Bin, O.**, **Crawford, T.**, Ewing, B., **Kruse, J.**, & **Landry, C.** (2006). Valuing Self Protection: Income & Certification Effects for Safe Rooms. *Journal of Construction Management*, 24(10), 1057–1068.
18. **Bin, O.**, W. Patrick, K. Schwabe & P. Schuhmann. (2006). Hatchery Programs, Stock Enhancement, & Cost Effectiveness: A Case Study of the Albemarle Sound/Roanoke River Stocking Program 1981–1996. *Marine Policy*, 30(4), 299–307.
19. **Bin, O.** & **Kruse, J.** (2006). Real Estate Market Response to Coastal Flood Hazards. *Natural Hazards Review*, 7(4), 137–144.
20. **Bin, O.** (2005). A Semiparametric Hedonic Model for Valuing Wetlands. *Applied Economics Letters* 12(10), 597–601.
21. **Bin, O.**, & Polasky, S. (2005). Evidence on the amenity value of wetlands in a rural setting. *Journal of Agricultural & Applied Economics*, 37(3), 589–602.
22. **Bin, O.**, **C. Landry, C.** Ellis, & H. Vogelsong, (2005). Some consumer surplus estimates for North Carolina beaches. *Marine Resource Economics*, 20(2), 145–161.
23. Briggs, R. W., Engelhart, S. E., Nelson, A. R., Dura, T., Kemp, A. C., Haeussler, P. J., **Corbett, D. R.** . . . & Bradley, L. A. (2014). Uplift and subsidence reveal a nonpersistent megathrust rupture boundary (Sitkinak Island, Alaska). *Geophysical Research Letters*, 41(7), 2289–2296.
24. Burdette, K. E., Rink, J., **Mallinson, D. J.**, Parham, P., & Reinhardt, E. (2010). Geologic Investigation & Optical Dating of the Merritt Island Sand Ridge Sequence, Eastern Florida, USA. *Southeastern Geology*, 47(4).
25. Burdette, K. & **Mallinson, D. J.** (2008). Geologic Framework of the Currituck Sand Ridges, Northeastern North Carolina. *Southeastern Geology*, 46, 2–10.

26. Calvo-Culvero, J., Ibanez, C., Rovira, A., Sharpe, P. J., & **Reyes, E.** (2013). Mineral versus organic contribution to vertical accretion & elevation change in restored marshes (Ebro Delta, Spain). *Ecological Engineering*, *61*, 12–22.
27. Cearreta, A., García-Artola, A., **Leorri, E. J.**, Irabien, M. & Masque, P. (2013). Recent environmental evolution of regenerated salt marshes in the southern Bay of Biscay. *Journal of Marine Systems* 109–110. S203–S212.
28. Cleckner, H., & **Allen, T. R.** (2014). Dasymetric mapping & spatial modeling of mosquito vector exposure, Chesapeake, Virginia. *ISPRS International Journal of Geo-Information Science* *3*(3), 891–913. doi:10.3390/ijgi3030891
29. **Corbett, D. R.**, Frappier, A. (2014). Mud & the Maya: A 2240-year record of cave flooding events reveals multiple overlapping climatic hazards in northern Yucatán during the Terminal Classic Period 'Megadroughts'. *Geophysical Research Letters*, *41*(14), 5148–5157.
30. **Corbett, D. R.**, Kniskern, T. (2014). Characterization of a flood-associated deposit on the Waipaoa River shelf using radioisotopes & terrigenous organic matter abundance & composition. *Continental Shelf Research*, *86*, 66–84.
31. **Corbett, D. R.**, **Walsh, J. P.**, Harris, C. K., Ogston, A. S., & Orpin, A. R. (2014). Formation & preservation of sedimentary strata from coastal events: Insights from measurements & modeling. *Continental Shelf Research*, *86*, 1–5.
32. **Corbett, D. R.**, **Walsh, J.**, Harris, C., Ogston, A., & Orpin, A. (2014). Formation & Preservation of Sedimentary Strata from Coastal Events: Insights from Measurements & Modeling. *Continental Shelf Research*, *86*, 1–5.
33. **Corbett, D. R.**, Xu, K. (2014). Seabed erodibility Variations on the Louisiana Continental Shelf before and after the 2011 Mississippi River Flood. *Estuarine, Coastal & Shelf Science*, *149*, 283–293.
34. **Corbett, R.** & Kemp, A. (2013). Sea-level change during the last 2500 years in New Jersey, USA. *Quaternary Science Reviews*, *81*, 90–104.
35. Cowart, L., **D. R. Corbett**, & Walsh, J. P. (2011). Shoreline Change along sheltered coastlines: Insights from the Neuse River Estuary, NC. *Remote Sensing*, *3*, 1516–1534.
36. Cowart, L., **Walsh, J. P.** & **Corbett, D. R.** (2010). Analyzing Estuarine Shoreline Change: A Case Study of Cedar Island, NC. *Journal of Coastal Research*, *6*(5), 817–830.
37. **Covi, M.**, & **Kain, D. J.** (2015) Sea-Level rise risk communication: Public understanding, risk perception and attitudes about information. *Environmental Communication*. (In press).
38. **Crawford, T. W.**, **Bin, O.**, **Kruse, J. B.** & **Landry, C. E.** (2014). On the importance of time for GIS view measures & their use in hedonic property models: Does being temporally explicit matter? *Transactions in GIS*, *18*(2), 234–252. doi: 10.1111/tgis.12036
39. **Crawford, T. W.**, **Bradley, D. E.**, & Marcucci, D. J. (2013). Impacts of In-Migration and Coastal Amenities on Housing Growth in Coastal North Carolina, United States. *Population, Space and Place*, *19*(3), 223-238.
40. **Crawford, T.**, A. Salahuddin, **Curtis, S.**, Ahmed, A., **Allen, T. R.**, Bradley, D., Miah, G., Mishra, A., **Mukherji, A.**, Premalal, K. (2013). Human Responses to Catastrophic Monsoon Events in South Asia: Designing a Spatially Explicit Model in Low-Lying Coastal Areas. *APN Science Bulletin* *3*, 125–127.

41. **Crawford, T.**, Commito, J. A., & Borowik, A. M. (2006). Fractal Characterization of *Mytilus Edulis* L. Spatial Structure in Intertidal Landscapes Using GIS Methods. *Landscape Ecology*, *21*, 1033–1041.
42. **Crawford, T.** (2006). Polygon-to-polygon spatial accessibility using different aggregation approaches: A case study of national forests in the US Mountain West region. *Transactions in GIS*, *10*(1), 121–140.
43. **Crawford, T.** (2005). Spatial fluctuations as signature of self-organization: a complex systems approach to landscape dynamics in Rondonia, Brazil. *Environment & Planning B*, *32*, 857–875.
44. **Crawford, T.**, Messina, J. P., Manson, D., & O’Sullivan, D. (2005). Complexity Science, Complex Systems, & Land Use Research. (guest editorial) *Environment & Planning, B* *32*, 792–798.
45. **Culver, S., Leorri, E., Mallinson, D., Corbett, D. R., & Shazili, N.** (2015). Recent coastal evolution & sea-level rise, Setiu Wetland, Peninsular Malaysia. *Palaeogeography, Palaeoclimatology, Palaeoecology*, *417*, 406–421.
46. **Culver, S., Leorri, E., Mallinson, D., Corbett, R., & Shazili, N.** (2015). Recent coastal evolution and sea-level rise, Setiu Wetland, Peninsular Malaysia. *Palaeogeography, Palaeoclimatology, Palaeoecology*, *417*, 406–421.
47. **Culver, S. J., Leorri, E., Corbett, D. R., Mallinson, D. J., Shazili, N. A. M.,** Mohammad, M. N., ... & Yaacob, R. (2013). Infaunal mangrove swamp foraminifera in the Setiu wetland, Terengganu, Malaysia. *The Journal of Foraminiferal Research*, *43*(3), 262–279.
48. **Culver, S. J., Mallinson, D. J., Corbett, D. R.,** Rouf, A., Noor, A. M., Yaacob, R., Whittaker, J., Parham, P. (2012). Distribution of Foraminifera in the Setiu Estuary and Lagoon, Malaysia. *Journal of Foraminiferal Research*, *42*, 109–133.
49. **Culver, S. J.,** Pre, C. G., **Mallinson, D. J., Riggs, S. R., Corbett, D. R.,** Foley, J., ... & Horton, B. (2007). Late Holocene barrier island collapse: Outer Banks, North Carolina, USA. *The Sedimentary Record*, *5*(4), 4–8.
50. **Culver, S. J.,** Farrell, K. M., **Mallinson, D. J.,** Horton, B. P., Willard, D. A., Thielier, E. R., ... & Hillier, C. (2008). Micropaleontologic record of late Pliocene and Quaternary paleoenvironments in the northern Albemarle Embayment, North Carolina, USA. *Palaeogeography, Palaeoclimatology, Palaeoecology*, *264*(1), 54–77.
51. **Culver, S.,** Ames, D., **Corbett, D. R., Mallinson, D., Riggs, S.,** Smith, C. G., & Vance, D. J. (2006). Foraminiferal and sedimentary record of late Holocene barrier island evolution, Pea Island, North Carolina: the role of storm overwash, inlet processes, and anthropogenic modification. *Journal of Coastal Research*, *22*(4), 836–846.
52. **Curtis, S.,** Gamble, D. W., & **Popke, J.** (2014): Sensitivity of crop water need to 2071–2095 projected temperature & precipitation changes in Jamaica. *Earth Interactions*, *18*(12), 1–17.
53. **Curtis, S.** (2013). Daily Precipitation Distributions over the Intra-Americas Sea & their Interannual Variability. *Atmosfera* *26*(2), 243–259.
54. **Curtis, S.** (2013). In the Eye of the Storm: A Participatory Course on Coastal Storms. *Journal of Geography* *112*(4), 133–142.
55. **Curtis, S.** (2012). ENSO Induced Monthly Oscillations of Precipitation: The Unique Case of the South Tropical Indian Ocean. *Climate Dynamics*, *38*(11–12), 2209–2225.
56. **Curtis, S., Long, P. T., & Arrigo, J.** (2011). Climate, Weather, & Tourism: Issues & Opportunities. *Bulletin of the American Meteorological Society*, *92*, 361–363.

57. **Curtis, S.** & Gamble, D. (2008). Regional variations of the Caribbean mid-summer drought. *Theoretical & Applied Climatology*, *94*, 25–34.
58. **Curtis, S.** (2008). The Atlantic multidecadal oscillation and extreme daily precipitation over the US and Mexico during the hurricane season. *Climate Dynamics*, *30*(4), 343–351.
59. **Curtis, S., Crawford, T.,** & Lecce, S. (2007). A comparison of TRMM to other basin-scale estimates of rainfall during the 1999 Hurricane Floyd Flood. *Natural Hazards*, *43*, 187–198.
60. **Curtis, S.,** Salahuddin, A., Adler, R. F., Huffman, G. J., Gu, G., & Hong, Y. (2007). Precipitation extremes estimated by GPCP and TRMM: ENSO relationships. *Journal of Hydrometeorology*, *8*(4), 678–689.
61. **Curtis, S.,** Adler, R. F., Huffman, G. J., Gu, G., Bolvin, D. T., & Nelkin, E. J. (2006). Comments on “El Niño: Catastrophe or Opportunity”. *Journal of Climate*, *19*, 6439.
62. **Curtis, S.** (2008). El Niño/southern oscillation & global precipitation. *Geography Compass*, *2*, 600–619.
63. **Curtis, S. & Salahuddin A.** (2006). Interannual Changes of 20–50 and 50–70 day climate variability in the indo-pacific sector in austral summer. *Journal of the Meteorological Society of Japan*, *84*, 567–579.
64. **Curtis, S.** (2006). Developing a climatology of the south’s ‘other’ storm season: ENSO impacts on winter extratropical cyclogenesis. *Southeastern Geographer*, *46*, 231–244.
65. De Silva, D. G., **Kruse, J. B.,** & Wang, Y. (2008). Spatial dependencies in wind-related housing damage. *Natural hazards*, *47*(3), 317–330.
66. De Silva, D. G., **Kruse, J. B.,** & Wang, Y. (2006). Catastrophe-Induced Destruction and Reconstruction I. *Natural Hazards Review*, *7*(1), 19–25.
67. Ellis, A., **S. Culver, D. J. Mallinson, D. R. Corbett, E. Leorri,** M. A. Buzas, N. A. M. Shazili. (2014). The Influence of Aquaculture on Modern Foraminifera & Sediments in the Setiu Estuary & Lagoon, Terengganu, Malaysia. *Journal of Foraminiferal Research*, *44*, 390–415.
68. Eulie, D., **Walsh, J. P., & Corbett, D. R.** (2013). High-resolution measurements of shoreline change & application of balloon-aerial photography, Albemarle-Pamlico Estuarine System, North Carolina, USA. *Limnology & Oceanography: Methods*, *11*(4), 151–160.
69. Ewing, B. T., **Kruse, J. B.,** & Thompson, M. A. (2009). Twister! Employment responses to the 3 May 1999 Oklahoma city tornado. *Applied Economics*, *41*(6), 691–702.
70. Ewing, B. T., **Kruse, J. B.,** & Thompson, M. A. (2008). Analysis of time-varying turbulence in geographically-dispersed wind energy markets. *Energy Sources, Part B*, *3*(4), 340–347.
71. Ewing B., **Kruse, J.,** Schroeder, J. & Smith, D. (2007). Time series analysis of wind speed using var & the generalized impulse response technique. *Journal of Wind Engineering & Industrial Aerodynamics (Journal of American Society of Civil Engineers)*, *95*, 209–19.
72. Ewing, B. T., **Kruse, J. B.,** & Sutter, D. (2007). Hurricanes and economic research: An introduction to the hurricane Katrina symposium. *Southern Economic Journal*, 315–325.
73. Ewing, B., **Kruse, J.,** & Wang, Y. (2007). Local housing price index analysis in wind-disaster-prone areas, *Natural Hazards*, *40*(2), 463–483.

74. Ewing B., Hein, S., & **Kruse, J.** (2006). Insurer stock price responses to hurricane Floyd: An event study analysis using storm characteristics. *Weather & Forecasting (Journal of American Meteorological Society)*, *21*(3) 395–407.
75. Ewing B., **Kruse, J.**, & Thompson, M. (2006). Transmission of Employment Shocks Before & After the Oklahoma City Tornado. *Environmental Hazards* *6*(4) 181–188.
76. Ewing B., **Kruse, J.**, & Schroeder, J. (2006). Time series analysis of wind speed with time-varying turbulence. *Environmetrics*, *17*119–127.
77. Ewing, B., **Kruse, J.**, & Thompson, M. (2005): An empirical examination of the Corpus Christi unemployment rate and Hurricane Bret. *Natural Hazards Review*, *6*(4) 191–196.
78. Ewing, B. **Kruse, J.** & Thompson M. (2004). Employment Dynamics & the Nashville Tornado. *Journal of Regional Analysis & Policy*, *34*(2), 48–60.
79. Fagherazzi, S., Kirwan, M. L., Mudd, S. M., Guntenspergen, G. R., Temmerman, S., D'Alpaos, A., **Reyes, E.**... & Clough, J. (2012). Numerical models of salt marsh evolution: Ecological, geomorphic, and climatic factors. *Reviews of Geophysics*, *50*(1). doi:10.1029/2011RG000359.
80. Fatela, F., J. Moreno, **E. Leorri**, & **Corbett, D. R.** (2013). Highmarsh foraminiferal assemblage response to intra-decadal and multi-decadal precipitation variability, between 1934 and 2010 (Minho, Portugal). *Journal of Sea Research*, *93*, 118–132.
81. Filatova, T., & **Okmyung, B.** (2015). Mandatory Flood Insurance & Housing Prices: An Empirical Agent-Based Model Approach. *The Journal of Risk & Insurance*. (Under consideration).
82. Gamble, D. W., Campbell, D., **Allen, T. L.**, Barker, D., **Curtis, S.**, McGregor, D., & **Popke, J.** (2010). Climate change, drought, and Jamaican agriculture: local knowledge and the climate record. *Annals of the Association of American Geographers*, *100*(4), 880–893.
83. Gamble, D. W., & **Curtis, S.** (2008). Caribbean precipitation: review, model and prospect. *Progress in Physical Geography*, *32*(3), 265–276.
84. Ganapati, N.E., **Mukherji, A.** (2014). Out of sync: Shared lessons from India & Turkey on World Bank Funding and post-disaster planning for housing recovery. *Natural Hazards Review*, *15*(1), 58–73. DOI: 10.1061/(ASCE)NH.1527-6996.0000120
85. Garcia-Artola, A., Cearreta, A., & **Leorri, E.** (2015). Relative sea-level changes in the Basque coast (northern Spain, Bay of Biscay) during the Holocene & Anthropocene: The Urdaibai estuary case. *Quaternary International*, *364*, 172–180. doi: 10.1016/j.quaint.2014.06.040.
86. Goni, M., Y. Alleau, **D. R. Corbett**, J. P. Walsh, **D. J. Mallinson**, M. Allison, E. Gordon, S. Petsch, & T. Dellapenna. The Effects of Hurricanes Katrina & Rita on the Seabed of the Louisiana Shelf. *The Sedimentary Record* *5* (2007): 4–9.
87. Gu, G., R. Adler, Huffman, G., & Curtis, S. (2007). Tropical Rainfall Variability on Interannual-to-Interdecadal/Longer-time scales derived from the GPCP monthly product. *Journal of Climate*, *20*, 4033–4046.
88. Hale, R. P., Ogston, A. S., **Walsh, J. P.**, & Orpin, A. R. (2014). Sediment transport and event deposition on the Waipaoa River Shelf, New Zealand. *Continental Shelf Research*, *86*, 52–65.
89. Hao, H., **Long, P.**, & **Curtis, S.** (2012). Attitudes of property owners to climate change considerations and their effects on future property values in coastal communities. *Journal of Risk Analysis and Crisis Response*, *2*(4), 285–291.

90. Harnsberger, D. & **O'Driscoll, M.** (2010). The influence of urban channel incision & water table decline on floodplain groundwater nitrogen dynamics, Greenville, NC. *Journal of Environmental Hydrology*, 18(6), 1–22.
91. Horton, B. P., Peltier, W. R., **Culver, S. J.**, Drummond, R., Engelhart, S. E., Kemp, A. C., . . . & Thomson, K. H. (2009). Holocene sea-level changes along the North Carolina Coastline and their implications for glacial isostatic adjustment models. *Quaternary Science Reviews*, 28(17), 1725–1736.
92. Humphrey, C., Chaplinski, N., **O'Driscoll, M.**, & Richards, S. (2014). Nutrient & E. coli attenuation in a constructed stormwater wetland in the North Carolina Coastal Plain. *Environment & Natural Resources Research*, 4(3), 12–22.
93. Humphrey, C., J. Harris, & **O'Driscoll, M.** (2012). Evaluation of Water Table Dynamics in Relation to Soil Morphological Indicators of Seasonal Wetness. *Universal Journal of Environmental Research & Technology*, 2(4), 286–292.
94. Humphrey, C. & **O'Driscoll, M.** (2011). Evaluation of On-Site Wastewater System E. Coli Contributions to Shallow Groundwater in Coastal North Carolina. *Water Science & Technology*, 63(4), 789–795.
95. Humphrey, C. & **O'Driscoll, M.** (2011). Evaluation of Soil Colors as Indicators of the Seasonal High Water Table in Coastal North Carolina. *International Journal of Soil Science*, 6(2), 103–113.
96. Humphrey, C., **O'Driscoll, M.** & Zarate, M. (2010). Controls on Groundwater Nitrogen Contributions from On-Site Wastewater Systems in Coastal North Carolina. *Water Science & Technology*, 62(6), 1448–1455.
97. Ibáñez, C., Day, J. W., & **Reyes, E.** (2014). The response of deltas to sea-level rise: natural mechanisms and management options to adapt to high-end scenarios. *Ecological Engineering*, 65, 122–130.
98. **Kain, D., & Covi, M.** (2013). Visualizing complexity and uncertainty about climate change and sea level rise. *Communication Design Quarterly Review*, 1(3), 46–53.
99. Kelsey, H., Witter, R., Engelhart, S., Briggs, R., **Corbett, D. R.**, A. Nelson, P. Haussler (2015). Beach ridges as paleoseismic indicators of abrupt coastal subsidence during subduction zone earthquakes, southeast coast of the Kenai Peninsula, Alaska. *Quaternary Science Reviews*, 113, 147–158.
100. Kemp, A. C., Buzas, M. A., Horton, B. P., & **Culver, S. J.** (2011). Influence of patchiness on modern salt-marsh foraminifera used in sea-level studies (North Carolina, USA). *The Journal of Foraminiferal Research*, 41(2), 114–123.
101. Kesete, Y., Peng, J., Gao, Y., Shan, X., Davidson, R. A., Nozick, L. K., & **Kruse, J.** (2014). Modeling Insurer-Homeowner Interactions in Managing Natural Disaster Risk. *Risk analysis*, 34(6), 1040–1055.
102. Kirwan, M., Murray, A. B., Donnelly, J. P., & **Corbett D. R.** (2011). Rapid wetland expansion during European settlement and its implication for marsh survival under modern sediment delivery rates. *Geology*, 39(5), 507–510.
103. Kniskern, T., **Mitra, S.**, Orpin, A., Harris, C., **Walsh, J., & Corbett, D. R.** (2014). Characterization of a flood-associated deposit on the Waipaoa River shelf using radioisotopes & terrigenous organic matter abundance & composition. *Continental Shelf Research*, 86, 66–84.
104. Kriesel, W., Landry, C. E., & Keeler, A. (2005). Coastal erosion management from a community economics perspective: The feasibility and efficiency of user fees. *Journal of Agricultural and Applied Economics*, 37(02), 451–461.

- I05. **Kruse, J.**, Ewing, B., & Sutter, D. (2009). An Overview of Hurricane Katrina and Economic Loss. *Journal of Business Valuation & Economic Loss Analysis*, *4*(2), 1–12.
- I06. **Kruse, J.**, Ewing, B., & Thompson, M. (2008). Transmission of shocks among health care sector index returns. *Applied Financial Economics Letters*, *4*, 71–75.
- I07. **Kruse, J.**, Ewing, B., & Thompson, M. (2009). A multidisciplinary plan for executive education & lifelong learning programs in wind science & engineering. *International Journal of Continuing Education & Life-Long Learning*, *19*(1), 74–81.
- I08. Lagomasino, D., **Corbett, D. R.**, & **Walsh, J. P.** (2013). Influence of wind-driven inundation and coastal geomorphology on sedimentation in two microtidal marshes, Pamlico River Estuary, NC. *Estuaries and coasts*, *36*(6), 1165–1180.
- I09. **Landry, C.** & Jahan-Parvar, M. (2011). Flood insurance coverage in the coastal zone. *Journal of Risk & Insurance*, *78*(2), 361–388.
- I10. **Landry, C.** (2011). Coastal erosion as a natural resource management problem: An economic perspective. *Coastal Management*, *39*(3), 259–278.
- I11. **Landry, C. E.**, & Hindsley, P. (2011). Valuing beach quality with hedonic property models. *Land Economics*, *87*(1), 92–108.
- I12. **Landry, C.**, & Li, J. (2011). Participation in the community rating system of NFIP: Empirical analysis of NC counties. *Natural Hazards Review*, *13*(3), 205–220.
- I13. **Landry, C. E.**, **Allen, T.**, Cherry, T. L., & Whitehead, J. C. (2011). Offshore wind turbines and coastal recreation demand. Available at SSRN 1824397 or <http://dx.doi.org/10.2139/ssrn.1824397>
- I14. **Landry, C.**, Hindsley, P., **Bin, O.**, **Kruse, J.**, Whitehead, J. C., & **Wilson, K.** (2011). Weathering the storm: Measuring household willingness-to-pay for risk-reduction in post-Katrina New Orleans. *Southern Economic Journal*, *77*(4), 991–1013.
- I15. **Landry, C.**, & Liu, H. (2009). A semi-parametric estimator for revealed and stated preference data: An application to recreational beach visitation. *Journal of Environmental Economics & Management*, *57*(2), 205–218.
- I16. **Landry, C. E.**, Lange, A., List, J. A., Price, M. K., & Rupp, N. G. (2008). Is a donor in hand better than two in the bush? Evidence from a natural field experiment (No. w14319). *National Bureau of Economic Research*.
- I17. **Landry, C.**, & List, J. (2007). Using ex ante approaches to obtain credible signals of value in contingent markets: evidence from the field. *American Journal of Agricultural Economics*, *89*(2), 420–432.
- I18. **Landry, C.**, & McConnell, K. (2007). Hedonic onsite cost model of recreation demand. *Land Economics*, *83*(2), 253–267.
- I19. **Landry, C.**, **Bin, O.**, Hindsley, P., Whitehead, J., & **Wilson K.** (2007). Going home: Evacuation-migration decisions of Hurricane Katrina survivors. *Southern Economic Journal*, *74*(2), 326–343.
- I20. **Landry, C.**, Lange, A., List, J. A., Price, M. K., & Rupp, N. G. (2005). Toward an understanding of the economics of charity: Evidence from a field experiment (No. w11611). *National Bureau of Economic Research*.
- I21. **Leorri, E.**, Cearreta, A., Irabien, M. J., Garcia-Artola, A., **Corbett, D. R.**, Horsman, E., & Sanchez-Cabeza, J. A. (2014). Anthropogenic disruptions of the sedimentary record in coastal marshes: Examples from the southern Bay of Biscay (N. Spain). *Continental Shelf Research*, *86*, 132–140.
- I22. **Leorri, E.**, Cearreta, A.; Jesús Irabien, M., García-artola, A., **Corbett, D. R.**, Horsman, E., Blake, W. H., Sanchez-Cabeza, J. (2014) Anthropogenic disruptions of the

- sedimentary record in coastal marshes: examples from the southern Bay of Biscay. *Continental Shelf Research*, 86, 132–140. DOI: 10.1016/j.csr.2013.08.016.
- I23. **Leorri, E.**, Mitra, S., Irabien, M. J., Zimmerman, A. R., Blake, W. H., & Cearreta, A. (2014). A 700-year record of combustion-derived pollution in northern Spain: Tools to identify the Holocene/Anthropocene transition in coastal environments. *Science of the Total Environment*, 470, 240–247.
- I24. **Leorri, E.**, Cearreta, A., García-Artola, A., Irabien, M. J., & Blake, W. H. (2013). Relative sea-level rise in the Basque coast (N Spain): Different environmental consequences on the coastal area. *Ocean & Coastal Management*, 77, 3–13.
- I25. **Leorri, E.**, Fatela, F., Cearreta, A., Moreno, J., Antunes, C., & Drago, T. (2011). Assessing the performance of a foraminifera-based transfer function to estimate sea-level changes in northern Portugal. *Quaternary Research*, 75(1), 278–287.
- I26. **Leorri, E.**, Mulligan, R., **Mallinson, D.**, & Cearreta, A. (2011). Sea-level rise and local tidal range changes in coastal embayments: An added complexity in developing reliable sea-level index points. *Journal of Integrated Coastal Zone Management*, 11(3), 307–314.
- I27. Ling, L., Jeng, A., Naik, D., **Allen, T.**, & Frontini, M. (2008). Creation of environmental health information system for public health service: A pilot study. *Information Systems Frontiers*, 10, 531–542.
- I28. Lopes, V., Freitas, M.C., Zourarah, B., Andrade, C., **Leorri, E.**, Mellas, S., Gribouard, R., Cruces, A. (2010). Characterization of an overwash deposit in the barrier system of oualidia lagoon (Moroccan Atlantic Coast). *e-Terra Geosciences On-line Journal*, 12(17), 1–4.
- I29. Luchette, J. A., & **Crawford, T.** (2008). A public participation gis application for citizen-based watershed monitoring in the Pamlico-Tar River Basin, North Carolina. *Southeastern geographer*, 48(2), 184–200.
- I30. Malik, F., Ewing, B. T., **Kruse, J. B.**, & Lynch, G. J. (2009). Modeling the time-varying volatility of the paper–bill spread. *Journal of Economics and Business*, 61(5), 404–414.
- I31. **Mallinson, D.J.**, **Culver, S.J.**, **Corbett, D.R.**, Parham, P.R., Shazili, N.A.M., & Yaacob, R. (2014). Holocene coastal response to monsoons & relative sea-level changes in north-east peninsular Malaysia. *Jl. Asian Earth Science* 91, 194–205.
- I32. **Mallinson, D. J.**, Smith, C. W., **Culver, S.**, Riggs, S., & Ames, D. (2010). Geological characteristics and spatial distribution of paleo-inlet channels beneath the outer banks barrier islands, North Carolina, USA. *Estuarine Coastal & Shelf Science*, 88, 175–189.
- I33. **Mallinson, D. J.**, Smith, C. W., Mahan, S., **Culver, S. J.**, & McDowell, K. (2011). Barrier island response to late holocene climate events, North Carolina, USA. *Quaternary Research*, 76, 46–57.
- I34. **Mallinson D.**, **Culver, S.**, **Riggs, S.**, Thieler, E., Foster, D., Wehmiller, J., Farrell, K. Pierson, J. (2010). Regional seismic stratigraphy and controls on the quaternary evolution of the Cape Hatteras region of the Atlantic passive margin, USA. *Marine Geology*, 268, 16–33.
- I35. **Mallinson D.**, Mahan, S., & Moore, C. (2008). High Resolution Shallow Geologic Characterization of a Late Pleistocene Eolian Environment Using Ground Penetrating Radar & Optically Stimulated Luminescence Techniques: North Carolina, USA. *Southeastern Geology*, 45, 161–177.
- I36. **Mallinson, D.**, Burdette, K., Mahan, S., & Brook, G. (2008). Optically stimulated luminescence age controls on late pleistocene & holocene lithosomes: North Carolina, USA, *Quaternary Research*, 69, 97–109.



137. **Manda, A. K.**, Giuliano, A. S., & **Allen, T. R.** (2014). Influence of artificial channels on the source and extent of saline water intrusion in the wind tide dominated wetlands of the southern Albemarle estuarine system (USA). *Environmental Earth Sciences*, *71*(10), 4409–4419.
138. **Manda, A. K.**, Sisco, S. M., Griffin, M. T., & **Mallinson, D.** (2014). Relative role & extent of marine & groundwater inundation on a dune-dominated barrier island under sea-level rise scenarios. *Hydrological Processes*, *29*(8), 1894–190. doi: 10.1002/hyp.10303.
139. McGann, M., Grossman, E. E., Takesue, R. K., Penttila, D., **Walsh, J. P.**, & **Corbett, D. R.** (2012). Arrival and expansion of the invasive foraminifera *Trochammina hadai* Uchio in Padilla Bay, Washington. *Northwest Science*, *86*(1), 9–26.
140. Monge-Ganuzas, M., A. Cearreta, G. Evans, **E. Leorri**, M. J. Irabien, A. García-Artola, Iriarte, E. (2011). Dinámica Sedimentaria Actual en el Estuario del Oka. En Guía científica de Urdaibai. M. Onaindia, A. Ibabe y J. Unzueta. Cátedra (Eds.) *UNESCO sobre Desarrollo Sostenible y Educación Ambiental de la UPV/EHU*, 407–427.
141. **Montz, B. E.** & **Tobin, G. A.** (2011). Natural Hazards: An evolving tradition in applied geography. *Applied Geography*, *31*, 1–4.
142. **Montz, B. E.**, **Allen, T. R.**, & Monitz, G. I. (2011). Systemic trends in disaster vulnerability: Migrant and seasonal farm workers in North Carolina. *Risk. Hazard & Crisis in Public Policy*, *2*(1), Article 5.
143. Moran, K., **Mallinson, D.**, **Culver, S.**, **Leorri, E.**, & Mulligan, R. (2014). Late holocene evolution of Currituck Sound, North Carolina, USA: Environmental change driven by sea-level rise, storms and barrier island morphology. *Journal of Coastal Research*, *31*(4), 827–84. doi: 10.2112/JCOASTRES-D-14-00069.1.
144. Moreno, J., Fatela, F., **Leorri, E.**, De la Rosa, J. M., Pereira, I., Araújo, F., Freitas, C., **Corbett, D. R.**, Medeiros, A. (2014). A marsh benthic foraminifera response to historical climate: 2000 years of sediment record from Minho River Estuary–NW Portugal. *Quaternary Research*, *82*, 318–330.
145. Moreno, J., Fatela, F., **Leorri, E.**, Moreno, F., de la Rosa, J., Freitas, M. C., Valente, T., **Corbett, D. R.** (2015). Bromine enrichment in marsh sediments as a marker of environmental changes driven by Grand Solar Minima & anthropogenic activity (Caminha, NW of Portugal). *Science of the Total Environment*, *506*, 554–566.
146. **Mukherji, A.** (2015). From tenants to owners: Housing renters after disaster in Bhuj, India. *Housing Studies*. DOI: 10.1080/02673037.2015.1008423
147. **Mukherji, A.** (2015). Planning note: Land readjustment during post disaster urban reconstruction. *Journal of the American Planning Association, Special Issue On: Building Back Better: The Lessons of Planning for Disaster Recovery*, *80*(4), 438–439. DOI: 10.1080/01944363.2014.989058
148. **Mukherji, A.** (2014). Post-Disaster Housing Recovery: The Promise and Peril of Social Capital. *Journal of Civil Society*, *10*(2), 119–143. DOI: 10.1080/17448689.2014.885787
149. **Mukherji, A.**, Ganapati, N. E., & Rahill, G. (2014). Expecting the unexpected: field research in post-disaster settings. *Natural hazards*, *73*(2), 805–828. DOI: 10.1007/s11069-014-1105-8
150. **Mukherji, A.** (2010). Post-earthquake housing recovery in Bachhau, India: The homeowner, the renter, and the squatter. *Earthquake Spectra*, *26*(4), 1085–1100.

- I51. Mulligan, R., **Walsh, J.**, and Wadman, H. (2015). Storm Surge and Surface Waves in a Shallow Lagoonal Estuary during the Crossing of a Hurricane. *Journal of Waterway, Port, Coastal & Ocean Engineering*, *141*(4), A5014001.
- I52. Munroe, R., **Crawford, T.**, & Curtis, S. (2014). Geospatial analysis of space-time patterning of ENSO forced daily precipitation distributions in the Gulf of Mexico. *The Professional Geographer*, *66*(1), 91–101.
- I53. Nieto Ferreira, R., Herdman, A., **Curtis, S.**, Chia, R., Poe, E., Thompson, R., & Yang, B. (2012). A Multinational Course on Global Climate Change. *Bulletin of the American Meteorological Society*, *93*(10), 1539–1546.
- I54. Nieto-Ferreira, R., Hall, L., & **Rickenbach, T.** (2013). A climatology of the structure, evolution, & propagation of midlatitude cyclones in the southeast United States. *Journal of Climate*, *26*, 8406–8421.
- I55. Null, K., **Corbett, D. R.**, Demaster, D. J., Burkholder, J. M., Thomas, C. J., Reed, R. E. (2011). Porewater advection of ammonium into the Neuse River Estuary, North Carolina, USA. *Estuarine, Coastal & Shelf Science*, *95*, 314–325.
- I56. **O'Driscoll, M. A.**, Humphrey, C., Deal, N., Lindbo, D., & Zarate-Bermudez, M. (2014). Meteorological influences on nitrogen dynamics of a coastal onsite wastewater treatment system. *Journal of Environmental Quality*, *43*(6), 1873–85. doi: 10.2134/jeq2014.05.0227.
- I57. **O'Driscoll, M. A.**, Clinton, S., Jefferson, A., **Manda, A.**, & McMillan, S. (2010). Urbanization effects on watershed hydrology & in-stream processes in the southern United States. *Water*, *2*, 605–648.
- I58. **O'Driscoll, M.**, Johnson, P., & **Mallinson, D.** (2010). Geological controls and effects of floodplain asymmetry on river–groundwater interactions in the southeastern Coastal Plain, USA. *Hydrogeology Journal*, *18*(5), 1265–1279.
- I59. O'Sullivan, D., Manson, S. M., Messina, J. P., & **Crawford, T. W.** (2006). Space, place, and complexity science. *Environment and Planning A*, *38*(4), 611–617.
- I60. Oertel, G., **Allen, T.**, & Foyle, A. (2008). The Influence of Drainage Hierarchy on Pathways of Barrier Retreat: An example from Chincoteague Bight, Virginia, U.S.A. *Southeastern Geology*, *45*(4), 179–201.
- I61. Peek, K. L., **Mallinson, D. J.**, **Culver, S. J.**, & Mahan, S. (2014). Holocene geologic development of the Cape Hatteras region, Outer Banks, NC, USA. *Journal of Coastal Research*, *30*, 41–58.
- I62. Peng, J., Shan, X. G., Gao, Y., Kesete, Y., Davidson, R. A., Nozick, L. K., & **Kruse, J.** (2014). Modeling the integrated roles of insurance and retrofit in managing natural disaster risk: a multi-stakeholder perspective. *Natural Hazards*, *74*(2), 1043–1068.
- I63. Petrolia, D., **Landry, C. E.**, & Coble, K. (2013). Risk preference, risk perception, and flood insurance. *Land Economics*, *89*(2), 227–245.
- I64. **Popke, J.**, **Curtis, S.**, & Gamble, D. W. (2014). A social framing of climate change discourse and policy: Adaptation, resilience, and vulnerability in a Jamaican agricultural landscape. *Geoforum*. doi: 10.1016/j.geoforum.2014.11.003
- I65. Prado, P., Ibanez, C., Caoila, N., & **Reyes, E.** (2013). Evaluation of seasonal variability in the food-web properties of coastal lagoons subjected to contrasting salinity gradients using network analyses. *Ecological Modelling*, *265*, 180–193.
- I66. Pre, C. G., **Culver, S. J.**, **Mallinson, D. J.**, Farrell, K. M., **Corbett, D. R.**, Horton, B. P., . . . & Buzas, M. A. (2011). Rapid Holocene coastal change revealed by high-resolution micropaleontological analysis, Pamlico Sound, North Carolina, USA. *Quaternary Research*, *76*(3), 319–334.

167. Pruitt, R. J., **Culver, S. J.**, Buzas, M. A., **Corbett, D. R.**, Horton, B. P. **Mallinson, D. J.**, 2010. Modern foraminiferal distribution and recent environmental change in Core Sound, North Carolina, USA. *Journal of Foraminiferal Research*, 40(4), 344–365.
168. Rabien, K.A., **Culver, S.J.**, Buzas, M.A., **Corbett, D. R.**, **Walsh, J. P.** Tichenor, H. R. (2015). The foraminiferal signature of recent Gulf of Mexico hurricanes. *Journal of Foraminiferal Research*, 45, 82–107.
169. Rahill, G. J., Ganapati, N. E., Clérismé, J.C., **Mukherji, A.** (2014). Shelter recovery in urban Haiti after the earthquake: The dual role of social capital. *Disasters*, 38(S1): S73–S93. DOI: 10.1111/disa.12051
170. **Rickenbach, T.**, Ferreira, R. N., Zarzar, C., & Nelson, B. (2015, online). A seasonal & diurnal climatology of precipitation organization in the southeastern United States. *Royal Meteorological Society Quarterly Journal*. doi: 10.1002/qj.2500
171. **Rickenbach, T. M.**, Nieto-Ferreira, R., Barnhill, R. P., & Nesbitt, S. W. (2013). Seasonal and regional differences in the rainfall and intensity of isolated convection over South America. *International Journal of Climatology*, 33(8), 2002–2007. doi: 10.1002/joc.3568
172. **Rickenbach, T. M.**, Nieto-Ferreira, R., Barnhill, R. P., & Nesbitt, S. W. (2011). Regional contrast of mesoscale convective system structure prior to and during monsoon onset across South America. *Journal of Climate*, 24(14), 3753–3763.
173. Rossi, V., Horton, B. P., **Corbett, D. R.**, **Leorri, E.**, Perez-Belmonte, L., & Douglas, B. C. (2011). The application of foraminifera to reconstruct the rate of 20th century sea level rise, Morbihan Golfe, Brittany, France. *Quaternary Research*, 75(1), 24–35.
174. Salahuddin, A. & **Curtis, S.** (2011). Climate extremes in Malaysia and the equatorial South China Sea. *Global & Planetary Change*, 78, 83–91.
175. Salahuddin, A., & **Curtis, S.** (2009). Evolution of mesoscale convective systems and its relationship with the Madden-Julian Oscillation in the Indo-Pacific Region, *The Open Atmospheric Science Journal*, 3, 141–154.
176. Salahuddin, A., Isaac, R.H., **Curtis, S.** & Matsumoto, J. (2006). Teleconnections between the sea surface temperature in the Bay of Bengal & monsoon rainfall in Bangladesh. *Global & Planetary Change*, 53, 188–197.
177. Schneeberger, C., **O'Driscoll, M.**, Humphrey, C., Henry, K., Deal, N., et al. (2015). Fate and transport of enteric microbes from septic systems in a coastal watershed. *Journal of Environmental Health*, 77(9), 22–30.
178. Shearman, P., Bryan, J., & **Walsh, J. P.** (2013). Trends in deltaic change over three decades in the Asia-Pacific Region. *Journal of Coastal Research*, 29(5), 1169–1183.
179. Smith, C. F., & **Kain, D. J.** (2010). Making sense of hurricanes: Public discourse and perceived risk of extreme weather. *Critical Approaches to Discourse Analysis across Disciplines*, 4(2), 180–196.
180. Smith, C., **Riggs, S.**, **Culver, S.**, Ames, D., & **Mallinson, D.** (2008) Geospatial analysis of barrier island width of two segments of the outer banks, North Carolina, USA: anthropogenic curtailment of natural self-sustaining processes. *Journal of Coastal Research*, 24(1), 70–83.
181. Smith, C. G., **Culver, S. J.**, **Riggs, S. R.**, **Corbett, D. R.**, **Mallinson, D. J.** (2009). Using foraminifera to recognize former flood-tide deltas in the Holocene stratigraphic record: Examples from the Outer Banks, North Carolina. *Stratigraphy*, 6, 61–78.
182. Snedden, J. W., Tillman, R. W., & **Culver, S. J.** (2011). Analysis and reevaluation of a mid-shelf, storm-built sand ridge, New Jersey continental shelf, USA. *Journal of Sedimentary Research*, 81, 534–552.

183. Sutter, D., DeSilva, D., & **Kruse, J.** (2009). An economic analysis of wind resistant construction. *Journal of Wind Engineering and Industrial Aerodynamics*, 97(3), 113–119.
184. Thornberg, H. M., **Culver, S., Corbett, D. R., Mallinson, D. J., Buzas, M. A., & Shazili, N. A. M.** (2014). The influence of aquaculture on modern foraminifera & sediments in the setiu estuary & lagoon, Terengganu, Malaysia. *Journal of Foraminiferal Research*, 44(4), 365–389.
185. **Walsh, J. P., Corbett, D. R.,** Kiker, J., Orpin, A., Hale, R., Ogston, A. (2014). Spatial and temporal variability in sediment deposition & seabed character on the Waipaoa River margin, New Zealand. *Continental Shelf Research*, 86, 85–102.
186. Wehmiller, J. F., Thieler, E. R., Miller, D., Pellerito, V., Keeney, V. B., **Riggs, S. R., . . . & Parham, P. R.** (2010). Aminostratigraphy of surface and subsurface Quaternary sediments, North Carolina coastal plain, USA. *Quaternary Geochronology*, 5(4), 459–492.
187. Whitehead, J. C., Poulter, B., Dumas, C. F., & **Bin, O.** (2009). Measuring the economic effects of sea level rise on shore fishing. *Mitigation and adaptation strategies for global change*, 14(8), 777–792.
188. Wuensch, S. X., & **Curtis, S.** (2010). Can Satellites be used to detect extreme precipitation events? An example from the Carolinas. *Southeastern Geographer*, 50(2), 244–257.
189. Wuensch, S., Ast, J., & **Curtis, S.** (2005). The 2004 hurricane season: Impacts in North Carolina. *North Carolina Geographer*, 12, 34–40.
190. Xu, K., **Corbett, D. R., Walsh, J. P.,** Young, D., Briggs, K. B., Cartwright, G.M., Friedrichs, C.T., Harris, C. K., Mickey, R. C., & **Mitra, S.** (2014). Seabed erodibility variations on the Louisiana continental shelf before and after the 2011 Mississippi River Flood. *Estuaries & Coasts*, 149, 283–293.
191. Yanez-Arancibia, A., Day, J. W., & **Reyes, E.** (2013). Understanding the coastal ecosystem-based management approach in the Gulf of Mexico. *Journal of Coastal Research*, SI:63, 244–262.

### *Selected refereed book chapters*

1. **Allen, T. R.** (2014). Advances in remote sensing of coastal wetlands: LiDAR, SAR, & Object-oriented case studies from North Carolina. In C. Finkl & A. Klein (Eds.), *Advances in Coastal & Marine Resources: Remote Sensing & Modeling* (pp. 409–428). Springer.
2. **Corbett, D. R. & Walsh, J. P.** (2015). <sup>210</sup>Pb & <sup>137</sup>Cs—Establishing a Chronology for the Last Century. In I. Shennan, A. J. Long, & B. P. Horton (Eds.), *Handbook of Sea Level Research* (pp. 361–372). John Wiley & Sons, Ltd.
3. **Kain, D., de Jong, M., & Smith, C. F.** (2010). Information usability testing as audience and context analysis for risk communication. In M. Albers & B. Still (Eds.) *Usability of Complex Information Systems: Evaluation of User Interaction* (pp. 305–332). New York: CRC Press.
4. **Kruse, J., B. Ewing & Thompson, M. A.** (2008). Wind hazard risk perception: An experimental test. In T. Cherry, S. Kroll & J. Shogren (Eds.) *Experimental Methods, Environmental Economics*, Vol. 8 (pp. 395–406). London: Routledge.
5. **Riggs, S. R., Ames, D. V., Culver, S. J., Mallinson, D. J., Corbett, D. R., & Walsh, J. P.,** (2009). Eye of a human hurricane: Pea Island, Oregon Inlet, & Bodie Island, northern Outer Banks, North Carolina. In J. T. Kelley, O. H. Pilkey, & J. A. G. Cooper, eds.,

*America's Most Vulnerable Coastal Communities: Geological Society of America Special Paper 460*, p. 43–72, doi: 10.1130/2009.2460(04).

6. Smith, M. D., Murray, A. B., Gopalakrishnan, S., **Keeler, A. G., Landry, C.**, et. al., (2015). Geoengineering coastlines? From accidental to intentional. In J. Baztan , O. Chouinard, B. Jorgensen , P. Tett , J.Vanderlinden , L. Vasseur (Eds.), *Coastal Zones Solutions for the 21st Century* (pp. 99–124). Waltham, MA: Elsevier.

### *Selected proceedings & abstracts*

1. Clunies, G. J., Mulligan, R. P., **Mallinson, D. J., & Walsh, J. P.** (2014). Hydrodynamics of the Albemarle-Pamlico Estuarine System in Response to Wind & Tidal Forcing. AGU Ocean Sciences. Honolulu, HI.
2. **Culver, S. J., Mallinson, D.J., Leorri, E., Corbett, D.R.**, Parham, P.R., Shazili, N.A.M., & Yaacob, R. (2014). Holocene coastal response & relative sea-level changes in northeast peninsular Malaysia. National Geoscience Conference, Malaysia, Kuala Terengganu, June.
3. **Curtis, S.** (Forthcoming). Precipitation. In D. Richardson, (EIC.) *International Encyclopedia of Geography: People, the Earth, Environment, and Technology*. Wiley Publications.
4. Humphrey, C. & **O'Driscoll, M.** (2014). Onsite wastewater treatment systems & nitrogen in coastal watersheds. North Carolina Onsite Water Protection Conference.
5. Kegel, J., Kemp, A., **Culver, S., & Leorri, E.** (2014). Extension of the late holocene sea-level record in North Carolina. Geological society of America abstracts with programs.
6. Kemp, A. C., Kegel, J., **Culver, S. J., Horton, B.P., Mallinson, D., Leorri, E., Riggs, S. R.** (2015). Sea-level change in North Carolina, USA during the last 1500 years. XIX INQUA, Nagoya, Japan, July.
7. **Kruse, J., & Landry, C.** (2014). Economics of Natural Hazards. *Encyclopedia of Environmental Economics*. J. Whitehead (Ed.)
8. **Kruse, J.** (2014). Insurance & retrofit in Managing Urban Natural Disaster Risk. with J. Peng, Y. Gao, X. Shan, Y. Kesete, R. Davidson, & L. Nozick, Third International Conference on Urban Disaster Reduction & sustainable Recovery: addressing risks & uncertainty, September, Boulder, Colorado.
9. **Kruse, J.** (2014). Math Modeling to Support Regional Natural Disaster Risk Management. with J. Peng, X. Shan, R. Davidson, Y. Kesete, Y. Gao & L. Nozick&, Proceedings 10th National Conference in Earthquake Engineering, Earthquake Engineering Research Institute, July, & Anchorage, AK.
10. **Kruse, J.** (2014). Modeling Government Interventions in a Natural Catastrophe Insurance Market. With Y. Gao, L. Nozick, & R. Davidson , 5th International Disaster & Risk Conference IDRC, August, Davos, Switzerland.
11. **Manda, A. K.** & Klein, W. A. (2015). Refining groundwater management policy in the coastal plain of North Carolina to safeguard groundwater resources. Geological Society of America (GSA) Abstracts with Programs, Southeast Division.
12. **Manda, A. K.** & Nixon, J. (2014). Using borehole geophysical methods to assess the depth dependence of permeability in shallow fractured-crystalline rock aquifers of the Piedmont & Blue Ridge provinces of North Carolina. Geological Society of America (GSA) Abstracts with Programs, Southeast Division, Blacksburg, Virginia.
13. **Montz, B. E. & Tobin, G. A.** (2012). Natural hazards and natural disasters. In J. Stoltman Ed.) *21st Century Geography: A Reference Handbook* (pp. 509–518). Thousand Oaks, CA: Sage Publications.

14. Pitt, J. & **Manda, A. K.** (2015). Influence of canals on the extent of saltwater intrusion during wind tide events in a coastal wetland system. Geological Society of America (GSA) Abstracts with Programs, Southeast Division.
15. Smith, C. F., **Mallinson, D. J., Leorri, E., Culver, S. J.,** DeWitt, R. (2014). Flood tide delta foraminifera, Ocracoke Inlet, North Carolina, USA. GSA Annual Meeting, Vancouver, October.
16. Smith, C., **Mallinson, D., & Leorri, E.** (2014). Flood Tide Delta Foraminifera, Ocracoke Inlet, North Carolina, USA. Geological Society of America Abstracts with Programs.
17. **Walsh, J. P., & Corbett, D. R.** (2015). Coastal Hazards & Management Challenges: Examples & Insights from Northern NC. NCAFPM Mitigation Starts with Yourself-ie.
18. **Walsh, J. P.** (2014). Great Storms & Marine Floods: Examples, Impacts & Stratigraphy. Submersions Marines: passé, présent, futur.
19. Woodson, A., **Culver, S., & Leorri, E.** (2014). Geochemical Evidence Of Holocene East Asian Monsoon Variability From Sunda Shelf, South China Sea Sediments. Geological Society of America Abstracts with Programs.

### *Working papers*

#### **2014-I5**

1. Foraminifera as indicators of hypoxia off southwest Pass, Mississippi Delta, Gulf of Mexico. Tichenor, R., **Culver, S. J., Corbett, D. R., Walsh, J. P.,** & Buzas, M. A.
2. Wind & tidally-driven hydrodynamics of a large & shallow back-barrier estuarine system. Clunies, G., Mulligan, R., **Mallinson, D., & Walsh, J. P.**
3. Modeling Government Interventions in a natural catastrophe insurance market. **Kruse, J.** with Y. Gao, R. Davidson & L. Nozick. 5<sup>th</sup> International Disaster and Risk Conference.
4. Market Insurance & Self Insurance through retrofit: Analysis for hurricane risk in North Carolina. **Kruse, J.** with X. Shan, J. Peng, Y. Gao, Y. Kesete, R. Davidson & L. Nozick.
5. Onset of modern rates of relative sea-level rise in northern Spain during the mid-1920s: the geological record of salt marshes. Garcia-Artola, A., Cearreta, A., & **Leorri, E.**
6. Geoengineering Coastlines? From Accidental to Intentional. Craig Landry, Economics, East Carolina University, **Andrew Keeler,** Economics, East Carolina University, with Martin Smith, Brad Murray, Sathya Gopalkrishnan, Dylan McNamara & Laura J. Moore.
7. Hedonic Property Prices & Coastal Beach Width. Craig Landry, Economics, East Carolina University, **Tom Allen,** Geography, East Carolina University.
8. Characterization of a Flood-Associated Deposit on the Waipaoa River Shelf Using Radiosotopes and Terrigenous Organic Matter Abundance and Composition. Siddartha Mitra, Geological Sciences, East Carolina University, **J.P. Walsh,** Geological Sciences, East Carolina University, **D. Reide Corbett,** Department of Geological Sciences, East Carolina University, with Tara Kniskern, Alan R. Orpin, & Courtney K. Harris.
9. Storm Surge & Surface Waves In a Shallow Lagoonal Estuary During the Crossing of a Hurricane. **J. P. Walsh,** Geological Sciences, East Carolina University, with Ryan P. Mulligan & Heidi Wadman.

### 2013

10. Wind Insurance & Mitigation in the Gulf Coastal Zone. **Craig Landry**, Economics, East Carolina University, with Dan Petrolia, Joonghyung Hwang & Keith Coble.
11. Influence of Wind-Driven Inundation & Coastal Geomorphology on Sedimentation in Two Microtidal Marshes, Pamlico River Estuary, NC. **D. Reide Corbett**, Geological Sciences, East Carolina University, **J. P. Walsh**, Geological Sciences, East Carolina University, with David Lagomasino.
12. Expecting the Unexpected: Field Research In Post-Disaster Settings. **Anuradha Mukherji**, Geography, East Carolina University, with N.E. Ganapati & G. J. Rahill.
13. A Climatology of the Structure, Evolution, & Propagation of Midlatitude Cyclones in the Southeast United States. **Tom Rickenbach**, Geography, East Carolina University, with R. L. Nieto-Ferrera.
14. Disaster Vulnerability of Migrant & Seasonal Farm Workers: A Comparison of Texas & North Carolina. **Burrell Montz**, Geography, East Carolina University, Paul Gares, Geography, East Carolina University.
15. Housing Market Fluctuations & the Implicit Price of Water Quality: Empirical Evidence from a South Florida Housing Market. **Okmyung Bin**, Economics, East Carolina University, with Jingyuan Li.
16. In the Eye of the Storm: A Participatory Course on Coastal Storms. **Scott Curtis**, Geography, East Carolina University.

### 2012

17. The 16 April 2011 EF3 tornado in Greene County, eastern North Carolina. **Thomas M. Rickenbach**, Geography, East Carolina University

### 2011

18. Changes in Implicit Flood Risk Premiums: Empirical Evidence from the Housing Market. **Okmyung Bin**, Economics, East Carolina University, **Craig Landry**, Economics, East Carolina University
19. Participation in the Community Ratings System of NFIP: An Empirical Analysis of North Carolina Counties. **Craig Landry**, Economics, East Carolina University, Jingyuan Li, Doctoral Student, Coastal Resources Management
20. Risk Preferences, Risk Perceptions, & Demand for Flood Insurance. **Craig Landry**, Economics, East Carolina University, Daniel Petrolia, Agricultural Economics, Mississippi State University (corresponding author), Keith Coble, Agricultural Economics, Mississippi State University

### 2010

21. Coastal Erosion as a Natural Resource Management Problem: The State of Economic Science & Policy. **Craig Landry**, Economics, East Carolina University.
22. Geovisualization for Storm Surge Risk Communication. **Thomas Allen**, Geography, East Carolina University, **Stephen Sanchagrin**, RENCI, East Carolina University.
23. Social Capital & the Provision of Disaster Assistance to Employees & Community by Local Businesses: The Case of Hurricane Floyd. Jessama E. Allender, M.A., East Carolina University, **Bob Edwards**, Sociology, East Carolina University.
24. Redistributive Impacts of the National Flood Insurance Program. **Okmyung Bin**, Economics, East Carolina University, John A. Bishop, Economics, East Carolina University, Carolyn Kousky, Resources for the Future.

**2009**

25. Valuing Beach Quality with Hedonic Property Models. **Craig E. Landry**, Economics, East Carolina University , Paul Hindsley, Environmental Studies, Eckerd College
26. Weathering the Storm: Measuring Household Willingness-to-Pay for Risk-Reduction in Post-Katrina New Orleans. **Craig E. Landry**, Economics, East Carolina University , Paul Hindsley, Environmental Studies, Eckerd College , **Okmyung Bin**, Economics, East Carolina University , **Jamie B. Kruse**, Economics, East Carolina University , John C. Whitehead, Economics, Appalachian State University, **Kenneth R. Wilson**, Sociology, East Carolina University

**2008**

27. Estimating Economic Impact from Inlet Formation. Hans Vogelsong, Recreation & Leisure Studies, East Carolina University, Flood Insurance Coverage in the Coastal Zone. **Craig E. Landry**, Economics, East Carolina University, **Mohammad Jahan-Parvar**, Economics, East Carolina University
28. Measuring the Economic Impacts of Sea-Level Rise on Marine Recreational Shore Fishing in North Carolina. **Okmyung Bin**, Economics, East Carolina University, John C. Whitehead, Economics, Appalachian State University, Chris Dumas, Economics, UNC Wilmington
29. Social Capital & Business Giving to Charity Following a Natural Disaster: An Empirical Assessment. **Okmyung Bin**, Economics, East Carolina University, Bob Edwards, Economics, East Carolina University

**2007**

30. The Atlantic Multidecadal Oscillation & Extreme Daily Precipitation over the U.S. & Mexico during the Hurricane Season. **Scott Curtis**, Geography, East Carolina University
31. Trauma written in the flesh: Tattoos as memorials & stories. Glen W. Gentry, Geography, Syracuse University, **Derek H. Alderman**, Geography, East Carolina University
32. Going Home: Evacuation-Migration Decisions of Hurricane Katrina Survivors. **Craig E. Landry**, Economics, East Carolina University, **Okmyung Bin**, Economics, East Carolina University , Paul Hindsley, East Carolina University , John Whitehead, Economics, Appalachian State University , **Kenneth Wilson**, Sociology, East Carolina University
33. Willingness to Pay for Risk Reduction & Amenities: Applications of the Hedonic Price Method in the Coastal Zone. **Craig E. Landry**, Economics, East Carolina University , Paul Hindsley, East Carolina University

**2006**

34. Valuing Spatially Integrated Amenities & Risks in Coastal Housing Markets. **Okmyung Bin**, Economics, East Carolina University , **Tom Crawford**, Geography, East Carolina University , **Jamie B. Kruse**, Economics, East Carolina University , **Craig E. Landry**, Economics, East Carolina University.
35. Real Estate Market Response to Coastal Flood Hazard. **Okmyung Bin**, Economics, East Carolina University, **Jamie B. Kruse**, Economics, East Carolina University.



## 2005

36. Valuing Self Protection: Income & Certification Effects for Safe Rooms. Bradley T. Ewing, Operations Management, Texas Tech University , **Jamie B. Kruse**, Economics, East Carolina University
37. Hurricane Insurer Event Study. Bradley T. Ewing, Operations Management, Texas Tech University , Scott E. Hein, Bank Management & Finance, Texas Tech University , **Jamie B. Kruse**, Economics, East Carolina University
38. Hurricanes & Unemployment. Bradley T. Ewing, Operations Management, Texas Tech University , **Jamie B. Kruse**, Economics, East Carolina University
39. Spatial Dependencies in Wind-Related Housing Damage. Dakshina G. De Silva , Economics, Texas Tech University , **Jamie B. Kruse**, Economics, East Carolina University , Yongsheng Wang, Economics, Texas Tech University, John C. Whitehead, Economics, Appalachian State University

## 2004

40. An Empirical Investigation of the Corpus Christi Unemployment Rate & Hurricane Bret. [Revised version published in Natural Hazards Review Vol 6 No. 4, November 2005, pp 191–196], Bradley T. Ewing, Operations Management, Texas Tech University, **Jamie B. Kruse**, Economics, East Carolina University, Mark A. Thompson, Economics, Austin State University
41. Time Series Analysis of Wind Speed Using VAR & the Generalized Impulse Response Technique. [In press; forthcoming in Environmetrics, Bradley T. Ewing, Operations Management, Texas Tech University, **Jamie B. Kruse**, Economics, East Carolina University, John L. Schroeder, Geosciences & Wind Sciences, Texas Tech University, Douglas A. Smith, Civil Engineering & Wind Science, Texas Tech University
42. Time Series Analysis of Wind Speed with Time-Varying Turbulence. Bradley T. Ewing, Operations Management, Texas Tech University, **Jamie B. Kruse**, Economics, East Carolina University, John L. Schroeder, Geosciences & Wind Science, Texas Tech University
43. Growth & Risk: Employment Responses to the Oklahoma City Tornado. Bradley T. Ewing, Operations Management, Texas Tech University, **Jamie B. Kruse**, Economics, East Carolina University, Mark A. Thompson, Economics, Austin State University
44. Local Housing Price Index Analysis in Wind-Disaster-Prone Areas. Bradley T. Ewing, Operations Management, Texas Tech University, **Jamie B. Kruse**, Economics, East Carolina University, Yongsheng Wang, Wind Science & Engineering Research Center, Texas Tech University

## *Reports*

1. 2014. **Corbett, D. R.** Advanced Regional & Decadal Predictions of Coastal Inundation for the U.S. Atlantic & Gulf Coasts., submitted to NOAA.
2. 2013. **Smith, C.** Poster & policy presentation for the 4th Annual ECU-NCM Hurricane Conference. Greenville NC May 22, Hurricane Watches & Warnings: Different Publics Respond Differently: Perspective & Recommendations for Policy & Practice.
3. 2013. **Kruse, J.** Coastal & Sustainable Environment Research & Education Plan: Report to the ECU Academic Council.
4. 2012: **Kruse, J.**, Economics of Severe Weather Warnings, White Paper, Weather Ready Nation Workshop, Birmingham, AL.

5. 2012. **Allen, T. R.** Geospatial Decision-Support Tools for Sea-Level Rise Stakeholders. Webinar, Presenter to NOAA CSCOR Northern Gulf of Mexico, Northern Gulf Institute Cooperative, Tallahassee.
6. 2011: **Corbett, D. R.**, Carpenter, D., & **Walsh, J.P.**, 2012 NC APES Assessment., submitted to APNEP
7. 2011: **Kruse, J.**, External Program Review of the Northeast Fisheries Science Center Social Science Branch: Report of Findings & Recommendations, Woodshole, MA.
8. 2011. **Smith, C. & Kain, D.**, Summary of North Carolina Response Plans & Key Informant Interviews. In final report for . Baseline Study: Perceived Risks of Gulf Oil Impacts on North Carolina's Coastal Tourism Businesses & Public Land Use Areas.
9. 2011. **Walsh, J. P., & Corbett, D.R.**, Final Report-NSF Mississippi River Flooding Project., submitted to NSF.
10. 2010. **Long, P.**, Hao, H., & **Kain, D.** Toolbox for Crisis Communications: Checklists & Best Practices. Review & Analysis of Literature & Existing Plans on Crisis Communication. prepared for the Dexter Koehl Group, LLC, & The United Nations World Tourism Organization.
11. 2010. **Kain, D.** Risk Perceptions & Emergency Communication Effectiveness in Coastal Zones: Preliminary Findings on Interpretations of Weather Related Messages & Maps. Report to the Director of the National Hurricane Center.
12. 2010. **Mallinson, D., Riggs, S., & Culver, S.** PHASE I: Synthesis of Available Geological Data for the Duke Energy Wind Turbine Feasibility Study.
13. 2010. **Mallinson, D.**, Benton, Birkemeier, Cleary, & Jarrett. North Carolina Sea-Level Rise Assessment Report.
14. 2010. Mallinson, D., Riggs, S., **Culver, S. Allen, T. R.** NC Sea-Level Rise Risk Management Study: **Task 1**—Methodology to Forecast Coastal Geomorphic Change in Response to Relative Sea-level Rise & Storm.
15. 2010. **Smith, C. F., Kain, D. J., & Wilson, K.** Hurricane Risk Perception & Emergency Communication Effectiveness in Coastal Zones 2008-2010 Surveys: Preliminary Reports. (<http://www.ecu.edu/riskcomm/reports.html>)
16. 2008. **Bin, O.** The Nature Conservancy Sea Level Rise Adaptation Briefing for Policymakers in North Carolina, April 10, Manteo, North Carolina. Measuring the Impacts of Climate Change on North Carolina Coastal Resources.
17. 2006. **Landry, C.** Government Accounting Office & National Academy of Sciences: Ecosystem Vulnerability to Climate Change, November

### Presentations, symposia, workshops, talks

1. **Allen, T. & Walsh, J. P.** (2014). Synthesis of high & low marsh habitat mapping, vulnerability & responses to sea-level rise in the South Atlantic region. SALCC Webinar Series, Virtual.
2. **Allen, T., Thomas, W. J., Walsh, J. P., Howard, R., & Covi, M.** (2013). Maps, Marshes, & Management with North Carolina Coastal Atlas. NC GIS, Raleigh, NC.
3. **Allen, T.R.**, G. McLeod, & K. Vangraafeiland. (2013). Geovisualization for Hurricane Surge Risk Awareness & Emergency Management. NOAA Coastal GeoTools, Myrtle Beach, March 25-28.
4. **Allen, T.R.** (2012-2013). Albemarle-Pamlico National Estuary Program, Manteo, North Carolina. Sorting out Sea-Level Rise. APNEP meeting.

5. **Allen, T.R.** (2012). Best Practices (and pitfalls). for Communicating Hurricane Maps & Graphics. 3<sup>rd</sup> Annual NC Hurricane Workshop, Greenville, May 23.
6. **Allen, T.R.** (2012). Visualizing Storm Surge Uncertainty. NOAA-in-the-Carolinas Annual Meeting, Charleston, SC, March 15-16, (invited.)
7. **Allen, T.R.** (2012). Modeling Needs & Opportunities for Sea-Level Rise & Coastal Hazards in Bangladesh. Asia-Pacific Research Network Workshop, Dhaka, Bangladesh, September 18.
8. **Allen, T. Walsh, J. P., Corbett, D., Crawford, T. & Sanchagrin, S.** (2009). NOAA Coastal GeoTools, March 2-5, Myrtle Beach, SC. Development, Validation, & Vulnerability Assessment of an Overwash Model, Outer Banks, NC.
9. **Allen, T. Walsh, J. P., Corbett, D., Crawford, T. & Sanchagrin, S.** (2009). The North Carolina Coastal Hazards Decision Portal (NC COHAZ). North Carolina GIS Conference, Raleigh, NC, February 18-19.
10. **Allen, T.,** Marshburn, E., & Wang, Y. (2009). Potentials & Impediments for Operational Remote Sensing of Small Recreational Vessels. American Society for Photogrammetry & Remote Sensing (ASPRS). Annual Conference, Baltimore, MD, March 8-13.
11. Ames, D., **Riggs, S., Culver, S., & Mallinson, D.** (2012). Sea-level rise & public policy in coastal North Carolina. GSA Annual Meeting, Charlotte, NC.
12. **Bin, O.,** Bishop, J., & Kousky, C. (2015). Assessing the Distributional Consequences of Premium & Claims Payments in the National Flood Insurance Program. Society for Benefit Cost Analysis, Washington, D.C.
13. **Bin, O. & Filatova, T.** (2014). Mandatory Flood Insurance & Housing Prices: An Empirical Agent-Based Model Approach. Yonsei University, Seoul, Republic of Korea.
14. **Bin, O. & Filatova, T.** (2013). Changing Climate, Changing Behavior: Adaptive Economic Behavior & Housing Markets Responses to Flood Risks. Old Dominion University, Transatlantic Solutions to Sea Level Rise Adaptation: Moving Beyond the Threat, Norfolk, VA.
15. **Bin, O.,** Bishop, J., & Kousky, C. (2013). Redistributive Effects of the National Flood Insurance Program. University of Pennsylvania, The Wharton School, Center for Risk Management & Decision Processes, Philadelphia, PA.
16. **Bin, O.** (2013). An Empirical Agent-Based Model of a Housing Market: Exploring Capitalization Effects of Flood Insurance. University of Twente, Twente Centre for Studies in Technology & Sustainable Development, Enschede, Netherlands.
17. **Bin, O.,** Dumas, C., Poulter, B., & Whitehead, J. (2008). Measuring the Impacts of Climate Change on North Carolina Coastal Resources. The Nature Conservancy Sea Level Rise Adaptation Briefing for Policymakers in North Carolina, Manteo, NC, April 10.
18. **Bin, O., Landry, C., & Meyer, G.** (2007). Riparian Buffers & Hedonic Prices: A Quasi-Experimental Analysis of Residential Property Values in the Neuse River Basin. Southern Economic Association Annual Meeting, New Orleans, LA, Nov. 18–20.
19. **Bin, O.** (2007). The Economic Value of the Setiu Wetlands: A Choice Modeling Approach to Management Options. The Current State of Knowledge of the Setiu Wetlands, Universiti Malaysia Terengganu, Terengganu, Malaysia, December 2–3,
20. **Bin, O. Crawford, T., Kruse, J. & Landry, C.** (2007). Flood Prone with a View: Coastal Housing Market Response to Risk & Amenity. Center for Natural Resource Economics & Policy, Louisiana State University, New Orleans, LA. May 20-23

21. **Bin, O.,** Dumas C., Poulter, B., & Whitehead, J. (2007). GIS Measuring the Impacts of Climate Change on North Carolina Coastal Resources, Ecosystem Sustainability & Health of Threatened Marine Environments, Universiti Malaysia Terengganu, Terengganu, Malaysia, May 2–4.
45. **Bin, O.,** Dumas, C., Poulter, B., & Whitehead, J. (2007). Impacts of Global Warming on North Carolina's Coastal Economy. North Carolina Beach, Inlet & Waterway Association Annual Conference, Carolina Beach, NC. November 12–13.
22. **Bin, O.** (2006). Measuring the Impacts of Climate Change on North Carolina Coastal Resources. Second Researchers Workshop at National Commission on Energy Policy, Washington, D.C. November 2–3.
23. **Bin, O.** (2006). GIS Measuring the Impacts of Climate Change on North Carolina Coastal Resources. Second Video Conference with University College of Science & Technology Malaysia (KUSTEM), Greenville, NC. September 18.
24. **Bin, O.** (2006). GIS Measuring the Impacts of Climate Change on North Carolina Coastal Resources. Second Video Conference with University College of Science & Technology Malaysia (KUSTEM), Greenville, NC. September 18.
25. **Bin, O.** (2006). Valuing Spatially Integrated Amenities & Risks in Coastal Housing Markets. Third World Congress of Environmental & Resource Economists, Kyoto, Japan. July 3–7.
26. **Bin, O.** (2006). Charleston, South Carolina. Social Capital & Business Giving to Charity Following a Natural Disaster: An Empirical Assessment. Southern Economic Association Annual Meeting, November 18–21.
27. **Bin, O.** (2005). Valuing Spatially Integrated Amenities & Risks: Evidence from the Coastal Housing Markets. East Carolina University, Department of Economics Seminar. November.
28. **Bin, O.** (2005). Southern Economic Association Meetings. Real Estate Market Response to Coastal Flood Hazards. Washington, D.C. November.
29. **Bin, O., Landry, C.** & Meyer, G. (2008). Riparian Buffers & Hedonic Prices: A Quasi-Experimental Analysis of Residential Property Values in the Neuse River Basin. Society for Benefit Cost Analysis, Washington, DC.
30. **Bin, O., Landry, C.,** & Meyer, G. (2008). Riparian Buffers & Hedonic Prices: A Quasi-Experimental Analysis of Residential Property Values in the Neuse River Basin. Albemarle-Pamlico National Estuary Program, Science & Technical Advisory Committee, Greenville, NC.
31. **Bin, O.,** Mustapha N., Muhamad, S., & Aziz, A. (2008). Recreation Demand & Economic Value of Tropical Island Beaches in Malaysia. Economy & Environment Program for Southeast Asia (EEPSEA)'s 29<sup>th</sup> Biannual Workshop, Bangkok, Thailand.
32. **Bin, O.,** Poulter, B., Dumas, C., & Whitehead, J. (2010). Southern Economic Association Annual Meetings, Washington, D.C. Measuring the Impacts of Sea-Level Rise on Coastal Real Estate in North Carolina: A Hedonic Price Approach.
33. **Bin, O.,** Poulter, B., Dumas, C., Whitehead, & J. (2008). Impacts of Global Warming on North Carolina's Coastal Economy. US EPA Ecological Research Lecture Series, Research Triangle Park, NC.
34. **Bin, O.,** Poulter, B., Dumas, C., Whitehead, & J. (2008). The 21st International Conference of the Coastal Society, Los Angeles, CA. Measuring the Impacts of Sea Level Rise on Coastal Real Estate in North Carolina.

35. **Bin, O.,** Poulter, B., Dumas, C., Whitehead, & J. (2008). Measuring the Impacts of Climate Change on North Carolina Coastal Resources. UNC Coastal Studies Institute Coastal Hazards Workshop, Manteo, NC.
36. Calvo-Cubero, J. & **Reyes, E.** (2013). Mineral versus organic contribution to vertical accretion & elevation change in restored marshes (Ebro Delta, Spain). 22<sup>nd</sup> Biennial Coastal & Estuarine Research Federation Conference: Toward Resilient Coasts & Estuaries, Science for Sustainable Solutions, San Diego, CA.
37. Clunies, G., Mulligan, R., **Mallinson, D.,** & **Walsh, J. P.** (2012). The influence of wind & tidal forcing on sediment resuspension & transport in a large, shallow estuarine system. American Geophysical Union (AGU), San Francisco, CA.
38. **Corbett, D. R., Walsh, J.,** Boudrioux, E., Strand, J., & Hawkins, D. (2015). Wetland Erosion & Sedimentation of Croatan Sound. Atlantic Estuarine Society Annual Meeting, Manteo, NC.
39. **Corbett, D. R.** (2014). Erosion & the Changing Estuarine Coast of North Carolina. NC Coastal Sustainability Workshop, Manteo, NC
40. **Corbett, D. R.** (2014). Significance of Meltwater in the Antarctica beyond the Rising Seas. Geological Science Seminar, Greenville, NC.
41. **Corbett, D. R. & Walsh, J. P.** (2013). NC Shorelines. NC DCM Shoreline Workshop, Wanchese, NC.
42. **Corbett, D. R.** (2013). Freshwater Discharge to the Southern Ocean, Anvers Island, Antarctica. UNC CSI Science on the Sound, Wanchese, NC.
43. **Corbett, D. R.** (2013). Shoreline Change & Sea Level Rise in NC. Sea-Level Rise Research & Monitoring Coordination Workshop, Beaufort, NC.
44. Covi, M. & Kain, D. (2010). Planning for Hurricanes in Coastal North Carolina: A Typology of Organizational Decision Making. TCS22: The Coastal Society's 22nd International Conference. Shifting Shorelines: Adapting to the Future. Wilmington, NC, June 13–16.
45. Crawford, T., **Allen, T. R., Kain, D.,** Murray, N., & Gedminas, L. (2012). Project BioViz: Communicating Hurricane Risk. Cybervisualization Conference, National Socio-Environmental Synthesis Centre (SESYNC) Workshop, Annapolis, MD, July 23–24.
46. Crawford, T. (2009). A sprawl pattern assessment tool applied to residential development in coastal North Carolina. Coastal GeoTools, Myrtle Beach, SC.
47. Crawford, T., **Allen, T., Walsh, J. P., Corbett, R.,** & Sanchagrin, S. (2009). Spatial modeling & visualization for the North Carolina Coastal Hazards Decision Portal (NCCOHAZ). Coastal GeoTools, Myrtle Beach, SC.
48. **Crawford, T., Allen, T.,** Wang, Y., **O'Driscoll, M.,** & McClendon, R. (2008). Mapping & modeling coastal flooding vulnerability from impervious runoff on the Outer Banks, NC. Annual Meeting of the Association of American Geographers, April, Boston, MA.
49. **Crawford, T. & Bradley, D.** (2008). How do retirement, migration & tourism impact residential development in coastal North Carolina? *Southeastern Geographer*, SEDAAG, Greensboro, NC.
50. **Crawford, T.** (2008). Human dimensions of GIScience & technology. Geographic Information Science Workshop, March, Greenville, NC.

51. **Crawford, T.** (2007). Linking demographic profiles to residential land use patterns in coastal North Carolina: integration of census blockgroup & parcel data. Coastal GeoTools '07, Myrtle Beach, SC.
52. **Crawford, T.** (2007). North Carolina's final coastal frontier: landcover change analysis for the Inner Banks, 1992–2001. Annual Meeting of the Association of American Geographers, San Francisco, CA.
53. **Crawford, T.** (2007). Signals of land cover change for North Carolina's Inner Banks, 1992–2001. NC GIS 10<sup>th</sup> Anniversary Conference, Winston-Salem, NC
54. **Crawford, T., Kain, D., Ward, H., Smith, C., & Howard, J.** (2007). Emergency communication & risk perception in the coastal zone of eastern North Carolina. Coastal Zone '07, Portland, OR.
55. **Crawford, T.** (2006). Tackling Coastal/Estuarine Issues: Social Science Approaches. Human dimensions of coastal land use change. East Carolina University, Coastal Maritime Council Workshop. April.
56. **Crawford, T.** (2005). Time-space characterization of residential development in a coastal setting. Annual Meeting of the Association of American Geographers Southeastern Division. West Palm Beach, FL.
57. **Crawford, T.** (2005). Exploring potential impacts of later-life migration in coastal regions: Land use in New Hanover County, North Carolina. Annual Meeting of the Gerontological Society of America. Orlando, FL.
58. **Crawford, T.** (2006). Inland coastal boom? Random & systematic landcover transitions in the Inner Banks, 1992–2001. Annual Meeting of the Association of American Geographers Southeastern Division, Morgantown, WV.
59. **Crawford, T.** (2010). Visualizing storm surges: communicating risk linking modeling & geovisualization. North Carolina Emergency Managers Association Meeting, Sunset Beach, NC.
60. **Crawford, T.** (2010). Relocation of retirees. Making Tourism Work for You II Conference, East Carolina University, Hilton Hotel, Greenville, NC.
61. **Crawford, T., Bennett, A., & Marcucci, D.** (2009). Sand castles in the Banks. American Planning Association, Minneapolis, MN.
62. **Curtis, S., Gamble, D. W., Popke, J., & Poore, S.** (2013). A case study in Caribbean climate change: Impacts on crop suitability & small farmer vulnerability in St. Elizabeth, Jamaica. American Geophysical Union Meeting, San Francisco, CA.
63. **Curtis, S.** (2008). The Climate-Weather Connection: Examples from TRMM. 3<sup>rd</sup> NASA/JAXA International TRMM Science Conference, February, Las Vegas, NV.
64. **Curtis, S.** (2007). American Geophysical Union Spring Meeting, Acapulco, Mexico. May.
65. **Curtis, S.** (2007). ENSO & Global Daily to 3-Hourly Precipitation Extremes. Annual Meeting of the American Meteorological Society. San Antonio, TX, Jan. 2007.
66. **Curtis, S.** (2007). Northern Hemisphere Climate Modes & Extreme Precipitation over the US. NASA Energy & Water Cycle Study Science Team Meeting, Huntsville, AL. September.
67. **Curtis, S.** (2006). Finding Funding for Research. SEDAAG Meeting, Morgantown, WV.
68. **Curtis, S.** (2006). A comparison of TRMM to other basin-scale estimates of rainfall during the 1999 Hurricane Floyd flood. 61<sup>st</sup> Annual SEDAAG Meeting. Morgantown, WV. Nov.

## Ten Years of Research, Teaching, and Service

69. **Curtis, S.** (2006). El Niño/Southern Oscillation & Extreme Precipitation, Duke University, Earth & Ocean Seminar Series. March.
70. **Curtis, S.** (2006). Indo-Pacific climate variability at 20–50 & 50–100 day time scales & El Niño. Fall Meeting, American Geophysical Union. San Francisco, CA, Dec.
71. **Curtis, S.** (2006). Climate Change & Global Warming. Global Education Fall Institute, Edgecombe Community College, September.
72. **Curtis, S.** (2006). Climatic variations of global precipitation extremes. NASA Energy & Water Cycle Study Science Team Meeting, College Park, MD, Sept.
73. **Curtis, S.** 2006. SEDAAG Meeting, Morgantown, WV. Finding Funding for Research.
46. **Curtis, S.** (2005). Impacts on the Climatology of Winter Extratropical Cyclones in the Southeast U. S., 60<sup>th</sup> Annual SEDAAG Meeting, ENSO. West Palm Beach, FL, November.
74. **Curtis, S.** (2005). An Analysis of the Climatology & Variation of Precipitation Extremes with GPCP & TRMM., Global Energy & Water Cycle Experiment. Costa Mesa, CA, June.
75. **Curtis, S.** (2005). NASA Precipitation Missions Science Team. Precipitation Variability in the Maritime Continent: From Local Impacts to Global Climate Change, Monterey, CA, December.
76. **Curtis, S.** (2005). University of North Carolina-Wilmington, Department of Earth Sciences. New Insights on El Niño-Precipitation Relationships, October.
77. **Curtis, S.** (2008). Wintertime Climate Extremes in the Equatorial South China Sea. 7<sup>th</sup> International Annual Symposium on Sustainability Science & Management. Terengganu, Malaysia.
78. **Curtis, S.** (2008). ENSO's Global Influence on Extreme Rainfall, American Geophysical Union Meeting, San Francisco, CA.
79. **Curtis, S.** (2008). ENSO's Global Influence on the Seasonal Distribution of Daily Rainfall, SEDAAG, Greensboro, NC.
80. **Ericson, R. E.** (2013). Preference Representations for Catastrophic Risks. East Carolina University, Department of Economics, Greenville, NC.
81. **Ericson, R. E. & Kruse, J.** (2012, June). Some Preference Representations for Catastrophic Risks. AFOSR Workshop on Catastrophic Risks, Palo Alto, CA.
82. **Ericson, R. E.** (2012). Preference Representations for Catastrophic Risks. NES Annual Research Conference, Moscow, Russia. December.
83. Gedminas, L., **Allen, T., Crawford, T., & Kain, D.** (2011). A study of hurricane advisory maps using eye-tracking and biometric measures. Annual Meeting of the Association of American Geographers, Environmental Perception and Behavioral Geography Specialty Group. Seattle WA. April 12–16.
84. Hale, R., Ogston, A., **Walsh, J. P., & Orpin, A.** (2012). Observations of Event-Based Sediment Transport on the Waipaoa Margin, NZ. International Geological Congress, Brisbane, AustraliaQLD.
85. **Kain, D. J.** (2014). Hazard Resilience in Coastal Communities: Communication of Coastal Risks. North Carolina Sea Grant Research Symposium Investments & Opportunities, Raleigh, NC. April.
86. **Kain, D.** (2013). Climate Change and Sea Level Rise: Technical Communication Beyond the Belief of Many. 16<sup>th</sup> Annual Conference of the Association of Teachers of Technical Writing. San Tampa, FL. March 9

87. **Kain, D. J., & Smith, C. F.** (2009). Beyond Warnings: Risk and Crisis Communication Across Professional and Community Networks. 12th Annual Conference of the Association of Teachers of Technical Writing. San Francisco, CA. March 11.
88. **Kain, D. J., Smith, C. F., & Wilson, Kenneth.** (2009). East Carolina University. Severe-Weather-Related Risk and Emergency Communication in Coastal Communities. Hurricane Floyd Symposium, Research Conference. Greenville, NC. Sept. 18.
89. **Kain, D., & Smith, C.** (2009). Beyond Warnings: Risk & Crisis Communication Across Professional & Community Networks. 12th Annual Conference of the Association of Teachers of Technical Writing (ATTW), San Francisco, CA.
90. **Kain, D., & Smith, C.** (2008). Weather Disasters in the Information Economy: Communicating the Public's Interest. Presented at International Professional Communication Conference (IPCC). Montreal, Canada. July 14
91. **Kain, D.** (2008). Application of Climate Data to Tourism Business Decision-Making. An Interactive Session with Tourism Business Owners & Operators. Climate, Weather & Tourism Workshop, Greenville, NC. Nov. 14.
92. **Kain, D.** (2008). Researching Risk & Emergency Communication for Multiple Publics. Risk Symposium Effective Risk Communication: Tools, Theory & Applications, Sante Fe, NM. March 12.
93. **Kain, D. J., & Smith, C. F.** (2008). Weather Disasters in the Information Economy: Communicating the Public's Interest. Presented at International Professional Communication Conference (IPCC). Montreal, Canada. July 14.
94. **Kain, D., Smith, C., Ward, H., & Thuman, R.** (2007). International Professional Communication Conference (IEEE), Local Weather Risk Communication: Hurricanes, Municipal Public Information Officers, Diverse Communities. Seattle, WA. October 1.
95. **Kain, D. & Smith, C.** (2007). Weather Disasters in the Information Economy: Communicating the Public's Interest. International Professional Communication Conference (IPCC), Montreal, Canada.
96. **Kain, D.** (2007). Researching the Effectiveness of Storm-related Risk & Emergency Communication for the Public in the Coastal Zone. Hazards & Disasters Researchers Meeting, Boulder CO. July 14.
97. **Kain, D.** (2007). Risk & Resilience: Understanding the Complex Role of Community in Communication about Natural Hazard Risks. Annual Conference of the Association of Teachers of Technical Communication, New York, NY.
98. **Kain, D. & Smith, C.** (2006). Emergency Management & Communication in North Carolina Workshop, Greenville, NC, November.
99. **Kain, D., & Kruse, J.** (2005). Birth of a Research Center I. 32<sup>nd</sup> Annual Conference Council for Programs in Technical & Scientific Communication. Lubbock, TX, October.
100. **Kruse, J.** (2014). Global Risk Forum. IDRC. Davos 2014, Davos Switzerland. August.
101. **Kruse, J., & Liu, H.** (2009). Review of Sampling Procedure for the NFIP Community Rating System for FEMA Community Rating System Task Force.
102. **Kruse, J.** (2008–2009). Hurricane Recovery, Responsibility & Financing. 45<sup>th</sup> Werner Sichel Lecture Series. The Economics of Natural & Unnatural Disasters, Western Michigan University, Kalamazoo, MI.
103. **Kruse, J.** (2008). Workshop, NSF. Towards a Natural Hazard Vulnerability & Resiliency Observatory. June, College Station, TX.
104. **Kruse, J.** (2007). Collection of Economic Impact Data: Implications for Disaster Areas & Receiving Regions. Hazards & Disaster Researchers' Meeting, Boulder, CO. July.



## Ten Years of Research, Teaching, and Service

- I05. **Kruse, J.** (2007). The New New Orleans: Evaluating Preferences for Rebuilding Plans after Hurricane Katrina. NSF, HSD PI's meeting, Arlington, VA. October 2007.
- I06. **Kruse, J.** (2007). Economic Effects of Hurricane Katrina. Southern Economic Association Meeting, New Orleans, LA. November.
- I07. **Kruse, J.** (2007). MBA Program for Physicians, Texas Tech, Lubbock, TX, March.
- I08. **Kruse, J.** (2007). Beautiful but Risky: Housing Market Response to Coastal Hazards. Texas Tech, Wind Science & Engineering Seminar, November, Lubbock, TX.
- I09. **Kruse, J.** (2007). Departmental Seminar, University of Central Florida, Orlando, FL, January.
- I10. **Kruse, J.** (2006). East Carolina University, Coastal Maritime Council Workshop. Tackling Coastal/Estuarine Issues: Social Science Approaches, April 2006.
- I11. **Kruse, J.** (2006). Market Forces & Price Ceilings. East Carolina University, Department of Economics Seminar. February.
- I12. **Kruse, J.** (2006). Emergency Management & Communication in North Carolina Workshop, Greenville, NC, November.
- I13. **Kruse, J.** (2006). Hazards & Disaster Researchers' Meeting, Boulder, CO, July.
- I14. **Kruse, J.** (2006). Presentation at 20 January 2006 meeting of North Carolina State Emergency Response Commission (SERC). Report of hazards research at East Carolina University.
- I15. **Kruse, J.** (2006). The Business of Healthcare. Mini Research Symposium, ECU, Greenville, NC, November.
- I16. **Kruse, J.** (2006). Tulane University, Katrina Research Symposium, New Orleans, LA, November.
- I17. **Kruse, J.** (2006). University of Tennessee, Institute for Secure & Sustainable Environment, Knoxville, TN, October.
- I18. **Kruse, J.** (2006). American Economic Association Meetings. Insurer Stock Price Response to Hurricane Floyd: an event study analysis. AEA session, Boston, MA, January.
- I19. **Kruse, J.** (2006). NSF, HSD PI's Meeting, Washington, DC, September 2006.
- I20. **Kruse, J.** (2006). Preparing for & Responding to Disasters in North America, San Antonio, TX, November.
- I21. **Kruse, J.** (2006). RENCI Board of Governors, Chapel Hill, NC, December.
- I22. **Kruse, J.** (2006). Southern Economic Association Meetings, Charleston, SC, November.
- I23. **Kruse, J.** (2006). Texas A & M, Departmental Seminar, Beautiful but Risky. College Station, TX. October.
- I24. **Kruse, J.** (2005). Americas Conference on Wind Engineering. Transmission of Labor Market Risk across Regions: Evidence from the May 3 1999 Oklahoma City Tornado. Baton Rouge, LA, June.
- I25. **Kruse, J.** (2005). Southern Economic Association Meetings. Disasters & Bank Performance. Washington, D.C. November.
- I26. **Kruse, J.** (2009). Hazards & Disaster Researchers' Meeting, Panel on Resiliency & Vulnerability Observatory Network (RAVON). .
- I27. **Kruse, J.** (2008). National Center for Atmospheric Research, Boulder, CO. Experimental Analysis of Risk & Ambiguity.

- I28. **Kruse, J.** (2012). Third International Symposium for the Prevention of Natural Disasters, Chapultepec Castle Mexico City, Mexico. Financial Impact of Disasters. Sponsored by the Ministry of Social Development of Mexico & the National University of Mexico.
- I29. **Landry, C. E.** (2014). Coastal Beach Width & Hedonic Housing Prices. Department of Ag & Applied Economics, University of Georgia, Athens, Georgia.
- I30. **Landry, C. E.** & Whitehead, J. (2014). Economic Values of Coastal Erosion Management. Social Coast Forum, Charleston, South Carolina.
- I31. **Landry, C. E.** (2013). Coastal Beach Width & Hedonic Housing Prices. Southern Economic Association Annual Meetings, Tampa, Florida.
- I32. **Landry, C. E.** (2013). Coastal Beach Width & Hedonic Housing Prices. Duke University Marine Laboratory, Beaufort, NC.
- I33. **Landry, C. E.** (2013). Coastal Beach Width & Hedonic Housing Prices. Department of Economics, University of Clemson, Clemson, South Carolina.
- I34. **Landry, C. E.** (2013). Economic Models for Coastal Erosion Management. Department of Marine Sciences, Texas A&M, Galveston, Galveston, Texas.
- I35. **Landry, C. E.** (2013). Microeconomics of Flood Hazard, Insurance, & Mitigation. University of Pennsylvania, Wharton Workshop on Flood Insurance & Mitigation, Philadelphia, Pennsylvania.
- I36. **Landry, C. E.** & **Allen, T.** (2013). Coastal Property Values & Beach Width. Forum on Challenges in Natural Resource Economics & Policy, Louisiana State University, 4th National Forum on Socioeconomic Research in Coastal Systems, New Orleans, Louisiana.
- I37. **Landry, C. E.** (2012). Economic Models for Coastal Erosion Management. Sustainable Systems Science Symposium—University of Michigan, Ann Arbor, Michigan.
- I38. **Landry, C. E.** & **Allen, T.** (2012). Coastal Property Values & Beach Width. The Coastal Society 23rd Annual Conference, Miami, Florida.
- I39. **Landry, C. E.** & **Allen, T.** (2012). Coastal Property Values & Beach Width. Southern Economics Association 82nd Annual Conference, New Orleans, Louisiana.
- I40. **Landry, C. E.** & **Allen, T.** (2012). Coastal Property Values & Beach Width. South Atlantic Cooperative Ecosystem Study Units (CESU) Annual Meeting, Charleston, South Carolina
- I41. **Landry, C.** (2008). East Carolina University Dept. of Geography Seminar Series, April, Greenville, NC. Optimal Beach Erosion Management.
- I42. **Landry, C.** & **Liu, H.** (2008). University of Georgia Dept of Agricultural Econ Seminar Series, April, Athens, Georgia. Flood Insurance Coverage in the Coastal Zone.
- I43. **Landry, C.** (2007). Center for Natural Resource Economics & Policy, Louisiana State University, May, New Orleans, Louisiana. Amenity Valuation in Simultaneous Hedonic Property Markets.
- I44. **Landry, C.** (2007). Mississippi State University Department of Agricultural Economics Seminar Series, November. Amenity Valuation in Simultaneous Hedonic Property Markets.
- I45. **Landry, C.** (2007). NSF HSD PI's meeting, October, Washington, D.C.. *Evaluating Preferences for Rebuilding New Orleans after Hurricane Katrina.*
- I46. **Landry, C.** (2007). Southern Economic Association Annual Meeting, November, New

147. **Landry, C.** (2007). Triangle Resource & Environmental Economics Seminar Series, September, Raleigh, NC. *Amenity Valuation in Simultaneous Hedonic Property Markets*.
148. **Landry, C.** (2007). University of Tennessee Department of Economics Seminar Series, October, Knoxville, Tennessee. Anchors Away: Field Experiments on Anchoring of Consumer Valuations.
149. **Landry, C. & Liu, H.** (2007). A Semi-Parametric Estimator for Revealed & Stated Preference Data. Department of Agricultural & Applied Economics Louisiana State University (14 March): Baton Rouge, LA.
150. **Landry, C., & Bin, O., Crawford, T., & Kruse, J.** (2007). Viewscapes & Flood Hazard: Coastal Housing Market Response to Amenities & Risk. Department of Economics & Finance College of Charleston (9 February): Charleston, SC.
151. **Landry, C.,** (2007). American Agricultural Economics Association, July, Portland, Oregon. *Optimal Beach Erosion Management*.
152. **Landry, C. & Bin, O., Hindsley, P., Kruse, J. Whitehead, J., & Wilson, K.** (2006). Evaluating Preferences for Rebuilding New Orleans after Hurricane Katrina. Katrina Research Symposium Tulane University (4 November): New Orleans, LA.
153. **Landry, C. & Liu, H.** (2006). A Semi-Parametric Estimator for Observed & Contingent Behavior Data: An Application to Recreational Beach Visitation. Southern Economics Association 76<sup>th</sup> Annual Conference (20 November): Charleston, SC.
154. **Landry, C.** (2006). Homeowner Preferences regarding Risk & Amenities: Applications of the Hedonic Price Method in Coastal Areas. Living Shorelines Summit Virginia Institute of Marine Sciences, College of William & Mary (6 December): Williamsburg.
155. **Landry, C., & Alevy, J., & List, J.** (2006). Preference Stability & Market Experience: An Experimental Analysis of Anchoring in the Field. Department of Business & Economics Appalachian State University (13 October): Boone, NC.
156. **Landry, C.** (2005). Camp Resources XIII. Simultaneous Hedonic Property Markets. Wilmington, NC August.
157. **Landry, C.** (2005). Optimal Management of Coastal Erosion on Developed Barrier Beaches. Southern Economic Association 75<sup>th</sup> Conference Washington D.C. November.
158. **Landry, C.** (2005). Southern Economic Association Meetings. Optimal Management of Coastal Erosion on Developed Barrier Beaches. Washington, D.C.
159. **Landry, C.** (2011). Northeast Recreation Research Symposium, Bolton Landing, NY. Coastal Erosion as a Natural Resource Management Problem: An Economic Perspective.
160. **Landry, C., & Jahan-Parvar, M.** (2009). Southern Economic Association Annual Meeting, Washington, D.C. Flood Insurance Coverage in the Coastal Zone.
161. **Landry, C., Bin, O., & Meyer, G.** (2010). Albemarle-Pamlico National Estuary
162. **Landry, C., Crawford, T., Johnson, J., & Kruse, J.** (2009). Southern Agricultural Economics Association Annual Meeting, Atlanta, GA. Hazard Perception & Behavior.
163. **Leorri, E.** (2015). Coastal marshes, sea-level rise, anthropogenic impact, & some notes about carbon sequestration. Department of Geography, ECU, Invited Colloquia, Greenville, NC.
164. **Leorri, E.** (2015). Coastal marshes, sea-level rise, anthropogenic impact, and some notes about carbon sequestration. Department of Geography, ECU. Invited Colloquia, Greenville, NC.

- I65. **Mallinson, D. J., Culver, S., Leorri, E., Mitra, S.,** Mulligan, R., G. Clunies, C. Lauback, J. Minnehan, (2012). Large-scale coastal behavior of a barrier fronted coastline in response to Holocene sea-level rise & storm impacts. GSA Annual Meeting, Charlotte, NC.
- I66. **Mallinson, D.,** Burdette, K., Rink, J., Mahan, S., & Peltier, R. (2008). American Geophysical Union, Orlando, Florida. New Insights into Quaternary Sea-Level Fluctuations & Isostasy Based on OSL, Geophysical, & Sedimentological Investigations of Paleo-Shoreline Features on the Southeast U.S. Atlantic Coastal Plain.
- I67. **Mallinson, D., Riggs, S., & Culver, S.** (2007). NC Beach & Inlet Waterway Association, 2007, Carolina Beach, NC. Quaternary sea-level change: Implications for the NC coast.
- I68. **Mallinson, D.** (2012). New Understandings of the Quaternary Evolution of the Northeast NC Coastal System, With a Focus on the Holocene & a Look Toward the Future. Geology Department, UNC-Wilmington.
- I69. **Mallinson, D., Culver, S., Riggs, S., & Ames, D.** (2010). Geologic Characterization & the Geomorphic & Paleoclimate Significance of Paleo-Inlets on the Outer Banks of North Carolina, USA. Association of American Geographers Annual Conference, Las Vegas, NV.
- I70. **Mallinson, D., Culver, S., Riggs, S., & Blanton, B.** (2010). Modeling Past & Future Coastal Reorganization in Response to Tidal Regime Change: Northeastern North Carolina Coastal System. SEGSA, St. Petersburg, FL.
- I71. **Mallinson, D., Culver, S., Riggs, S., Blanton, B., & Theiler, E. R.** (2010). Observations & Models of Coastal Tidal Variations & Sedimentation in Response to Coastal Geomorphic Reorganizations: Northeastern North Carolina Coastal System. AGU, San Francisco, CA.
- I72. **Mallinson, D., Riggs, S., Culver, S., Ames, D., Woods, T., & Dawkins, K.** (2010). Sea-level Change & the NC Coast: What Do We Know? National Science Teachers Association, Charlotte, NC.
- I73. **Manda, A. K., Sisco, S. M., Mallinson, D., & Griffin, M.** (2014). Impact of a shallow water table on on-site wastewater treatment systems & implications for climate change & sea level rise. Water Resources Research Institute of NC, Raleigh, NC.
- I74. **Manda, A. K., Sisco, S., Griffin, M., & Mallinson, D.** (2014). Is Groundwater inundation a hidden threat to coastal residents under climate change & sea level rise scenarios? University of North Carolina Wilmington, Wilmington, NC.
- I75. **Mukherji, A. & Ganapati, E.** (2014). Expecting the unexpected: Field research in post-disaster settings. Association of Collegiate Schools Of Planning, 54th Annual Conference, Philadelphia, Pennsylvania, October 30.
- I76. **Mukherji, A.** (2014). Building Local Resilience: Hazard Mitigation Plan Implementation in Coastal North Carolina. North Carolina Emergency Management/ECU Hurricane Workshop, Greenville, NC, May 28.
- I77. **Mukherji, A.** (2012, August). Post-2011 Recovery in Tohoku. Group GOZAIN, Sendai, Japan.
- I78. **Mukherji, A.** (2012, July). Searching for Resilience in Tohoku. Tohoku University, Sendai, Japan.
- I79. **Mukherji, A.** (2012, November). Holding Ground: Negotiating Recovery through Land Use Change Adaptation in Tohoku. Association of Collegiate Schools of Planning Conference, Cincinnati, Ohio.

180. **Mukherji, A.** (2012, September). Issues in Flood Mitigation & Adaptation in Bangladesh. Asia Pacific Network Workshop, Dhaka, Bangladesh.
181. Nieto-Ferreira, R., Hall, L., & **Rickenbach, T.** (2013). Seasonal-to-interannual variability of the structure & propagation of midlatitude cyclones in North Carolina. American Meteorological Society Annual Meeting.
182. **O'Driscoll, M. A.** (2013). Sustainability of water resources in a changing coastal plain: The role of the Coastal Water Resources Center. Coastal Resources Management Seminar.
183. **O'Driscoll, M. A.**, Humphrey, C., Deal, N., Lindbo, D., Thieme, S., Zarate, M. (2012). Meteorological controls on onsite wastewater treatment & groundwater dynamics in coastal North Carolina. Geological Society of America Annual Conference, Charlotte, NC.
184. Piatkowski, D. & **Walsh, J. P.** (2014). Coastal Resiliency Planning Initiatives & Ongoing Efforts in North Carolina. NC Beach, Inlet & Waterway Association, Wilmington, NC.
185. Orpin, A. & **Walsh, J. P.** (2013). Floods, ocean storms & stratigraphic variability over a year-long experiment on the muddy & energetic Waipaoa River margin. Integrated Coastal Zone & Shelf-Sea Research meeting, Waikato, New Zealand.
186. Powers, R. S., Knollenberg, W., Hao, W., **Wilson, K., Kain, D., Smith, C., Long, P.** (2012). Effects of Oil in Coastal Waters on Tourism-Impacted Business' Preparedness & Response. Social Coast Forum, Charleston, SC.
187. **Reyes, E.** (2013). Liberty Island landscape freshwater vegetation response to sea level: a modeling approach. 22nd Biennial Coastal & Estuarine Research Federation Conference: Toward Resilient Coasts & Estuaries, Science for Sustainable Solutions, San Diego, CA.
188. **Reyes, E.** & Perkinson, A. P. (2013). Modeling the potential for Tropical disease migration as consequence of climate change. Sustainable natural Resources in a Changing Climate Symposium. Southern University. Baton Rouge, LA. March 19.
189. **Rickenbach, T.**, Nieto-Ferreira, R., Zarzar, C., & Nelson, B. (2014). A five-year climatology of precipitation organization in the southeastern U.S.: seasonal cycle & extreme events. 26<sup>th</sup> Conference on Climate Variability & Change, American Meteorological Society 94th Annual Meeting, Atlanta, Georgia.
190. **Rickenbach, T.**, Zarzar, C., & Ferreira, R. N. (2014). Impact of precipitation organization on river discharge across North Carolina. American Geophysical Union Fall Meeting, San Francisco, CA.
191. **Rickenbach, T.**, Nieto-Ferreira, R., Rickenbach, T., & Zarzar, C. (2014). Seasonal variability of modes-of-delivery of precipitation within midlatitude cyclones in the southeastern United States. 26<sup>th</sup> Conference on Climate Variability & Change, American Meteorological Society 94th Annual Meeting, Atlanta, Georgia.
192. **Rickenbach, T.**, Nieto-Ferreira, R., Stevens, S., Nelson, B., & Blanton, B. (2013). Building a climatology of precipitating system organization in the Carolinas using the NOAA radar-based Multi-Sensor Precipitation Estimate (MPE) product. American Meteorological Society Annual Meeting.
193. **Rickenbach, T.**, Zarzar, C., Nieto-Ferreira, R., & Nelson, B. (2013). A five-year climatology of precipitation organization in the southeastern U.S.: Initial results. American Meteorological Society 36th Conference on Radar Meteorology, Breckenridge, Colorado.

194. **Riggs, S., Mallinson, D., Culver, S.,** Ames, D., **Corbett, D. R.,** A. Kemp, B. Horton, (2012). A 2100-year record of coastal system changes in response to shifts in rates of relative sea-level rise. GSA Annual Meeting, Charlotte, NC.
195. **Smith, C. F., Wilson, K., & Kain, D.** (2010). Communicating hurricanes: How people get and use storm risk and emergency information now. 2010 North Carolina Emergency Management Meeting. Sunset Beach, NC. March 2010.
196. **Smith, C. & Kain, D.** (2010). Risk communication, preparation, & decision-making. 2010 North Carolina hurricane workshop: A collaboration of North Carolina Emergency Management and East Carolina University. Murphy Center, East Carolina University, Greenville, NC. May 26.
197. **Smith, C., & Kain, D.** (2008). Storm Stories as Everyday Risk Analysis. Georgetown University Round Table, Washington D.C. March 15.
198. Thie, L., J. Hawhee, & **T.R. Allen.** (2012). Vulnerability of Coastal Public Health Infrastructure to Sea-Level Rise. Annual Meeting of the American Public Health Association, Atlanta, October 27-31,
199. Thie, L., **T.R. Allen,** & J. Hawhee. (2012). Climate Change & Infrastructure along Coastal North Carolina. Centers for Disease Control & Prevention (CDC) & NOAA Symposium. Atlanta, September 12,
200. Thornberg, H., **Culver, S., Corbett, D. R., Mallinson, D.,** Buzas, M., N. Shazili, (2012). Foraminiferal & geochemical evidence of environmental change in response to aquaculture in the Setiu estuarine-lagoonal system, Terengganu, Malaysia. GSA Annual Meeting, Charlotte, NC.
201. Vaughan, T. & **Rickenbach, T.** (2015). Accumulated Cyclone energy & tropical cyclone tracks: An in-depth analysis of the anomalously inactive 2013 Atlantic hurricane season. Research & Creative Activities Week, ECU, Greenville, US.
202. **Walsh, J. P. & Corbett, D. R.** (2015). NCAFPM Mitigation Starts with Yourself- ie, Coastal Hazards & Management Challenges: Examples & Insights from Northern NC. New Bern, NC.
203. **Walsh, J. P. & Corbett, D. R.** (2014). Geomorphic Change & Coastal Vulnerability: Insights from Roanoke Island & Dare County, NC. AERS, Ocean City, MD.
204. **Walsh, J. P.** (2014). Coastal Mud Wrestling: Sedimentation Studies from North Carolina to New Zealand. UNC CSI Science on the Sound, Wanchese, NC.
205. **Walsh, J. P.** (2014). Great Storms & Marine Floods: Examples, Impacts & Stratigraphy. Submersions Marines: passé, présent, futur, La Rochelle, France.
206. **Walsh, J. P.** (2013). Continental Margin Sedimentation from New Jersey to New Zealand. Princeton University, Princeton, NJ.
207. **Walsh, J. P.** (2013). Land-Sea Interactions in the Albemarle-Pamlico Estuarine System. APNEP STAC, Greenville, NC.
208. **Walsh, J. P.** (2013). Overview of Source to Sink (S2S) Concepts & Studies. AGU, San Francisco, San Francisco, CA.
209. **Walsh, J. P. & Corbett, D. R.** (2013). Coastal Change in NC: Anthropogenic & Storm Influences. AGU Science & Policy Conference, Washington, DC.
210. **Walsh, J. P. & Corbett, D. R.** (2013). NC Shoreline Mapping Progress. GSAA Project Meeting, Columbia, SC.
211. **Walsh, J. P. & Corbett, D. R.** (2013). Shoreline Data Analysis & Change Mapping. Estuarine Shoreline Symposium at UNC CSI, Wanchese, NC.

212. **Walsh, J. P. & Corbett, D. R.** (2013). Strata Development & Morphologic Evolution of the Waipaoa River Margin: Insights from Sedimentological, Radiochemical & Geophysical Data. 30<sup>th</sup> Annual Meeting of the International Association of Sedimentologist, Manchester, UK.
213. **Walsh, J.P.**, Mulligan, R. (2012). Storm surge & wave impacts in North Carolina estuaries during Hurricane Irene. International Conference on Coastal Engineering, Santander, Spain.
214. Wejrowski, M. & **Reyes, E.** (2013, November). Response of a *Spartina patens*-dominated oligohaline marsh to nitrogen enrichment in coastal North Carolina, USA. 22<sup>nd</sup> Biennial Coastal & Estuarine Research Federation Conference: Toward Resilient Coasts & Estuaries, Science for Sustainable Solutions, San Diego, CA.
215. **Wilson, K., Smith, C., Kain, D.,** & Drozdowski, A. (2010). Deciding to Evacuate: Gathering the Information to Make This Important Decision. TCS22: The Coastal Society's 22<sup>nd</sup> International Conference. Shifting Shorelines: Adapting to the Future. Wilmington, NC. June 13–16.
216. **Wilson, K.,** & Reiser, C., Aube, S., & Mooney, L. (2008). Family Pets & Hurricane Evacuation Decisions. Southern Sociological Association Annual Meetings, Richmond University, April.
217. **Wilson, K.,** & Reiser, C. (2007). Hurricane Evacuation Problems & Family Pets. Southern Sociological Society, Atlanta, GA. April.
218. **Wilson, K.,** & Reiser, C. (2006). Family Pets: Evacuation Problems & Solutions. Coastal Society Meeting, May, Tampa, FL.
219. **Wilson, K.,** & Reiser, C., Aube, S., & Mooney, L. (2008). Evacuation Decisions: Are Pets Part of the Family Evacuation Plan? Southern Sociological Society Annual Meetings, New Orleans, LA.
220. Woodson, A. L., **Culver, S. J., Leorri, E., Mallinson, D.J.,** Vijayan, V. R., Thunell, R. C., Parham, P. R., Shazili, N.A.M. (2014). Geochemical evidence of Holocene East Asian Monsoon variability from, Sunda Shelf, South China Sea sediments. GSA Annual Meeting, Vancouver, October.
221. Yañez-Arancibia, A., Day, J. W., & **Reyes, E.** (2013). Climate change & hurricanes in the Gulf of Mexico: ecological & socio economic implications. 22<sup>nd</sup> Biennial Coastal & Estuarine Research Federation Conference: Toward Resilient Coasts & Estuaries, Science for Sustainable Solutions, San Diego, CA.
222. Zarzar, C., **Rickenbach, T.,** Nieto-Ferreira, R., & Nelson, B. (2014, February). A GIS-based analysis of precipitation organization, topography, & land use in North Carolina using the Multi-Sensor Precipitation Estimation (MPE) product. 28<sup>th</sup> Conference on Hydrology, American Meteorological Society 94<sup>th</sup> Annual Meeting, Atlanta, Georgia.

## Engaging the Next Generation: Teaching and Learning

An integral part of academic research is educating and training the next generation of scholars, researchers, and professionals. Our projects allow students to be involved with the creative process of research that offers solutions to current problems and advances scientific knowledge.

Center faculty bring their research to the classroom—whether the classroom is on campus, in a virtual space on a computer screen, or in the middle of a wetland. Students take courses with faculty who are on the cutting edge of physical and social sciences; they also have opportunities to work with researchers and other professionals as research assistants and interns to learn first-hand about the research process.

CNHR faculty teach courses, provide mentoring, supervise student research, and fund students to work on grant-supported projects.

### ECU Courses that include natural hazards content

ATMO1300 Weather & Climate, Allen, Rickenbach	CRM 7010 Economics of Coastal Populations, Landry
ATMO2510/GEOG3510 Physical Meteorology, Rickenbach	GEOG 5350 Marine Geology, Mallinson
BIOL4300 Ecosystem Ecology, Reyes	GEOG 7002 Coastal GeoScience, Walsh
BIOL4301 Ecosystem Ecology, Reyes	GEOG1300 Weather & Climate, Curtis, Rickenbach
BIOL4320 Ecological Responses to Global Climate Change, Reyes	GEOG2350 Climate Change Science & Society, Rickenbach
COAS2025 Coastal/Marine Resources Management, Allen	GEOG3510 Physical Meteorology, Curtis
COAS4025 Society & the Sea Seminar, Leorri	GEOG4440 Coastal Applications of GIS, Allen
COAS 4025 Coastal evolution in response to external drivers, Leorri	GEOG 4550 Synoptic Meteorology, Curtis
ECON 3855 Environmental Economics, Bin, Landry, Howard	GEOG4580 Radar & Satellite Meteorology, Rickenbach
ECON 5000 Risk & Economic Regulation, Kruse	GEOG 6440 Techniques in Coastal Resource Analysis, Allen
ECON 5000 Coastal Resource Economics, Landry	GEOG 6540 Advanced Coastal Storms, Curtis
ECON 5170 Resource Economics, Keeler	GEOG/COAS Independent Research, Allen
ECON 6000 Hazards & Risk Management, Kruse	GEOG7002, Coastal GeoScience, Walsh
ECON 6300 Economics of Coastal Populations- Bin	GEOG 1550 Oceanography, Mallinson
ENGL 7765 Risk Communication, Kain, Frost	GEOG 1700 Environmental Geology
	GEOG 5300 The Geology of Coastal Processes, Mallinson



HNRS Global Warming & Climate  
Change, Curtis  
PLAN4015 Emergency  
Management Planning, Mukherji  
SUTO 6100 Environmental  
Systems & Sustainability, Allen

GEOL 7002 Coastal GeoScience,  
Walsh  
PLAN 4015 Emergency  
Management Planning, Mukherji  
SUTO 06100 Environmental  
Systems & Sustainability, Allen

### Students supported in natural hazards-related research

Zaneta Adme, Coastal Resources  
Management Ph.D.



*ECU Coastal Resources Management  
PhD student Zaneta Adme, left, and  
ECU economics professor Andrew  
Keeler are working with researchers  
from NC State and UNC Chapel Hill  
to examine the feasibility of deriving  
energy from coastal waters.  
(Photo by Cliff Hollis)*

Ben Anderson, Masters, Economics  
Signe Anderson, Undergraduate,  
Economics

James Brinkley, Coastal Resource  
Management Ph.D.

Caroline Brooks, Technical &  
Professional Discourse Ph.D.

Heather Chapman, Economics, ICSP  
Undergraduate Research  
Assistantship

Michelle Covi, Coastal Resources  
Management Ph.D.

Cassandra Darkes, Undergraduate,  
Sociology

Abey Dessie, Undergraduate,  
Sociology

April Evans, Coastal Resources  
Management Ph.D.

Paul Hindsley, Coastal Resources  
Management Ph.D.

Robert J. Howard, Masters, Geology

Hillary Huffer, Coastal Resources  
Management, Ph.D.

Kelly Jochim, Masters Public  
Administration

Laotria Lassater, Undergraduate,  
Sociology

Jingyuan Li, Coastal Resources  
Management Ph.D.

Alyson Lewis, Coastal Resources  
Management Ph.D.

Ryan Joye, Undergraduate, Art

Kevin Miller, Coastal Resources  
Management Ph.D.

Robbie Monroe, Masters, Geography

William Nelson, Technical &  
Professional Discourse Ph.D.

Clarence Nicholas, Masters  
Economics

Shona Patterson, Coastal Resources  
Management Ph.D.

Jennifer Perry, Undergraduate,  
Sociology

Dominique Phillips, Undergraduate  
Computer Science

Jessica Plummer, Undergraduate,  
Sociology

Melissa Place, Professional &  
Technical Communication Ph.D.

Ahmed Salahuddin, Coastal  
Resources Management Ph.D.  
Jens Schubert, Masters, Economics  
Stephen Siefert, Masters,  
English/Technical & Professional  
Communication  
Christopher Sparks, Coastal  
Resources Management Ph.D  
Guy Solomon, Technical &  
Professional Discourse Ph.D.  
Kate Stratford, Masters Geography  
Faith Stuart, Masters Geography  
Heather Ward, Coastal Resources  
Management Ph.D.  
Aimee White, Masters, Sociology  
Joel White, Undergraduate,  
Sociology  
Lindsay Wolter, Masters Geography



*CNHR Director **Jamie Kruse** and Undergraduate student **Clarence Nicholas** (right) visited Dare County Emergency Management on as Hurricane Sandy skirted the NC Coast. **Dave Clawson**, Dare County's Finance Director, provides a firsthand look at how the county prepares for potential natural disasters.*

Michelle Wood, Masters English  
Sol Wuensch, Masters Geography

### *Selected accomplishments of former students*

Students who gain experience working with researchers go on to various positions in their respective fields. We are proud of their many accomplishments and contributions.

**Michelle Covi**, PhD, Coastal Resources Management, worked on research projects funded by grants from North Carolina RENCI and NC Sea Grant. She served as Outreach coordinator for RENCI at ECU. Her area of interest is community decision making about natural hazard risks. Dr. Michelle Covi is now a research faculty member at Old Dominion University.

**Paul Hindsley**, MS, Economics; PhD, CRM, is an Associate Professor at Eckerd College.

**Robert J. Howard**, MA, Geology, joined Tom Allen at the Center for Coastal Informatics and Modeling to help develop the NC Coastal Atlas at ECU.

**Jens Schubert**, MS Economics, completed a PhD at University of Nevada and is now on Faculty at NCA&T.

**Daniel Siefert**, MA, English (Technical and Professional Communication), developed communication products and solutions for CNHR and the RENCI Engagement Center at ECU. After graduating, Daniel accepted a position as a technical writer with SAS in the Raleigh area research triangle.

**Heather Ward**, PhD, Coastal Resources Management, participated in research assessing the strategies of residents and stakeholders for communicating about hurricane preparedness and response. As she completed her dissertation, she also worked for NC Sea Grant. Heather is currently a project manager for the U.S. Army Corps of Engineers' Geographer, Geospatial Research Laboratory.

## Serving Communities: Engagement & Outreach

In addition to teaching, researching, and publishing research findings, Center-affiliated faculty engage with various communities in the region to share expertise and help develop local solutions for risk-related problems. Center efforts include partnering with North Carolina Emergency Management on an annual Hurricane conference held at ECU, speaking to community groups about coastal risks, providing workshops for professionals, and serving on committees and boards.

### Annual NCEM/ECU Hurricane Conference

The Center has developed a close relationship with the North Carolina Department of Emergency Management (NCEM). We keep the connection between academia and first responders relevant especially as it relates to hurricanes that affect all of North Carolina but the eastern region in particular. Hosting the largest group so far, the 6<sup>th</sup> annual ECU/NCEM Hurricane Conference took place May 27, 2015 at ECU. The conference provides a venue for the exchange of ideas and needs.

This collaboration between the NCEM and East Carolina University serves as an important event where academics and practitioners exchange information with the goal of achieving actionable results. New NOAA products have been tested and rolled out for practitioner use. Storm sheltering plans, communication strategies, research about residents' evacuation behavior, lessons learned from Hurricane Sandy, and the forecast for the yearly hurricane season are



some of the topics that have been presented over the years.

The conference has been held at the Murphy Center at ECU in May at the beginning of hurricane season since 2010. Featured speakers have included Directors of the National Hurricane Center, Bill Reade and

Rick Knabb; Governor Pat McCrory; representatives of media including Nate Johnson (WRAL) and Skip Waters (WCTN); and Director of North Carolina emergency management, Mike Sprayberry among others.

The event has grown consistently each year with participants including:

NC Dept. of Transportation  
NC Department of Agriculture  
NC Department of Public Instruction  
North Carolina Sea Grant  
US Army Corp of Engineers  
Amateur Radio Emergency Service,  
American Red Cross  
SKYWARN  
city and county planners  
local emergency medical services,

NC Department of Natural Resources  
NC State Highway Patrol  
NC National Guard  
Civil air Patrol  
National Weather Service  
Salvation Army  
Community Emergency Response Teams  
Vidant hospital  
Fire and Police Departments  
Universities, & community colleges

The Conference also serves as an accredited professional development activity for emergency management professionals.



*Hurricane Center  
Director Rick Knabb  
Keynote Speaker at the  
6<sup>th</sup> Annual Hurricane  
Conference,*

## Hurricane Floyd Symposium

On September 17 and 18, 2009, the CNHR was proud to host the *Hurricane Floyd Symposium* that commemorated the storm's 10th anniversary and the 5th year of the CNHR's existence. The public forum and research conference was designed to examine lessons learned from the disaster, the current status of the region, and highlight ongoing natural hazards research projects relevant to hurricane risk. The public forum included presentations from state and local government, nonprofit organizations, and academia. Over twenty researchers from eleven institutions presented findings during the research conference. Areas of expertise were diverse, including atmospheric science, communications, economics, finance, geography, hydrology, meteorology, planning, and sociology. The Symposium also served as a springboard for the annual NCEM/ECU Hurricane Conference that began the following year.

## Selected outreach and training activities

In addition to the annual events that the CNHR sponsors, Center researchers have been involved in a variety of activities that provide service to various local communities and organizations. Engagement also includes memberships on various panels, committees, and boards.

- **Allen, T.** Workshop on Coastal Hazards, Presentation to Coastal Hazards Workshop public forum, Jockeys Ridge State Park, Nags Head, NC.
- **Allen, T.** Hurricane "Felix" response tabletop exercise for decision makers. June 8, 2010, Manteo, N.C. In cooperation with Dare County Emergency Management, National Weather Service (NWS) (Rich Bandy), and Virginia emergency management.
- **Kain, D. J. & Covi, M. P.** (2013, May 1). *Communicating Changing Conditions at the Coast: A Workshop for Communicators, Non-formal Environmental Educators and Planners*. North Carolina Coastal Training Program Event, Jacksonville, North Carolina. (not included in 2012-13 Annual Report)
- **Kain, D. J. & Covi, M. P.** (2013, April 17). *Communicating Changing Conditions at the Coast: A Workshop for Communicators, Non-formal Environmental Educators and Planners*. North Carolina Coastal Training Program Event, Elizabeth City, North Carolina.
- **Kain, D. J.** (2013, June). *Social Media: How it Can Enhance Situational Awareness for Emergency Managers*. North Carolina Emergency Management Forum, Raleigh, North Carolina.
- **Landry, C.,** 2007-2008. Louisiana State University, Expert Panelist on Restoration of Gulf Coast, New Orleans, Louisiana. Planning for Restoration & Sustainability.



Emergency managers working through the Hurricane "Felix" tabletop exercise with Tom Allen.



Catherine Smith (left), and Donna Kain (right) deliver a workshop to public information officers.

## Ten Years of Research, Teaching, and Service

- **Landry, C.**, 2007-2008. PERC/Liberty Fund participant/panelist in colloquium, Emigrant, Montana. Markets, Freedom, and the Environment.
- **Mallinson, D.** Science & Technical Advisory Committee Member, APNEP, STAC Member for the Albemarle-Pamlico National Estuary Program.
- **Mallinson, D.** Science Panel Member, Coastal Resources Commission.
- **Mallinson, D.** NC Coastal Resources Commission Science Advisory Panel, Science Panel Member—responsible for advising on coastal management policy, Raleigh, North Carolina.
- **Mallinson, D.** NC Division of Water Quality—Beach & Inlet Management Plan (BIMP), Science Panel Member—responsible for advising on coastal policy, Raleigh, North Carolina.
- **Smith, C., & Kain, D.** Risk and Emergency Communication Workshop for Public Information Officers (PIOs), Manteo NC, December 11, 2007, focused on facilitating communication between PIOs and media to ensure public safety in natural disasters
- **Walsh, J. P.** *Coastal Sediment Dynamics from Nags Head Woods to New Zealand*. Men of the Wobbly Round Table, Southern Shores, North Carolina.

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. Ron Mitchelson, Provost Dr. Ying Zhou, Associate Provost of Institutional Planning, Assessment, and Research
Agenda Item	III. A.
Item Description	Annualized Schedule for Metrics
Action Requested	Approval
Disposition	
Notes	

# BOT Reporting Schedule: Institutional Metrics

## **September Meeting**

Enrollment Overview:

1. Fall Enrollment (UG, GR, and Prof.), historical trend
2. Profile of First-time Freshman Cohort
3. Profile of New Graduate Students
4. Applications and Admissions: number of applicants, acceptance rates, yield rates, etc.
5. First-year Retention Rate (by gender and ethnicity), with comparison to official peers

## **November Meeting**

Degrees and ECU Graduates:

1. Degree Awarded (by degree type, STEM + HEALTH, degrees awarded to Pell Grant recipients\*)
2. Four-year and Six-year Graduation Rates, with comparison to official peers
3. Graduate Student Retention and Time-to-Degree\*
4. Employment in North Carolina (NC Tower Data)
5. Percentage of ECU Graduates Pursuing Additional Education (National Student Clearing House Data)

## **February Meeting**

Transfer and Military Students:

1. Transfer Applications and Admissions: number of applicants, acceptance rates, yield rates, etc.
2. Transfer Student Persistence Rates (retention + graduation), historical trend
3. Degree Awarded to Transfer Students (by degree type, STEMH, Pell Grant recipients, etc.)
4. Military Students Enrollment and Success\*

## **April Meeting**

Student Achievement and Satisfaction:

1. Licensure Exam Pass Rates
2. Senior Exit Survey Results
3. Graduate Student Exist Survey Results
4. Student Engagement: results from the National Survey of Student Engagement and other surveys

\*Data availability under investigation

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. Ron Mitchelson, Provost Dr. John Fletcher, Associate Provost for Enrollment Services
Agenda Item	III. B.
Item Description	Enrollment and Retention Update
Action Requested	Information and Discussion
Disposition	
Notes	





East Carolina University®

# Fall Semester 2015 Enrollment Update

Paul Gemperline, PhD  
Dean, Graduate School

Jayne Geissler, PhD  
Executive Director Retention Services and Undergraduate Studies

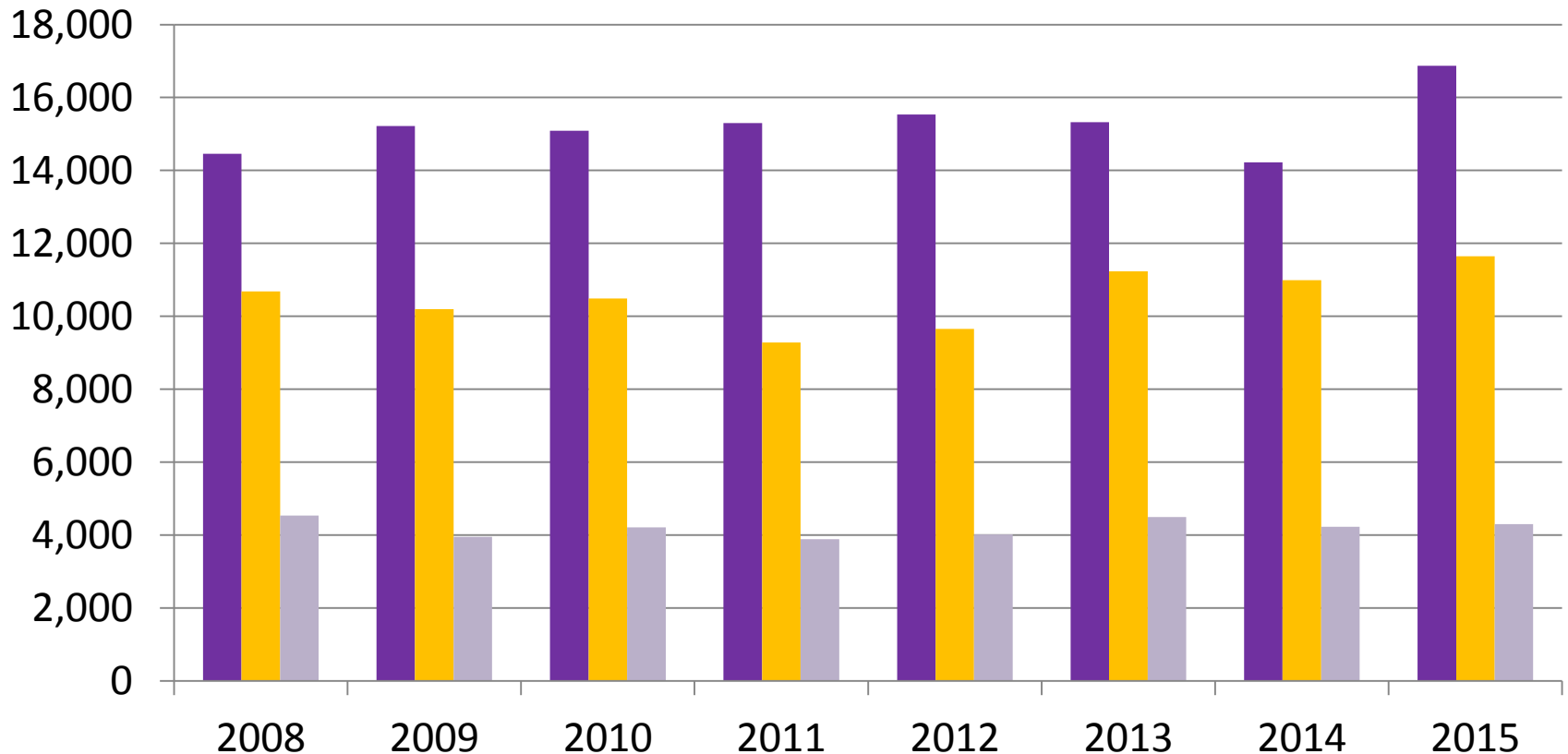
John T. Fletcher, EdD  
Associate Provost, Enrollment Services

# Total University Enrollment Fall Semester 2008-2015

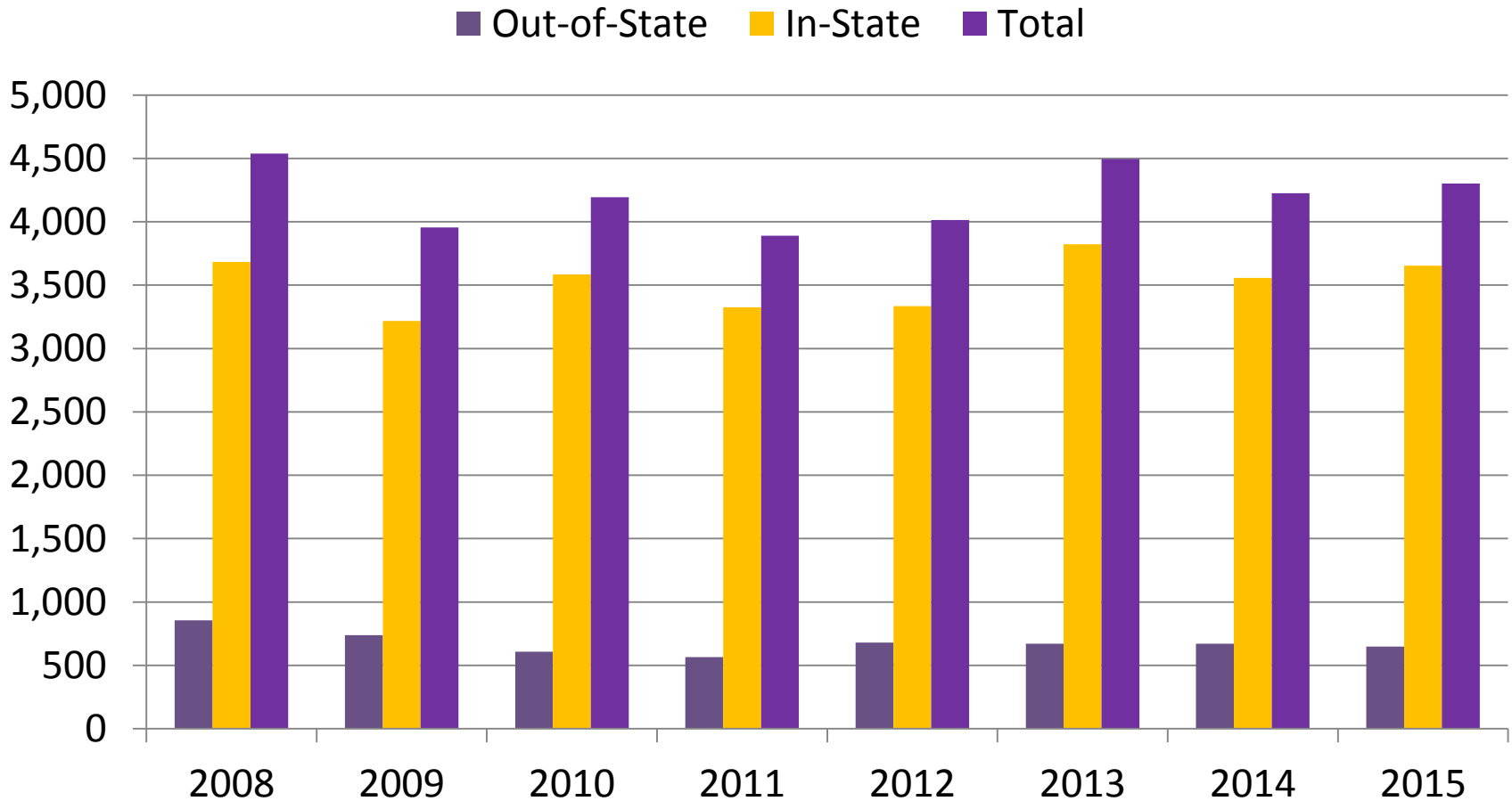


# Freshmen Applications Total Complete, Total Accepted and Total Enrolled Fall Semester 2008 - 2015

■ Total Complete Applications   ■ Total Accepted   ■ Total Enrolled

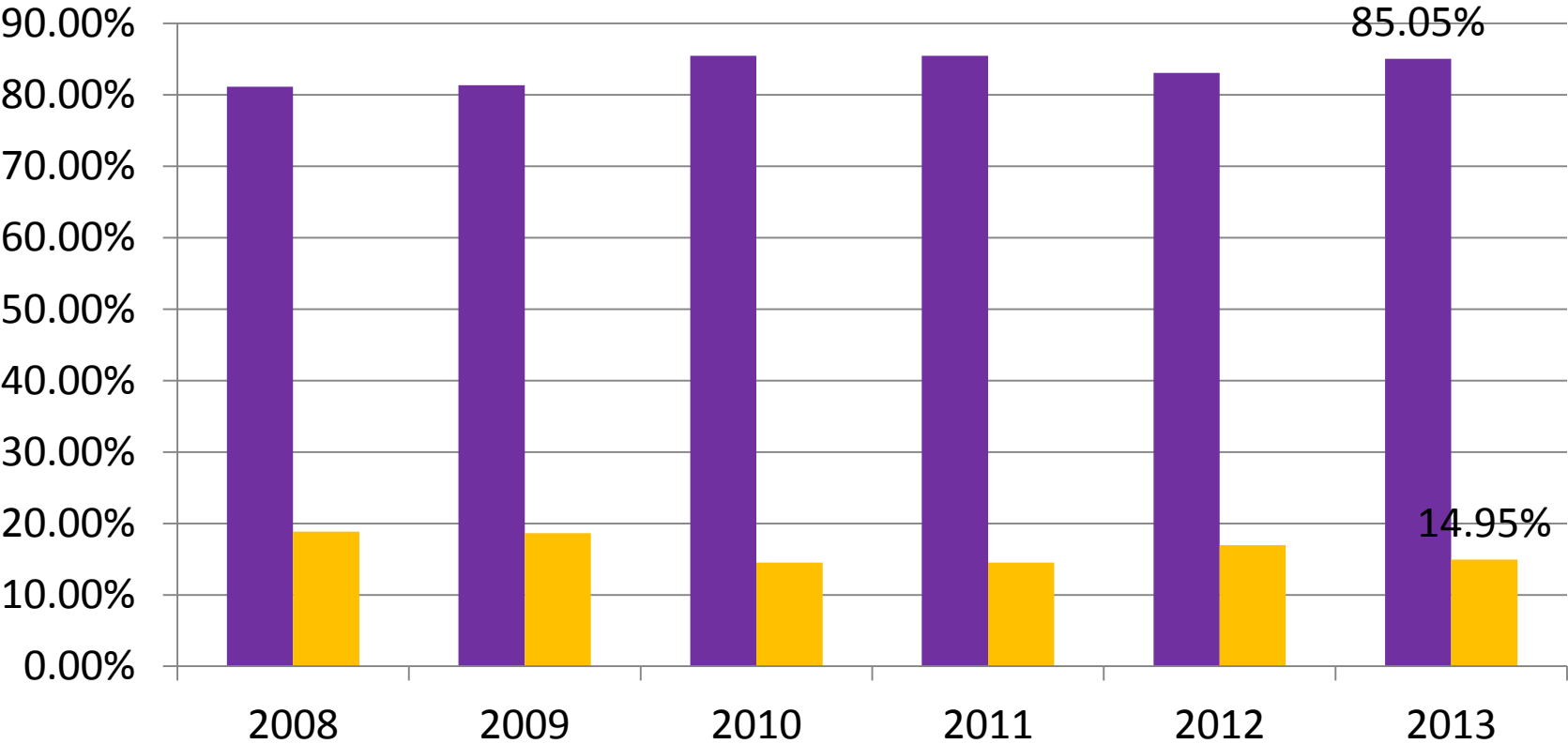


# Enrolled Freshmen In-State and Out-of-State Fall Semester 2008-2015

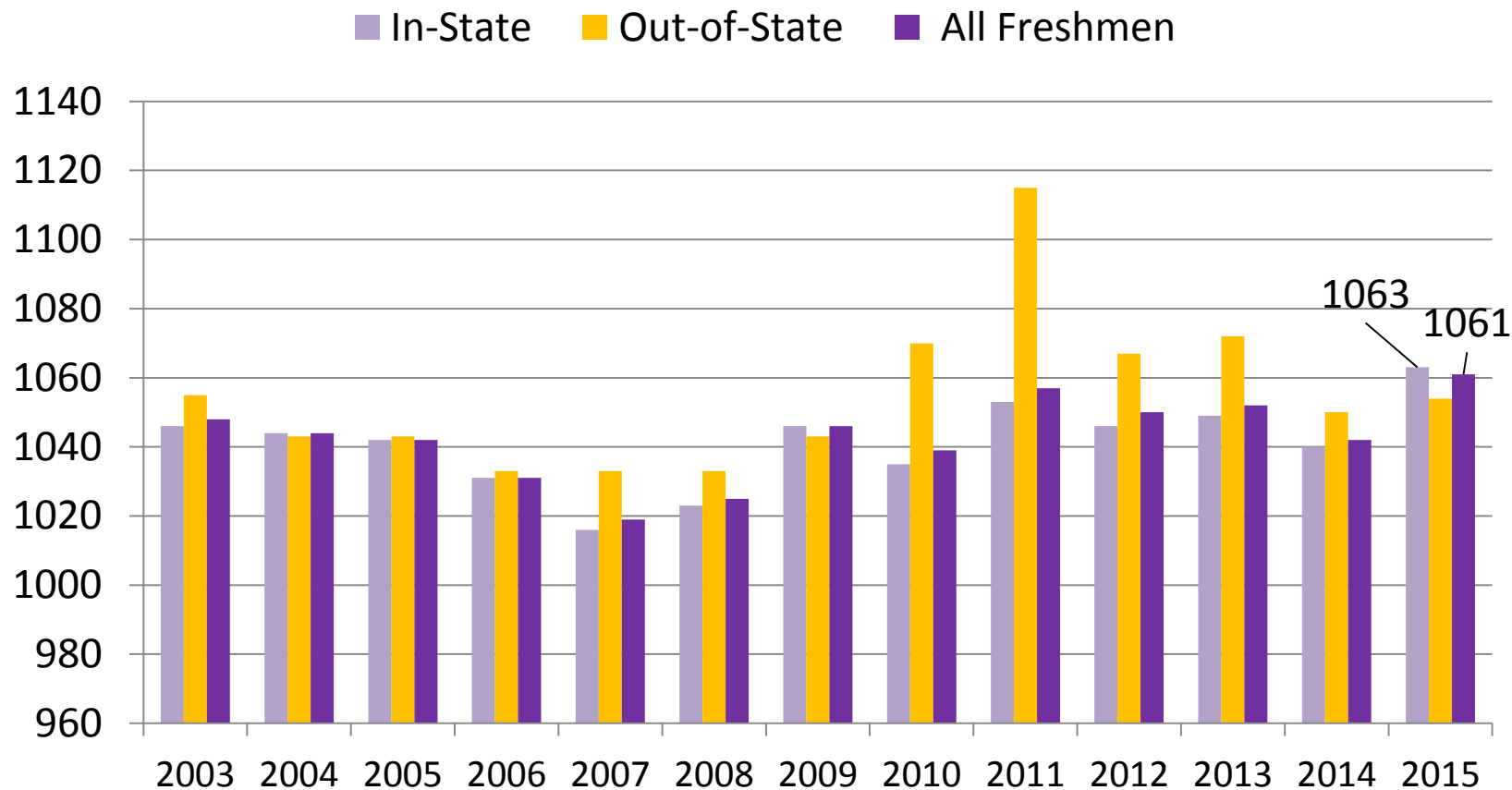


# Percent In-State and Out-of-State New Freshmen Fall Semester 2008-2015

■ In-State ■ Out-of-State



# Average SAT for Entering Freshmen In-State and Out-of-State Fall Semester 2008-2015



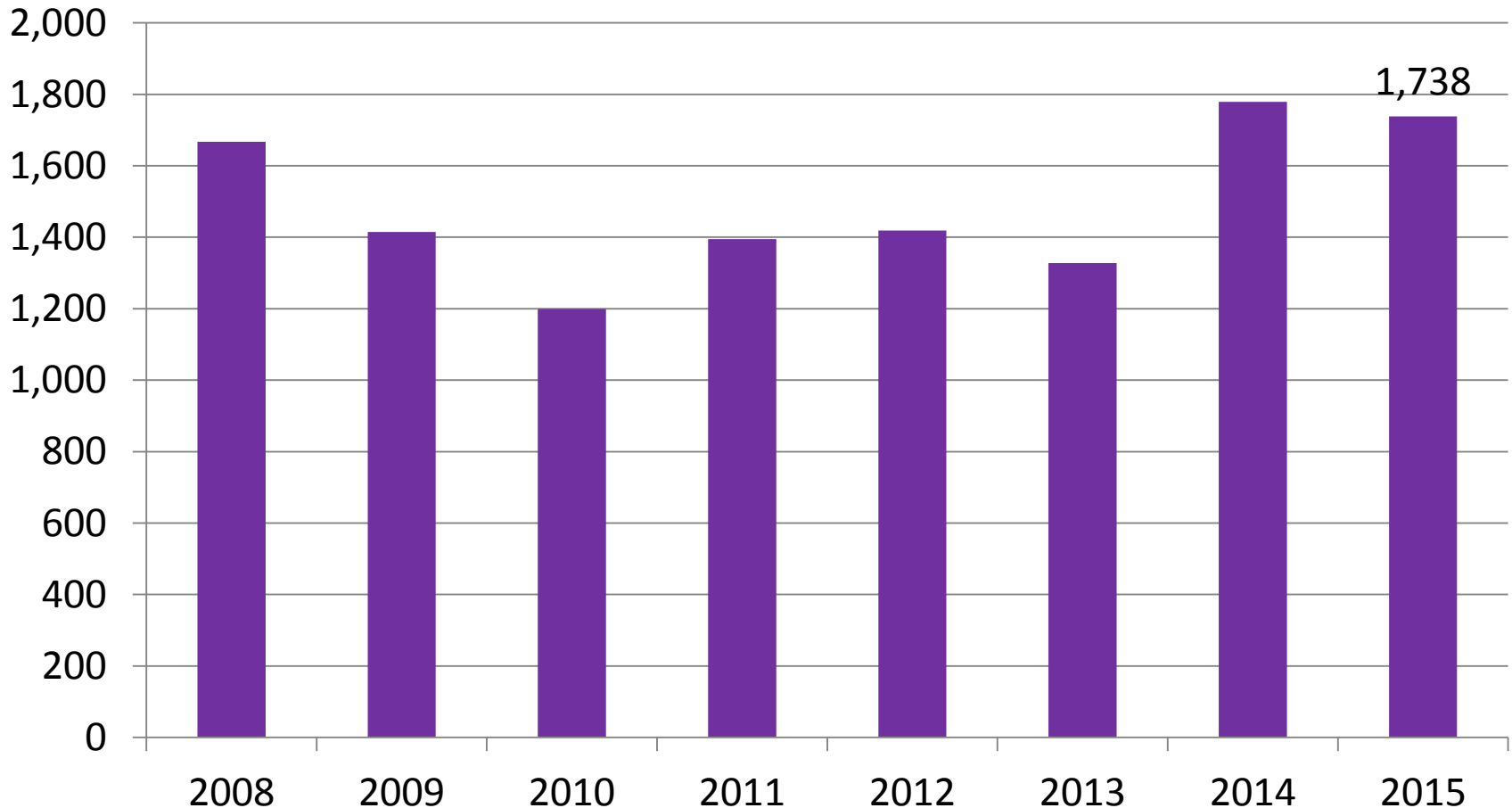
\*2013 SAT averages for enrolled students who were admitted based on SAT score

# Average HSGPA for Entering Freshmen In-State and Out-of-State Fall Semester 2008-2015

■ In-State ■ Out-of-State ■ Total Average

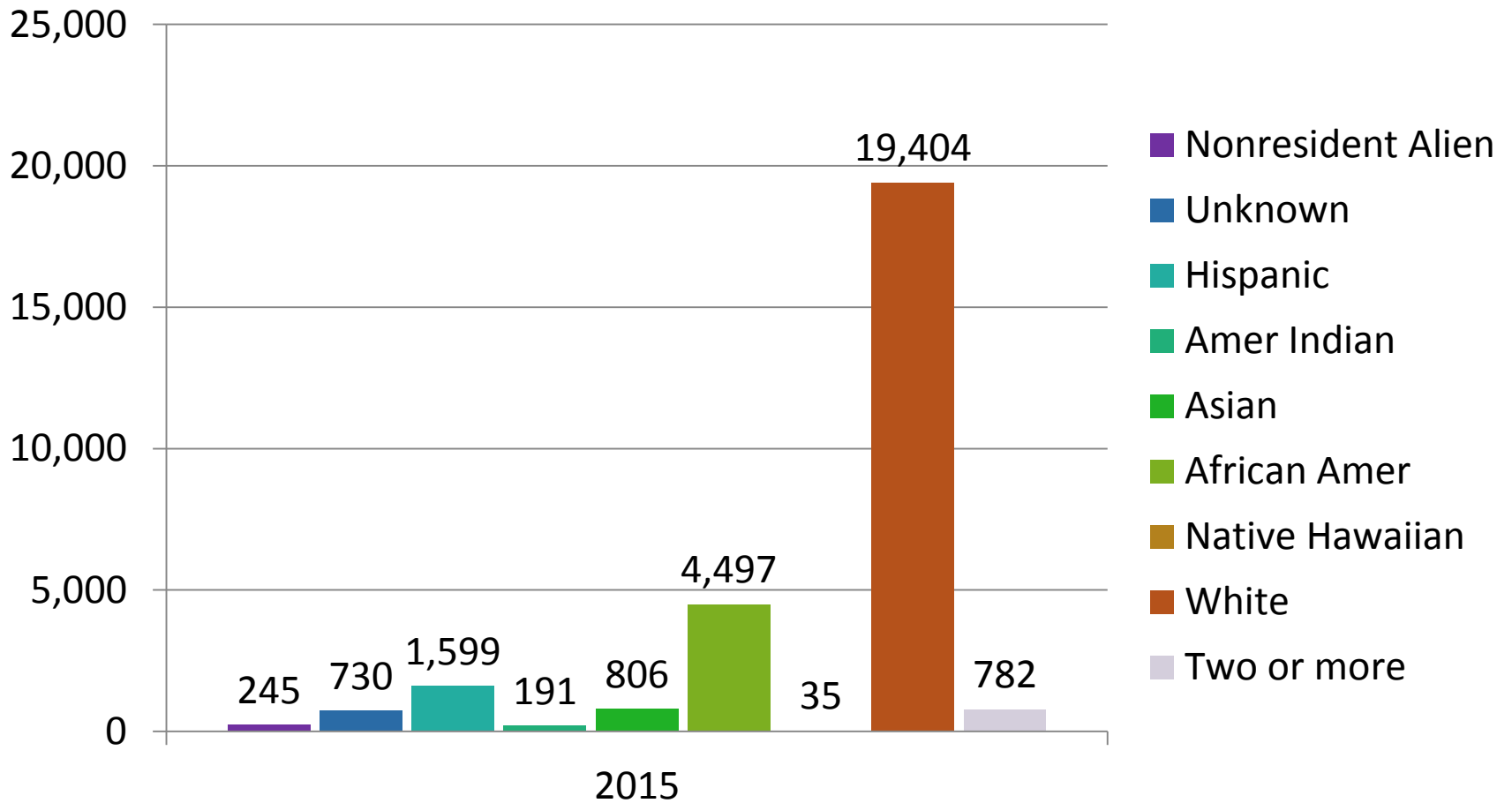


# Enrolled Transfer Students Fall Semester 2008-2015





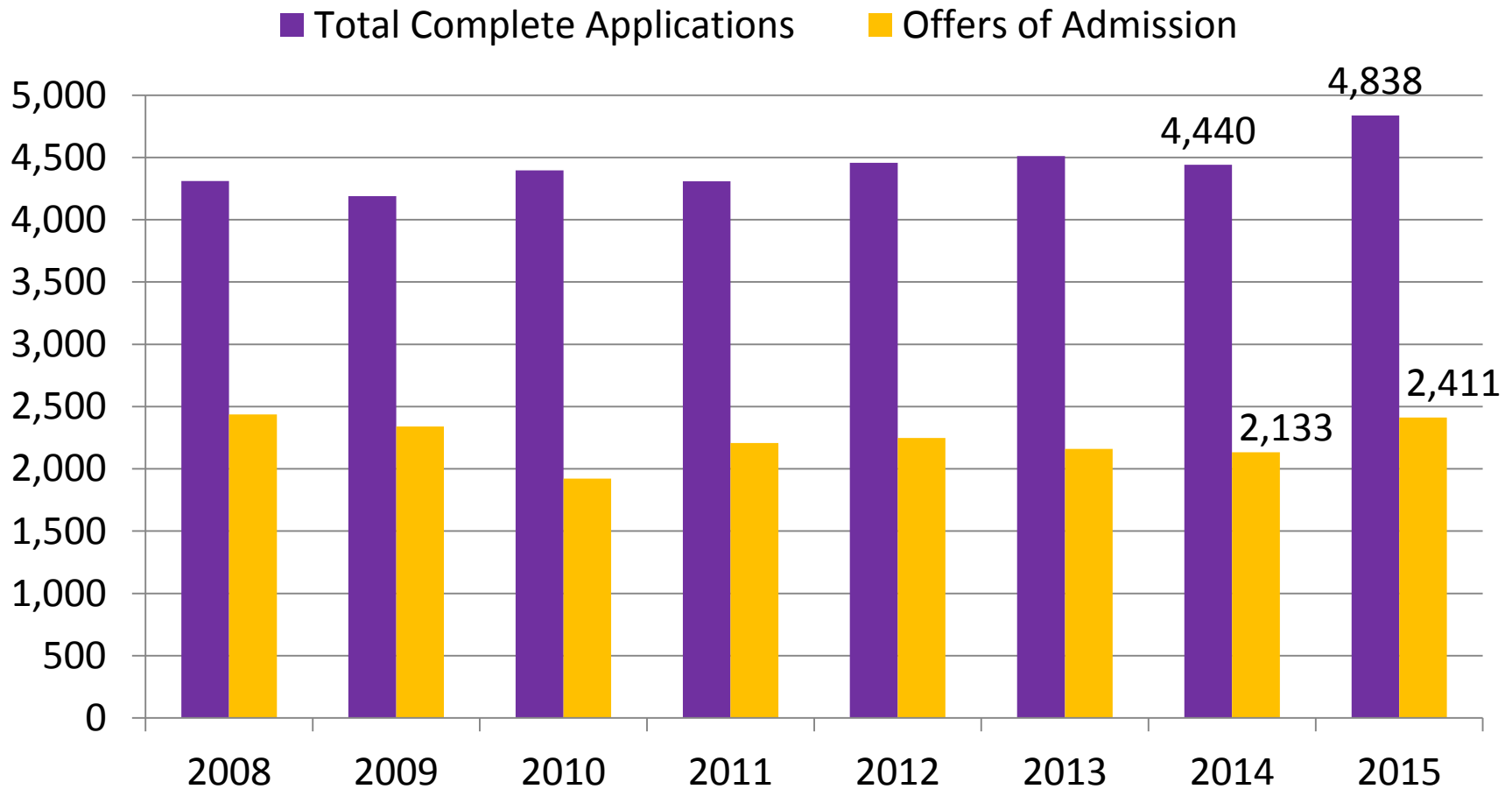
# Fall Semester 2015 Race/Ethnicity



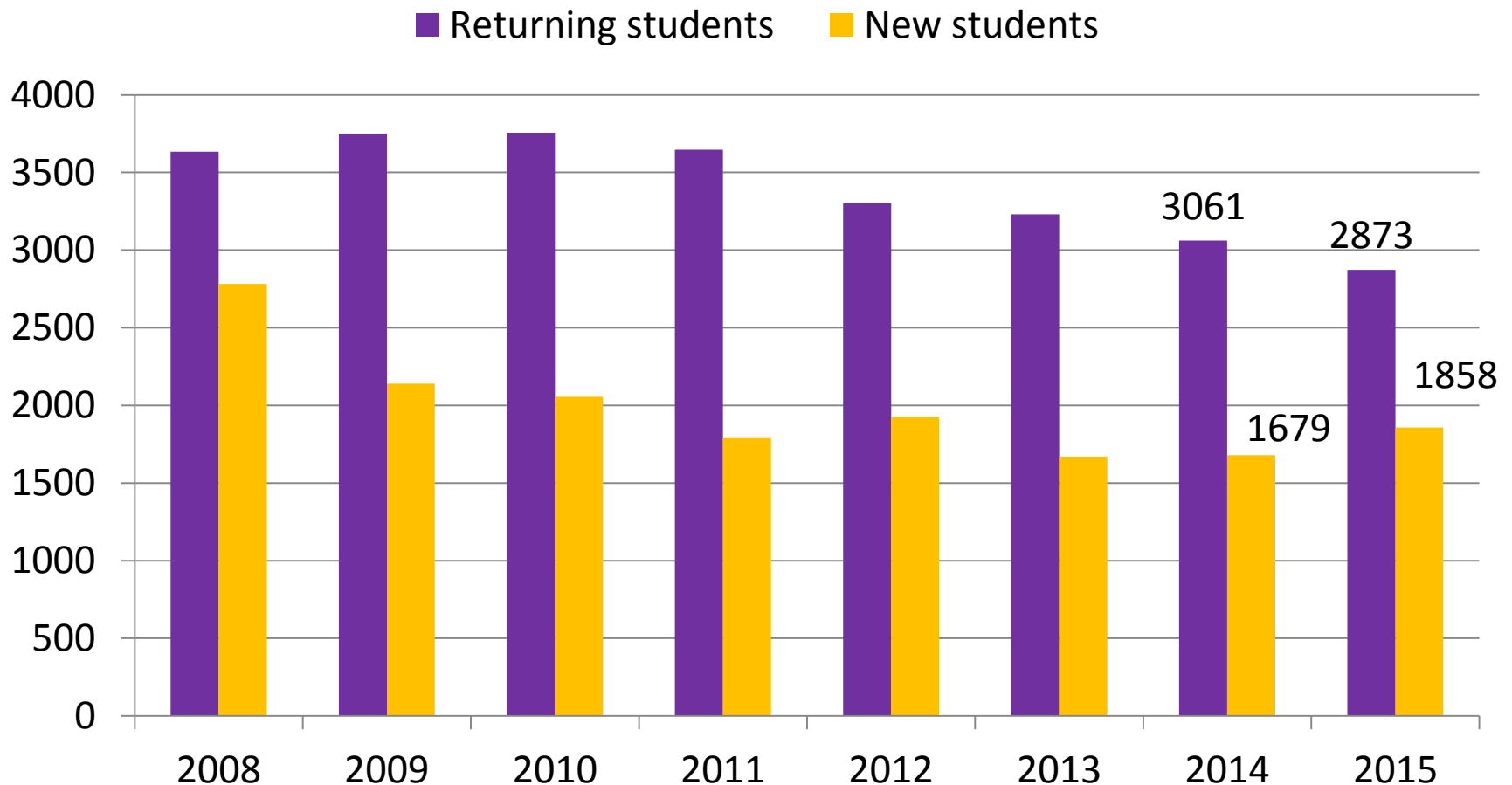
# Fall 2015 Graduate Enrollment Summary

- Total graduate enrollment has stabilized
  - Fall 2014: 4740
  - Fall 2015: 4731 (-9, -0.1%)
- Enrollment of new applicants has increased significantly
  - Fall 2014: 1679
  - Fall 2015: 1858 (+179, 11%)
- Remaining slides will cover following points
  - Multiyear trends in returning and new students
  - Reasons why first-time graduate students increased this year
  - Steps we are taking to sustain this year's increase

# Graduate + Doctoral and Professional Applications



# Graduate Enrollment Trends: New vs. Returning Students



# Increase in New Graduate Students

- New director of Graduate Admissions – Dr. Heidi Puckett
  - Increased customer service in the graduate admission office
  - Admissions staff empowered to be more flexible in their operations
- Increased effectiveness of online advertising, targeted strategically
- Largest increases observed in HHP, CET, AHS, and BSOM
- Enrollment in some online graduate programs is still growing

# Real-Time Registration Tracking and Forecasting Tool

- New real-time tools developed to track registrations over time
  - ITCS (Strategic Information Services) & Registrar
  - Collaboration with Graduate School, Enrollment services, and IPAR.
- Information from this tool is used to guide marketing and recruiting efforts targeted at the program level

# Real-Time Tools – Graduate Student Registration Trends



# Real-Time Tools – New Graduate Student Registration Trends

## COLLEGE

- Brody School of Medicine
- Col Fine Arts and Communic
- Col of Health and Human Perf
- College of Allied Health
- College of Arts and Sciences
- College of Business
- College of Education
- College of Engr and Technology
- College of Human Ecology
- College of Nursing
- No College Designated

## Student Level

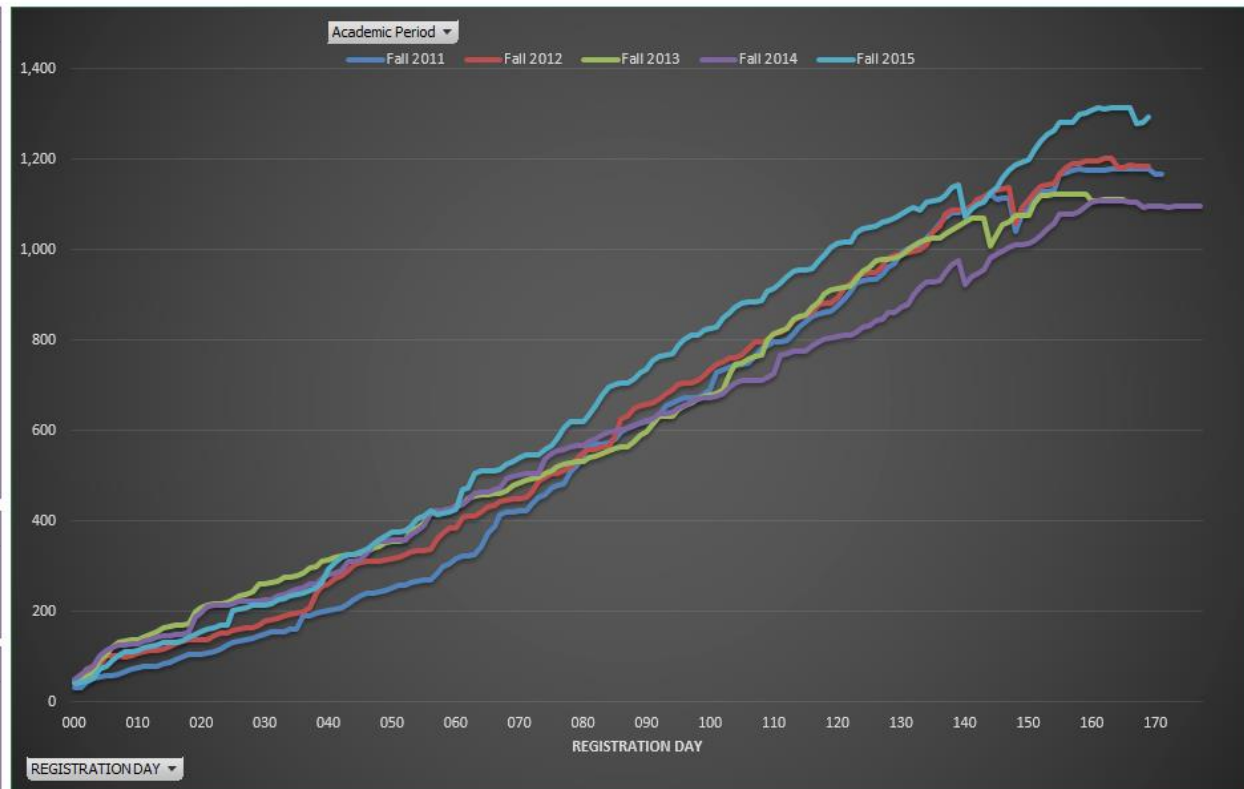
- Graduate
- Professional

## Student Classification

- Graduate
- Professional

## Admissions Population

- Exchange Student



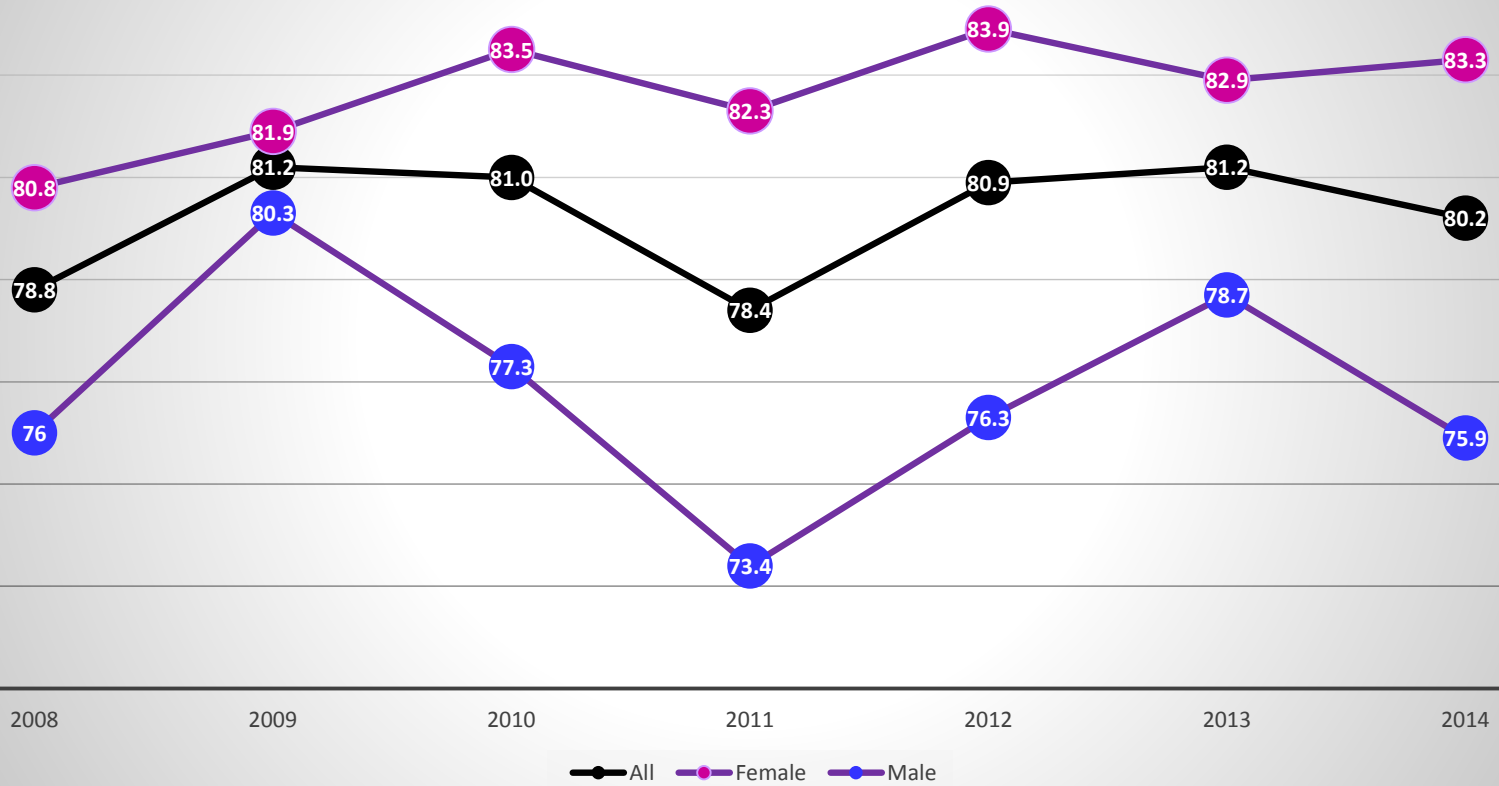
College	Reg Day		Fall 2012		Fall 2013		Fall 2014		Fall 2015	
	Students	% Diff	Students	% Diff	Students	% Diff	Students	% Diff	Students	% Diff
Brody School of Medicine	52		53	1.92%		-100.00%	46		67	45.65%
Col Fine Arts and Communic	36		39	8.33%		-100.00%	35		34	-2.86%



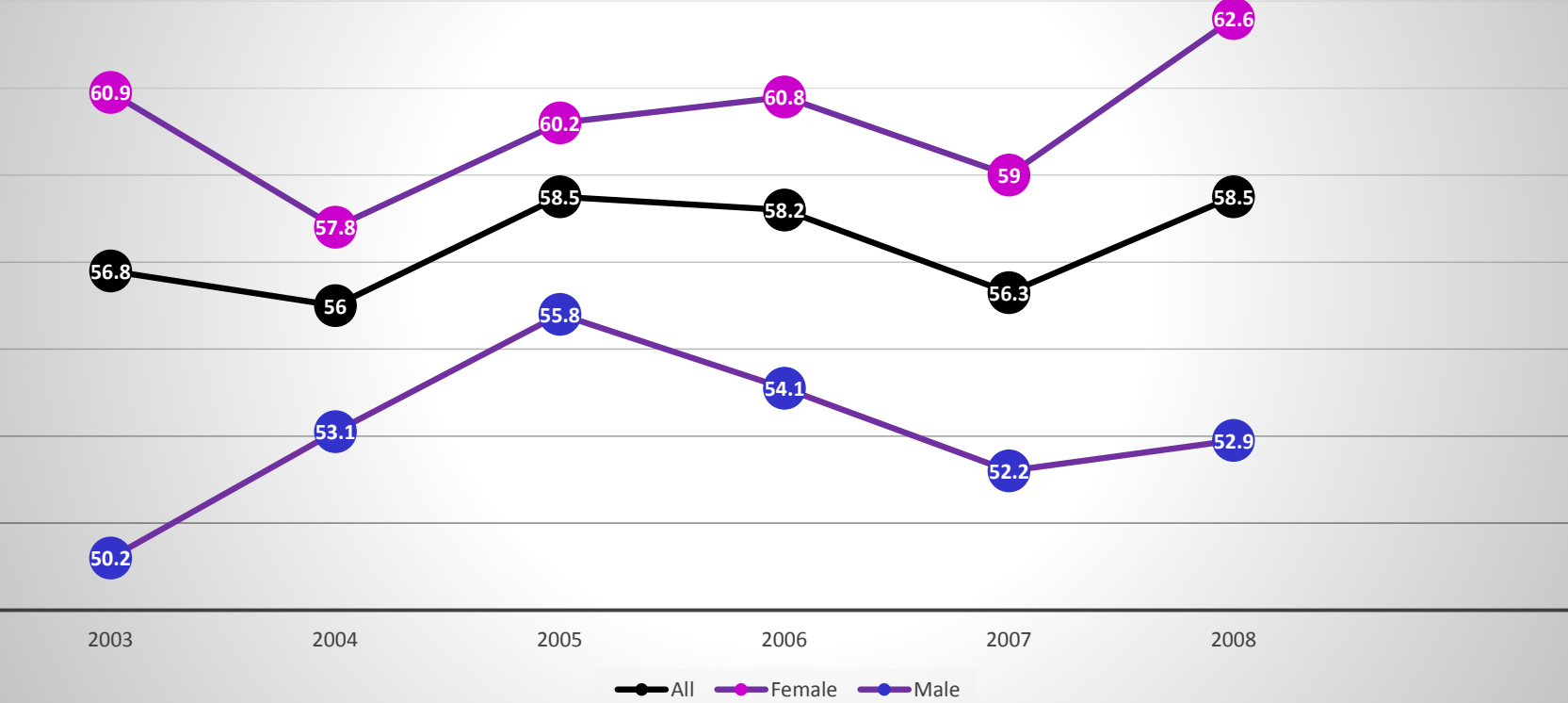
# Real-Time Tool – Results

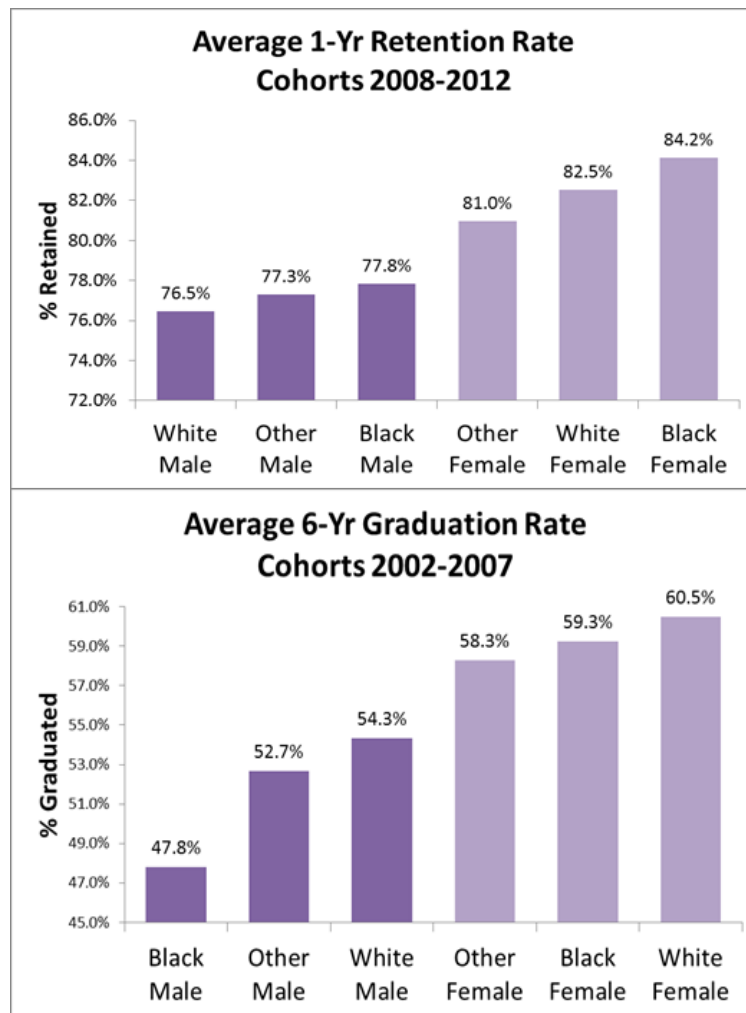
- Programs and prospective students were identified throughout this recruiting cycle for increased communication and out-reach efforts
  - Application started but not complete
  - Offer of admission but not registered
  - Registered but tuition and fees not paid
- Team based approach with the Graduate School, Financial Aid, Cashier's Office, Career Services, Colleges and faculty made a significant difference
  - Increased number of complete applications (9%)
  - Increased offers of admission (13%)
  - Increased number of new graduate students (11%)

## Retention: FTFT 2008-2014



# 6-Year Graduation: FTFT 2003-2008





### SAT and High School GPA of FTFT 2013 Cohort

	WM	Other M	WF	Other F	BM	BF
SAT	1079	1056	1055	1035	1018	993
HS GPA	3.14	3.10	3.31	3.29	3.07	3.22

## College and University Education

- In 2012, 34% more women than men graduated from college
- There are now 4 college-grad women for every 3 college grad men among Americans ages 22-29
- By 2023, females grads may outnumber male grads by 47%
- National Center for Educational Statistics:  
<http://nces.ed.gov/fastfacts/display.asp?id=40>
- National Bureau of Economic Research:  
<http://www.nber.org/digest/jan07/w12139.html>

# Retention and 6-year Graduation Rates

*Identified Peers (In descending order of 6-year Graduation Rate)*

Institution	Retention % FTFT* 2013	6-year Grad. % FTFT* 2008	Selectivity	2013 SAT or ACT
U. of S. Carolina-Columbia	87.9	73.6	1	1208
Ohio U. – Main Campus	80.2	67.0	2	1089
U. of Buffalo	88.1	64.8	1	1161
<b>Peer Group</b>				
Texas Tech U.	83.5	59.1	1	1116
Virginia Commonwealth U.	83.7	59.4	1	1111
East Carolina University	<b>81.2</b>	<b>58.5</b>	<b>3</b>	<b>1036</b>
U. of North Dakota	79.7	55.5	2	23.6
Central Michigan U.	76.4	55.5	3	22.4
U. of Nevada – Reno	82.0	55.0	2	23.4
Florida International U.	84.0	54.0	1	1150
W. Michigan U.	72.4	54.0	3	22.0
U. of Louisville	80.5	53.6	3	22.0
Old Dominion University	81.0	52.0	3	1035
U. Of Missouri-Kansas City	72.9	51.0	2	22.6
N. Illinois U.	71.0	50.0	3	21.8
<b>Peer Group</b>				
U. of S. Mississippi	73.6	48.4	3	21.6
S. Illinois U.- Carbondale	68.3	43.9	3	22.1
E. Tennessee State U.	69.4	43.0	3	22.0
Wright State U. – Main	65.9	38.3	3	21.8

Selectivity	SAT Score	ACT Score
1 Highly Selective	> 1100	> 24.0
2 Selective	1045 – 1100	22.5 – 24.0
3 Moderately Selective	<b>990 – 1044</b>	<b>21.0 – 22.4</b>
4 Less Selective	< 990	< 21.0

# Comparison to Public: 18,000 students

## 4-year Graduation Rate Average for Fall 2004-2010 Cohorts

Selective* Admissions (n=50):	25.6%
Moderately Selective** Admissions (n=64):	19.6%
<b>ECU = Moderately Selective</b>	<b>32.4%</b>

## 6-year Graduation Rate Average for Fall 2004-2008 Cohorts)

Selective* Admissions (n=50):	53.1%
Moderately Selective** Admissions (n=64):	49.3%
<b>ECU = Moderately Selective***</b>	<b>57.5%</b>

* "Selective" is based on 2013 SAT =	1045 – 1100
** "Moderately Selective is based on 2013 SAT =	990 – 1044
*** ECU's 2013 SAT =	1036

### Sources

"Other institutions" data: 2014-2015 CSRDE Retention Report, June 2015  
Center for Institutional Data Exchange and Analysis  
The University of Oklahoma Outreach

ECU data: UNC-GA website (Note: Means for cohorts are unweighted)

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. John Fletcher, Associate Provost for Enrollment Services
Agenda Item	III. C.
Item Description	Intercollegiate Athletics Survey
Action Requested	Information and Discussion
Disposition	
Notes	





## UNC Intercollegiate Athletics Survey: 2014-15

### 1. Contact Information

---

1.1 Please enter the primary point of contact for the data provided.

---

Name	<input type="text" value="John T. Fletcher"/>
Working Title	<input type="text" value="Associate Provost Enrollment Service"/>
Email Address	<input type="text" value="fletcherjo@ecu.edu"/>
Telephone	<input type="text" value="252-328-5817"/>

---

<<

>>



## UNC Intercollegiate Athletics Survey: 2014-15

### 2. Undergraduate Student-Athlete Admissions Policy

---

2.1. Per [UNC Policy 1100.1](#) (section 13.b), all UNC institutions annually report to the UNC Board of Governors regarding their intercollegiate athletics programs and shall include information regarding their "admission policy for student-athletes, including the definitions utilized for exceptions to campus-based criteria."

In the spaces below, please paste the URL that specifically points to your campus policy or upload a file with the policy language regarding this item. There is also space below to make any notes or comments about your submission.

---

#### 2.2. Admissions policy URL

2.3. If uploading a file, please name the uploaded file in the following manner: XXXX\_Admissions\_Policy where XXXX=your campus abbreviation.

- If there are multiple documents you would like to submit, please combine them into one file before uploading (the survey software only allows for one document to be uploaded in this question).

---

ECU\_Admissions\_Policy.docx

0.1 MB

2.4. Please use the space below if you wish to include any explanations about the policy above and your submission.

---



# Process for Admitting Student-Athletes with Special Talent Waivers

---

1. The need for a Special Talent Admission request will be determined through the Preliminary Evaluation Process completed by the Office of Compliance in conjunction with the Office of Admissions.
2. **All Special Talent Admissions Requests will be reviewed by the Academic Success Committee (ASC).** The ASC, appointed by the Chancellor, is chaired by the Faculty Athletics Representative and meets once a month. The committee is comprised of four (4) faculty members, four (4) athletic administrators, three (3) academic administrators, and one (1) head coach.
3. Once a prospective student-athlete (PSA) has been identified as a Special Talent scenario, the coach will initiate the process by submitting the "Special Talent Admissions Request Checklist" to the Office of Compliance. **To note, Sport Administrator approval is required for all Special Talent Requests.**
4. The Office of Compliance will confirm the PSA has a complete admissions file (e.g. high school transcripts, test scores, application, application fee, etc.). A Special Talent Request will not move forward until a PSA has a complete admissions file.
5. The Office of Compliance will create the "Special Talent Admissions Request Packet." This packet will include the following:

## Documents included for a FRESHMAN:

- The Projected Grade Point Average (PGA) from Banner;
- Copies of transcripts from ALL institutions attended;
- Copies of ALL test scores; and
- Copy of the Preliminary Evaluation.

## Documents included for a TRANSFER:

- Copies of transcripts from all institutions attended;
- Copies of all test scores (if applicable);
- Completed TRACER from all institutions attended;
- Completed Transfer Assessment Form; and
- Copy of the Preliminary Evaluation, which will include the transfer GPA.

6. **The Office of Compliance will provide the Head Coach the "Special Talent Admissions Packet" to be reviewed and signed by Jeff Compher.**
7. The Head Coach will work directly with the Office of Compliance to provide the required documentation to the ASC for review.
8. Once a decision is made by the Academic Success Committee, the ASC Designee will sign the form and return to the Office of Compliance.
9. The Office of Compliance will provide the form to the Office of Admissions who will then update Banner to reflect the decision rendered. Once this update is made, the Office of Admissions will notify the Office of Compliance in writing.

10. If a prospective student-athlete falls under one of the following categories, the sport must present additional documentation for review by the ASC:
- Students with a PGA below a 2.10;
  - Students who are projected or deemed nonqualifiers;
  - Transfer students with a transfer GPA of 2.100 or lower; or
  - Students who will need a NCAA/Conference USA waiver to be eligible.

### **Guidelines for Special Talent Admissions Requests & Reviews Requiring Additional Documentation:**

11. Each sport submitting a Special Talent Admissions Request will be subject to an APR analysis as defined by the Academic Success Committee. This analysis will be conducted by designated committee members using methodology designed to obtain a projection of the team's APR for the subsequent academic year; no sport with an APR below the NCAA minimum will be allowed a Special Talent Waiver.
12. Each sport will be subject to an historical review of the success of prior students admitted via the special talent process. This information will be used by the Academic Success Committee to determine whether the PSA should receive a Special Talent Admissions Acceptance. For example, if the requesting sport has not been able to graduate their student-athletes admitted through this process and at a rate commensurate with their overall graduation rate, this information will be considered by the committee in making their final admission decision.
13. Sports that have a prospective student-athlete fall into one or more of the categories listed above, must present the following items of support:
- A written statement from the ECU head coach to justify why ECU should take a risk on the applicant;
  - A written statement from the applicant describing his or her academic goals, life plans and any special, mitigating or extenuating circumstances related to the applicant's poor academic record; and
  - A letter from a high school teacher and/or guidance counselor describing the applicant's commitment to academics and his or her belief that the applicant can successfully complete college level work and earn a degree from ECU.
14. After reviewing the applicant's complete file and supporting documents, the committee votes on whether to grant the applicant special admission status. The committee's recommendation is communicated to the Chancellor for consideration by the committee chair. To note, the Chancellor retains the right to overrule all admission decisions.



**UNC Intercollegiate Athletics Survey: 2014-15**

**3. Enrolled Freshmen, Recruited Freshmen Student-Athletes, and UNC Minimum Course Requirements (MCRs)**

3.1. Please enter Fall 2014 and Spring 2015 unduplicated enrollment totals for *all freshmen* and *all recruited freshmen student-athletes (RFSAs)*.

- The numbers reported here are to be unduplicated headcounts for all freshmen and all RFSAs.
- Minimum Course Requirement (MCR) Exceptions are identified by using either the Student Data File (SDF) or the Student Data Mart (SDM).
  - In the SDF, MCR exceptions are found using the categories 07, 09, 11, and 12 in item 087.
  - In the SDM, MCR exceptions are found using the field/variable name MIN\_COURSE\_REQ\_CAT\_CODE.
    - the categories to be used in the SDM for this field/variable name are the same as item 087 on the SDF: categories 07, 09, 11, and 12.

All FERPA guidelines regarding protection of student identity will be followed. Please submit all student information here and when making this information public, UNC-GA will remove any details that could result in the information being identifiable.

	Campus Total
Total number of enrolled freshmen	4,260
Total number of enrolled freshmen receiving MCR exceptions	13
Total number of enrolled recruited freshmen student-athletes	98
Total number of enrolled recruited freshmen student-athletes receiving MCR exceptions	6

<<

>>



UNC Intercollegiate Athletics Survey: 2014-15

**4. Student-Athletes, Minimum Admissions Requirements (MARs), and Minimum Course Requirements (MCRs)**

4.1. Please enter enrollment totals by NCAA sport for ***all recruited freshmen student-athletes (RFSAs)*** in Fall 2014 and Spring 2015 and the number of ***recruited freshmen student-athletes (RFSAs)*** below one or more of the Minimum Admission Requirements (MARs) or Minimum Course Requirements (MCRs).

For the policy on MARs and MCRs, see [UNC Policy 700.1.1](#) and [Regulation 700.1.1.1\[R\]](#).

- If there is no data to report, please enter "0."
- **For SAT/ACT, only report on the standardized test score used in the admissions decision.**
- If an RFSAs was recruited for more than one sport and fell below one or more of the MARs, please report them for all sports for which they were recruited (**providing duplicate counts**). This will provide accurate information by sport for all RFSAs.
  - If you wish to make note of duplicate RFSAs in your data entry, please do so below in the space provided.
- The final column is not a TOTAL column. In the final column, enter the number of RFSAs enrolled below more than one of the requirements (GPA, SAT/ACT, and/or MCRs).

All FERPA guidelines regarding protection of student identity will be followed. Please submit all student information here and when making this information public, UNC-GA will remove any details that could result in the information being identifiable.

	# of RFSAs by sport	# of RFSAs below minimum <b>HS GPA only (2.5)</b>	# of RFSAs below minimum <b>SAT or ACT only (800 or 17)</b>	# of RFSAs receiving an <b>MCR exception</b> only	# of RFSAs below <b>more than one</b> requirement (GPA, SAT/ACT, or MCRs)
Bowling	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Rowing	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Softball	<input type="text" value="6"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's basketball	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's cross-country	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's golf	<input type="text" value="2"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's gymnastics	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's ice hockey	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's indoor track and field	<input type="text" value="7"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
Women's lacrosse	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's outdoor track and field	<input type="text" value="7"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
Women's rifle	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's skiing	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Women's soccer	<input type="text" value="10"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

UNC Intercollegiate Athletics Survey: 2014-15

	# of RFSAs by sport	# of RFSAs below minimum <u>HS GPA only (2.5)</u>	# of RFSAs below minimum <u>SAT or ACT only (800 or 17)</u>	# of RFSAs receiving an <u>MCR exception</u> only	# of RFSAs below <u>more than one</u> requirement (GPA, SAT/ACT, or MCRs)
Women's swimming and diving	4	0	0	0	0
Women's tennis	3	0	0	0	0
Women's volleyball	5	0	0	1	0
Women's water polo	0	0	0	0	0
Baseball	10	0	0	0	0
Fencing	0	0	0	0	0
Field hockey	0	0	0	0	0
Football	25	2	2	4	2
Men's basketball	2	0	0	0	0
Men's cross-country	1	0	0	0	0
Men's golf	2	0	0	0	0
Men's gymnastics	0	0	0	0	0
Men's ice hockey	0	0	0	0	0
Men's indoor track and field	12	3	1	0	1
Men's lacrosse	0	0	0	0	0
Men's outdoor track and field	12	3	1	0	1
Men's rifle	0	0	0	0	0
Men's skiing	0	0	0	0	0
Men's soccer	0	0	0	0	0
Men's swimming and diving	9	1	0	0	0
Men's tennis	1	0	0	0	0
Men's volleyball	0	0	0	0	0
Men's water polo	0	0	0	0	0
Wrestling	0	0	0	0	0
<b>Total</b>	<b>120</b>	<b>9</b>	<b>4</b>	<b>7</b>	<b>4</b>

4.2. Please use the space below if you wish to include any explanations about campus data entered above (including any RFSAs listed in more than one sport above).

Several RFSAs were recruited for more than one sport.



<<

>>



**UNC Intercollegiate Athletics Survey: 2014-15**

**5. Undergraduate Student-Athlete Academic Profile - Revenue Sports**

5.1. Please enter the following academic information for recruited freshmen student-athletes (RFSAs) in revenue sports at your campus.

- Enter the number of RFSAs in these three sports (same number as entered in the previous section), along with the average HS NCAA Core Course GPA & average SAT/ACT scores.
  - Enter the SAT/ACT scores in this format: XXXX / YY
  - Use the composite ACT score (highest score possible is 36).
  - **For SAT/ACT, only report on the standardized test score used in the admissions decision.**
- Please enter duplicate RFSAs information if students participate in more than one revenue sport.
- Enter "NA" in a cell if there were no RFSAs in the sport.

UNC-GA will not make any information publicly available that violates FERPA guidelines.

	Total Number of RFSAs by sport	Average HS NCAA Core Course GPA	Average SAT / ACT
Men's Football	<input type="text" value="25"/>	<input type="text" value="2.86"/>	<input type="text" value="897/70"/>
Men's Basketball	Data Redacted Due to Confidentiality Concerns		
Women's Basketball	<input type="text"/>	<input type="text"/>	<input type="text"/>

5.2. Please use the space below if you wish to include any explanations about campus data entered above (including any RFSAs listed in more than one sport above).

<<

>>



## UNC Intercollegiate Athletics Survey: 2014-15

### 6. Graduate Student-Athlete Admissions Policy

---

6.1. Per UNC Policy 1100.1, each institution shall include in their annual report an "admissions policy for student-athletes".

Does your institution have a specific policy regarding admission of graduate student-athletes?

- If YES, please select this option and provide the URL below (6.2) **OR** upload a file (6.3) with the policy language included.
- If NO, please select this option and move to the next question.
- If OTHER, please select this option and provide further details in the space that appears.

- 
- Yes (please provide the URL or upload a PDF of the policy below)
- No, graduate student-athletes follow the same admission policies as all graduate students
- Other (please explain in the space below)
- 

6.2. Graduate student-athlete admissions policy URL.

- If providing a URL, please ensure that the link points directly to the section on admissions for graduate student-athletes.

---

6.3. If uploading a PDF with your campus policy on Graduate Student-Athlete Admissions, please only include the sections pertaining to graduate student-athletes.

- Please name the uploaded file in the following manner: XXXX\_Grad\_Admissions where XXXX=your campus abbreviation.
  - If there are multiple documents you would like to submit, please combine them into one file before uploading (the survey software only allows for one document to be uploaded in this question).
- 

Drop files or click here to upload

<<

>>



## UNC Intercollegiate Athletics Survey: 2014-15

### 7. Graduate Student-Athlete Exceptions

7.1. Per [UNC Policy 1100.1](#), each institution shall include in their annual report an "admissions policy for student-athletes, including the definitions utilized for exceptions to campus-based criteria".

Does your institution allow for exceptions to the regular admission policy for graduate students?

- If YES, please select this option and provide the URL below (7.2) **OR** upload a file (7.3) with the policy language, including definitions used to allow for exceptions.
- If NO, please select this option and move to the next question.

Yes

No

7.2. Graduate student-athlete exceptions policy URL

- If providing a URL, please ensure that the link points directly to the section on admissions exceptions for graduate student-athletes.

7.3. If uploading a PDF with your campus policy on admissions exceptions for graduate student-athletes, please only include the sections pertaining to graduate student-athletes.

- Please name the uploaded file in the following manner: *XXXX\_Grad\_Exceptions* where *XXXX*=your campus abbreviation.
- If there are multiple documents you would like to submit, please combine them into one file before uploading (the survey software only allows for one document to be uploaded in this question).

Drop files or click here to upload

<<

>>



**UNC Intercollegiate Athletics Survey: 2014-15**

**8. Graduate Student-Athlete Enrollment**

---

8.1. Did your institution have any graduate student-athletes participate in intercollegiate athletics during Fall 2014 or Spring 2015?

---

- Yes
- No

<<

>>



**UNC Intercollegiate Athletics Survey: 2014-15**

8.2. Please enter Fall 2014 and Spring 2015 unduplicated enrollment totals for all graduate students and all graduate student-athletes.

All FERPA guidelines regarding protection of student identity will be followed. Please submit all student information here and when making this information public, UNC-GA will remove any details that could result in the information being identifiable.

	Campus Total
Total number of enrolled graduate students	<input type="text" value="5,589"/>
Total number of enrolled graduate student-athletes	<input type="text" value="11"/>

8.3. Please enter enrollment totals by NCAA sport for graduate student-athletes (GSAs) in Fall 2014 and Spring 2015 by sport.

- If there is no data to report, please enter "0."
- If a GSA participated in more than one sport, please report them for all sports in which they participated.
- If you would like to make any notes about these GSAs, please do so in the text box below.

All FERPA guidelines regarding protection of student identity will be followed. Please submit all student information here and when making this information public, UNC-GA will remove any details that could result in the information being identifiable.

	# of GSAs by sport
Bowling	<input type="text" value="0"/>
Rowing	<input type="text" value="0"/>
Softball	<input type="text" value="0"/>
Women's basketball	<input type="text" value="1"/>
Women's cross-country	<input type="text" value="0"/>
Women's golf	<input type="text" value="1"/>
Women's gymnastics	<input type="text" value="0"/>
Women's ice hockey	<input type="text" value="0"/>
Women's indoor track and field	<input type="text" value="1"/>
Women's lacrosse	<input type="text" value="0"/>
Women's outdoor track and field	<input type="text" value="1"/>
Women's rifle	<input type="text" value="0"/>
Women's skiing	<input type="text" value="0"/>

	# of GSAs by sport
Women's soccer	0
Women's swimming and diving	0
Women's tennis	2
Women's volleyball	0
Women's water polo	0
Baseball	0
Fencing	0
Field hockey	0
Football	5
Men's basketball	0
Men's cross-country	0
Men's golf	0
Men's gymnastics	0
Men's ice hockey	0
Men's indoor track and field	1
Men's lacrosse	0
Men's outdoor track and field	1
Men's rifle	0
Men's skiing	0
Men's soccer	0
Men's swimming and diving	0
Men's tennis	0
Men's volleyball	0
Men's water polo	0
Wrestling	0
<b>Total</b>	<b>13</b>

8.4. Please use the space below if you wish to include any explanations about campus data entered above (including any GSA listed in more than one sport above).

Two GSAs participated in more than one sport.

**9. Graduate Student-Athlete Academic Profile - Revenue Sports**

9.1. Please enter the following academic information for graduate student-athletes (GSAs) in revenue sports at your campus.



# UNC Intercollegiate Athletics Survey: 2014-15

- Enter the number of GSAs in these three sports (same number as entered in the previous section), along with the average undergraduate GPA from previous institutions.
- Please enter duplicate GSA information if students participate in more than one revenue sport.
- Enter "NA" in a cell if there were no **GSAs** in the sport.

UNC-GA will not make any information publicly available that violates FERPA guidelines.

	Total Number of GSAs by Sport	Average Undergraduate GPA
Men's Football	Data Redacted Due to Confidentiality Concerns	
Men's Basketball		
Women's Basketball		

<<

>>



**UNC Intercollegiate Athletics Survey: 2014-15**

**10. Majors of All Student-Athletes**

10.1. Please enter the number of majors for all recruited student-athletes who are enrolled and have achieved at least junior academic standing (including graduate student-athletes) as of Fall 2014.

If any recruited student-athletes are double majors, please report both majors.

- Do not leave any cells blank. If there are no declared majors for a particular discipline, please enter "0" in the cell.

	Declared Majors - Undergraduates	Declared Programs - Graduates
01 - agriculture, agriculture operations, & related sciences	0	0
03 - natural resources & conservation	0	0
04 - architecture & related services	1	0
05 - area, ethnic, cultural, gender, & group studies	0	0
09 - communication, journalism, & related programs	47	0
11 - computer and information sciences & support services	1	0
13 - education	7	3
14 - engineering	4	0
15 - engineering technologies & engineering-related fields	0	0
16 - foreign languages, literatures, & linguistics	0	0
19 - family and consumer sciences / human sciences	2	0
23 - English language and literature / letters	0	0
24 - liberal arts and sciences, general studies, & humanities	4	0
26 - biological & biomedical sciences	6	0
27 - mathematics and statistics	0	0
30 - multi/interdisciplinary studies	1	0
31 - parks, recreation, leisure, & fitness studies	16	0
38 - philosophy & religious studies	1	0
40 - physical sciences	2	0
41 - science technologies / technicians	0	0
42 - psychology	2	0
43 - homeland security, law enforcement, firefighting, & related protective services	16	0

	Declared Majors - Undergraduates	Declared Programs - Graduates
44 - public administration & social service professions	3	0
45 - social sciences	2	0
49 - transportation & materials moving	1	0
50 - visual & performing arts	0	0
51 - health professions & related programs	8	1
52 - business, management, marketing, & related support services	39	2
54 - history	0	0
XX - undecided	0	1
<b>Total</b>	<b>163</b>	<b>7</b>

10.2. Please use the space below if you wish to include any explanations about campus data entered above (including any student-athlete listed in more than one major above).

• Four student-athletes had double majors and both majors were reported. The following list shows the double majors for those students:

Student-Athlete 1    BSBA – Management    BA – Psychology

Student-Athlete 2    BS – Multidisciplinary Studies    BA – Physics





## UNC Intercollegiate Athletics Survey: 2014-15

### 11. Graduation/Academic Success Rate Reports

---

11.1. Please upload your campus' most recent (2005-2008 cohorts) Graduation Success Rate or Academic Success Rate report.

This will not be made public by UNC-GA until the NCAA publishes the information in the fall of 2015.

- Please name the uploaded file in the following manner: XXXX\_GSR.pdf or XXXX\_ASR.pdf where XXXX=your campus abbreviation.

---

ECU\_GSR.pdf

**0.1 MB**

application/pdf

---

<<

>>

# East Carolina University

## FRESHMAN-COHORT GRADUATION RATES

	All Students	Student-Athletes #
2008-09 Graduation Rate	59%	67%
Four-Class Average	59%	66%
Student-Athlete Graduation Success Rate		80%

## 1. Graduation-Rates Data

### a. All Students

	Freshman Rate				Freshman Rate				Freshman Rate			
	Men				Women				Total			
	2008-09		4-Class		2008-09		4-Class		2008-09		4-Class	
	N	%	N	%	N	%	N	%	N	%	N	%
Am. Ind./AN	7	29	40	38	15	40	67	42	22	36	107	40
Asian	39	72	152	61	47	74	181	65	86	73	333	63
Black	197	48	750	50	340	66	1384	60	537	59	2134	56
Hispanic	39	51	132	47	47	57	188	58	86	55	320	53
Nat. Haw./PI	0	-	***	***	0	-	***	***	0	-	***	***
N-R Alien	10	60	32	66	13	62	37	76	23	61	69	71
Two or More	0	-	11	64	0	-	16	81	0	-	27	74
Unknown	122	50	***	***	157	61	***	***	279	56	***	***
White	1495	54	4816	55	1991	63	7103	62	3486	59	11919	59
Total	1909	53	6275	54	2610	63	9444	62	4519	59	15719	59

### b. Student-Athletes

	Freshman Rate						Freshman Rate						Freshman Rate					
	Men						Women						Total					
	2008-09		4-Class		GSR		2008-09		4-Class		GSR		2008-09		4-Class		GSR	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Am. Ind./AN	0	-	***	***	***	***	0	-	***	***	***	***	0	-	***	***	***	***
Asian	0	-	0	-	***	***	0	-	0	-	***	***	0	-	0	-	***	***
Black	9	44	72	57	75	65	5	60	30	53	25	76	14	50	102	56	100	68
Hispanic	***	***	4	25	***	***	***	***	6	83	***	***	***	***	10	60	***	***
Nat. Haw./PI	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
N-R Alien	***	***	9	78	8	88	***	***	6	67	6	100	***	***	15	73	14	93
Two or More	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Unknown	***	***	***	***	4	75	***	***	***	***	8	100	***	***	***	***	12	92
White	22	55	88	61	78	82	24	88	91	79	85	91	46	72	179	70	163	87
Total	35	51	177	60	168	74	34	82	142	74	132	88	69	67	319	66	300	80

c. Student-Athletes by Sport Category

	<b>Baseball</b>				<b>Men's Basketball</b>				<b>Men's CC/Track</b>		
	Freshman Rate				Freshman Rate				Freshman Rate		
	2008-09	4-Class	GSR		2008-09	4-Class	GSR		2008-09	4-Class	GSR
Am. Ind./AN	-	-	-	Am. Ind./AN	-	-	-	Am. Ind./AN	-	-	-
Asian	-	-	-	Asian	-	-	-	Asian	-	-	-
Black	-	-	-	Black	0-a	42-c	64-c	Black	-	47-c	53-c
Hispanic	-	-	-	Hispanic	-	-	-	Hispanic	0-a	0-a	0-a
Nat. Haw./PI	-	-	-	Nat. Haw./PI	-	-	-	Nat. Haw./PI	-	-	-
N-R Alien	-	-	-	N-R Alien	-	-	-	N-R Alien	0-a	0-a	-
Two or More	-	-	-	Two or More	-	-	-	Two or More	-	-	-
Unknown	100-a	100-a	100-a	Unknown	-	-	-	Unknown	-	100-a	100-a
White	33-b	54-e	76-e	White	0-a	0-a	-	White	50-a	67-b	83-b
Total	43-b	55-e	77-e	Total	0-a	38-c	64-c	Total	25-a	48-e	61-e
	<b>Football</b>				<b>Men's Other</b>						
	Freshman Rate				Freshman Rate						
	2008-09	4-Class	GSR		2008-09	4-Class	GSR				
Am. Ind./AN	-	-	100-a	Am. Ind./AN	-	-	-				
Asian	-	-	-	Asian	-	-	-				
Black	50-b	64-e	69-e	Black	100-a	100-a	100-a				
Hispanic	-	-	-	Hispanic	-	50-a	100-a				
Nat. Haw./PI	-	-	-	Nat. Haw./PI	-	-	-				
N-R Alien	-	-	-	N-R Alien	100-a	88-b	88-b				
Two or More	-	-	-	Two or More	-	-	-				
Unknown	-	100-a	100-a	Unknown	-	0-a	0-a				
White	40-a	77-c	88-d	White	88-b	63-e	83-e				
Total	45-c	67-e	75-e	Total	90-b	65-e	83-e				
	<b>Women's Basketball</b>				<b>Women's CC/Track</b>				<b>Women's Other</b>		
	Freshman Rate				Freshman Rate				Freshman Rate		
	2008-09	4-Class	GSR		2008-09	4-Class	GSR		2008-09	4-Class	GSR
Am. Ind./AN	-	-	-	Am. Ind./AN	-	100-a	100-a	Am. Ind./AN	-	-	-
Asian	-	-	-	Asian	-	-	-	Asian	-	-	0-a
Black	50-a	40-c	64-c	Black	100-a	69-c	85-c	Black	-	50-a	100-a
Hispanic	-	-	-	Hispanic	-	50-a	50-a	Hispanic	100-a	100-a	100-a
Nat. Haw./PI	-	-	-	Nat. Haw./PI	-	-	-	Nat. Haw./PI	-	-	-
N-R Alien	-	100-a	100-a	N-R Alien	-	-	-	N-R Alien	50-a	60-a	100-a
Two or More	-	-	-	Two or More	-	-	-	Two or More	-	-	-
Unknown	-	-	-	Unknown	100-a	100-a	100-a	Unknown	100-a	75-a	100-a
White	0-a	50-a	100-a	White	80-a	71-c	71-c	White	94-d	82-e	94-e
Total	40-a	45-d	71-c	Total	86-b	74-e	79-e	Total	91-e	81-e	94-e

Values for N (a. 1-5, b. 6-10, c. 11-15, d. 16-20, e. greater than 20)

## 2. Undergraduate-Enrollment Data (All full-time students enrolled Fall 2014-15)

a. All Students	Men N	Women N	Total N	b. Student-athletes	Men N	Women N	Total N
Am. Ind./AN	51	66	117	Am. Ind./AN	0	3	3
Asian	235	290	525	Asian	1	1	2
Black	1257	1855	3112	Black	89	37	126
Hispanic	507	667	1174	Hispanic	2	0	2
Nat. Haw./PI	12	10	22	Nat. Haw./PI	0	0	0
N-R Alien	38	36	74	N-R Alien	14	14	28
Two or More	267	358	625	Two or More	4	5	9
Unknown	125	152	277	Unknown	2	6	8
White	5370	7500	12870	White	83	88	171
Total	7862	10934	18796	Total	195	154	349

### c. Student-Athletes # By Sports Category

Men	Basketball	Baseball	CC/Track	Football	Other
Am. Ind./AN	0	0	0	0	0
Asian	0	0	0	1	0
Black	10	0	16	61	2
Hispanic	0	0	0	1	1
Nat. Haw./PI	0	0	0	0	0
N-R Alien	1	0	2	0	11
Two or More	0	2	0	1	1
Unknown	0	0	0	1	1
White	2	25	14	20	22
Total	13	27	32	85	38

Women	Basketball	CC/Track	Other
Am. Ind./AN	1	1	1
Asian	0	0	1
Black	10	16	11
Hispanic	0	0	0
Nat. Haw./PI	0	0	0
N-R Alien	1	0	13
Two or More	0	1	4
Unknown	2	1	3
White	1	19	68
Total	15	38	101

#Only student-athletes receiving athletics aid are included in this report.

# Graduation Success Rate Report

## 2005 - 2008 Cohorts: East Carolina University

### Men's Sports

Sport	GSR	Fed Rate
Baseball	77	55
Basketball	64	38
CC/Track	61	48
Fencing	-	-
Football	75	67
Golf	90	75
Gymnastics	-	-
Ice Hockey	-	-
Lacrosse	-	-
Mixed Rifle	-	-
Skiing	-	-
Soccer	-	0
Swimming	75	58
Tennis	91	83
Volleyball	-	-
Water Polo	-	-
Wrestling	-	-
Men's Non-NCAA Sponsor. Sports	-	-

### Women's Sports

Sport	GSR	Fed Rate
Basketball	71	45
Bowling	-	-
CC/Track	79	74
Crew/Rowing	-	-
Fencing	-	-
Field Hockey	-	-
Golf	100	78
Gymnastics	-	-
W. Ice Hockey	-	-
Lacrosse	-	-
Skiing	-	-
Soccer	88	70
Softball	100	92
Swimming	96	92
Tennis	100	75
Volleyball	92	75
Water Polo	-	-
Women's Non-NCAA Sponsor. Sports	-	-



## **INFORMATION ABOUT THE GRADUATION RATES REPORT**

### **Introduction.**

This information sheet and the NCAA Graduation Rates Report have been prepared by the NCAA, based on data provided by the institution in compliance with NCAA Bylaw 18.4.2.2.1 (admissions and graduation-rate disclosure) and the federal Student Right-to-Know and Campus Security Act. The NCAA will distribute this sheet and the report to prospective student-athletes and parents.

The Graduation Rates Report provides information about two groups of students at the college or university identified at the top of the form: (1) all undergraduate students who were enrolled in a full-time program of studies for a baccalaureate degree; and (2) student-athletes who received athletics aid from the college or university for any period of time during their entering year. [Note: Athletics aid is a grant, scholarship, tuition waiver or other assistance from a college or university that is awarded on the basis of a student's athletics ability.]

The report gives graduation information about students and student-athletes entering in 2008. This is the most recent graduating class for which the required six years of information is available. The report provides information about student-athletes who received athletics aid in one or more of eight sports categories: football, men's basketball, baseball, men's track/cross country, men's other sports and mixed sports, women's basketball, women's track/cross country and other women's sports. For each of those sports categories, it includes information in six self-reported racial or ethnic groups: American Indian or Alaska Native, Asian, Black or African-American, Hispanic or Latino, Native Hawaiian or Pacific Islander, nonresident alien, two or more races, White or non-Hispanic and unknown (not included in one of the other eight groups or not available) and the total (all nine groups combined).

A graduation rate (percent) is based on a comparison of the number (N) of students who entered a college or university and the number of those who graduated within six years. For example, if 100 students entered and 60 graduated within six years, the graduation rate is 60 percent. It is important to note that graduation rates are affected by a number of factors: some students may work part-time and need more than six years to graduate, some may leave school for a year or two to work or travel, some may transfer to another college or university or some may be dismissed for academic deficiencies.

Two different measures of graduation rates are presented in this report: (1) freshman-cohort rate; and (2) Graduation Success Rate (GSR). The freshman-cohort rate indicates the percentage of freshmen who entered during a given academic year and graduated within six years. The GSR adds to the first-time freshmen, those students who entered midyear, as well as student-athletes who transferred into an institution and received athletics aid. In addition, the GSR will subtract students from the entering cohort who are considered allowable exclusions (i.e., those who either die or become permanently disabled, those who leave the school to join the armed forces, foreign services or attend a church mission), as well as those who left the institution prior to graduation, had athletics eligibility remaining and would have been academically eligible to compete had they returned to the institution.

### **Graduation Rates Report.**

1. Graduation Rates Data. The box at the top of the Graduation Rates Report provides freshman-cohort graduation rates for all students and for student-athletes who received athletics aid at this college or university. Additionally, this box provides GSR data for the population of student-athletes. [Note: Pursuant to the Student-Right-to-Know Act, anytime a cell containing cohort numbers includes only one or two students, the data in that cell and one other will be suppressed so that no individual can be identified.]

a. All Students. This section provides the freshman-cohort graduation rates for all full-time, degree-seeking students by race or ethnic group. It shows the rate for men who entered as freshmen in 2008-09, and the four-class average, which includes those who entered as freshmen in 2005-06, 2006-07, 2007-08 and 2008-09. The same rates are provided for women. The total for 2008-09 is the rate for men and women combined and the four-class average is for all students who entered in 2005-06, 2006-07, 2007-08 and 2008-09.

b. Student-Athletes. This section provides the freshman-cohort graduation rates and also the GSR for student-athletes in each race and ethnic group who received athletics aid. Information is provided for men and women separately and for all student-athletes.

c. Student-Athletes by Sports Categories. This section provides the identified graduation rates as in 1-b for each of the eight sports categories. (The small letters indicate the value of N).

## 2. Undergraduate Enrollment Data.

a. All Students. This section indicates the number of full-time, undergraduate, baccalaureate, degree-seeking students enrolled for the 2014 fall term and the number of men and women in each racial or ethnic group.

b. Student-Athletes. This section identifies how many student-athletes were enrolled and received athletics aid for the 2014-15 academic year and the number of men and women in each racial or ethnic group.

c. Student-Athletes by Sports Categories. This section provides the enrollment data as identified in 3-b for each of the eight sports categories.



## UNC Intercollegiate Athletics Survey: 2014-15

### 12. Academic Integrity Regulations

---

12.1. Per UNC Academic Integrity Regulation ([700.6.1\[R\]](#)) and Guidelines ([700.6.1.1\[G\]](#)), please provide information for the following questions related to academic integrity.

Student-athlete data for 12.2., 12.3., and 12.4. in this section should include Summers I and II 2014, Fall 2014, and Spring 2015.

Question 12.5. asks for Spring 2015 data only.

---

<<

>>



**UNC Intercollegiate Athletics Survey: 2014-15**

**Review of Course Clustering**

12.2. Please provide a summary of findings for the analyses of student-athlete clustering in course sections.

- See [UNC Policy 700.6.1.1\[G\]](#) Sections V.A.1 and V.A.2
- Please note that [UNC Policy 700.6.1.1\[G\]](#) states that all course sections flagged will be reviewed using the following analyses:
  - Grade distribution between student-athletes and non-student-athletes in flagged sections.
  - Grade distribution between flagged sections and non-flagged sections of the same course.
  - Review of transcript of any student-athlete who enrolls in more than three flagged sections per academic year (including summers).

	Total
Number of sections flagged	135
Number of sections found to be irregular	0

12.2.1. If you have a section (or sections) flagged as "irregular," please upload a short description on the process, findings, and corrective action (if appropriate) taken regarding the analysis of course sections (no more than 500 words).

Provide one summary per section flagged as irregular.

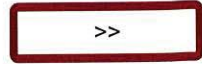
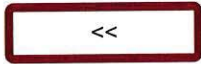
Please combine all documents into one PDF and upload it below.

- Please name the uploaded file in the following manner: *XXXX\_Irregularities\_Flagged* where *XXXX*=your campus abbreviation.

ECU\_Irregularities.docx

**0.1 MB**

application/vnd.openxmlformats-officedocument.wordprocessingml.document



## Course Clustering Review Process

A review team designated by the chancellor conducts an audit of student-athlete course enrollment for each term (summer, fall and spring). The review team consists of the Executive Director for the Office of Internal Audit, the Associate Provost for Enrollment Services and the Director of Student Development.

For the audit, three separate reports are generated for the term under review:

- 1) Grade Distribution Comparison Report – This report provides all classes with student-athlete enrollment and lists data by Instructor, Subject, Course Number, Course Section and Title. The data provides the total students vs. student-athletes enrolled, along with a breakdown of those numbers by letter grade (A, B, C, D, F, Incomplete). The report also provides the total percentage of student-athletes in each course as well as the percentage of student-athletes in each grade category for each course.
- 2) Student-Athlete Individual Grades Report – This report provides the individual semester course grades for each student-athlete and is used for a more detailed analysis of concerns raised from review of the Grade Distribution Comparison Report.
- 3) Flagged Course Composite by Individual – This report lists student-athletes who were enrolled in three or more flagged courses (courses with 20% or higher student-athlete enrollment) within an academic year (summer, fall and spring). The report also provides detailed grade information on each course.

Each reviewer audits the above reports independently. The reviewers then meet to discuss areas of concern and identify any irregularities.

Courses with a student-athlete enrollment of 20% or higher are identified as flagged and are examined in detail. Both the total number of students enrolled and the number of sections offered for the specific course are considered in the review.

All course sections, flagged and non-flagged, are reviewed for student-athlete grade distribution. Courses with a higher number of "A"s for student-athletes than for the general student enrollment are examined in more detail and the student-athlete individual grade report, when necessary, is used in the analysis. The grade distribution in these courses is compared to all other sections of the same course to determine if an irregularity exists.

As part of the course clustering process, the review team also performs a transcript audit of any student-athlete enrolled in three or more flagged courses.

Additionally, a review of independent study classes is also conducted. The Director of Student Development reviews each course labeled as directed readings or independent study and investigates the reasons for student-athlete enrollment. Each is discussed during the course audit with the review team.

Findings from the audit are included in the Student-Athlete Course Audit Report for the specific term(s) and shared with the Chancellor, Provost, Board of Trustees Athletics Committee, Faculty Athletics Representative, Director of Athletics, and the University Athletics and Academic Success Committees.



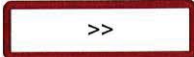
### UNC Intercollegiate Athletics Survey: 2014-15

12.5. Please provide the results of your campus analysis of Average Cumulative Student-Athlete GPA and Average Cumulative Non-Student Athletes GPA (see [UNC Regulation 700.6.1\[R\]](#)).

This comparison is for **Spring 2015 only**.

- ***Please exclude graduate student athletes in this comparison.***

	Average Cumulative GPA for <b>Spring 2015 only</b> .
Student-Athlete GPA - Spring 2015	<input type="text" value="2.91"/>
Non-Student Athlete GPA - Spring 2015	<input type="text" value="2.90"/>





## UNC Intercollegiate Athletics Survey: 2014-15

### 13. Other Athletics Related Reporting Requirements

---

13.1. Please upload an explanation of your institution's reporting structure for athletics compliance and whether and to whom the athletics compliance director reports outside of the department of athletics (see [UNC Policy 1100.1.1\[R\]](#)).

- If there has been no change to the reporting structure from what was reported last year, please enter "no change to reporting structure" in the box below.

---

13.2 Please name the uploaded file in the following manner: XXXX\_Reporting\_Structure where XXXX=your campus abbreviation.

- If there are multiple documents you would like to submit, please combine them into one file before uploading (the survey software only allows for one document to be uploaded in this question).
- 

ECU\_Reporting\_Structure.pdf

**38.2 KB**

application/pdf

---

13.3. Please upload a document containing any especially effective practices employed at your institution that reinforce the integral connection between academics and athletics (see [UNC Policy 1100.1.1\[R\]](#)).

- Please name the uploaded file in the following manner: XXXX\_Effective Practices where XXXX=your campus abbreviation.
  - If there are multiple documents you would like to submit, please combine them into one file before uploading (the survey software only allows for one document to be uploaded in this question).
- 

ECU\_Effective Practices.docx

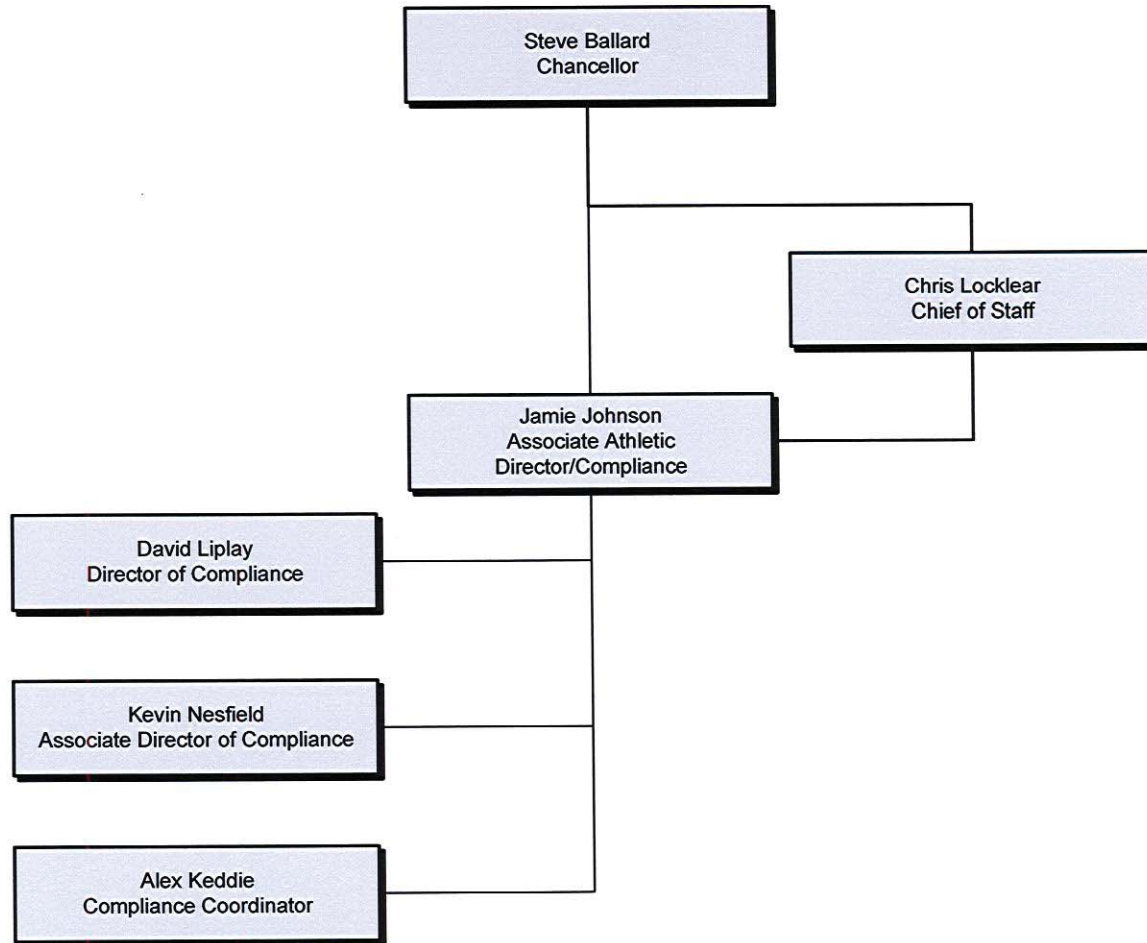


**27.1 KB**

application/vnd.openxmlformats-officedocument.wordprocessingml.document

<<

>>



Under the leadership of Chancellor Steve Ballard attention to the connection between the academic mission of ECU, the success of our student-athletes and the success of our athletic program have been a major focus. This document contains materials which have been previously shared in earlier surveys in addition to those effective practices ECU employs multiple structures across the university to include many leadership, faculty and governance groups.

Chancellor's Compliance Luncheon. Periodically throughout the academic year the Chancellor convenes a group of faculty and administrators composed of himself, Provost, Chief of Staff, Director of Athletics, Associate Athletic Director of Compliance, Executive Director Internal Audit, Assistant Vice Chancellor for Enterprise Risk Management, Faculty Athletics Representative, and Associate Provost for Enrollment Services. The purpose of these meetings is to review any potential or identified issues with academics and compliance issues.

University Athletics Committee. The University Athletics Committee is a standing Faculty Senate Committee composed of 8 faculty members, ex-officio members appointed by the Chair of the Faculty, the Faculty Athletics Representative, the President of the Student Government Association, the President of the Alumni Association, and the President of the Pirate Club. Additional ex-officio members are appointed to represent, the Chancellor, the Provost, the Director of Athletics, the Assistant Director of Athletics for Student Development, the Director of Compliance, the Chair of the University Foundations Curriculum and the President of the Student Athletic Advisory Council. This committee is charged with providing oversight in the area of academic integrity, compliance with NCAA rules and regulations, and the overall development of student athletes. This committee is a value resource for the university administration in examining issues related to the committee's charge and engaging faculty members in those activities.

The third component of ECU's tools to provide a strong connection between academics and athletics is the Academic Success Committee. The Academic Success committee is a committee appointed by the Chancellor and is composed of the Faculty Athletics Representative, three faculty members, the Provost, the Vice Chancellor for Student Affairs, the Associate Athletics Director for Compliance, the Senior Women's Administrator, the Director of Athletic Student Development, one coach and the Associate Provost for Enrollment Services. This committee is charged with the following:

"The purpose of the Academic Success Committee (ASC) is to protect and enhance the academic integrity of all 19 athletic programs and to promote the academic success of all student athletes participating in these programs. "Academic success" is much more than eligibility...it is progress towards a degree, a grade point average that creates future opportunities and the skills and competencies that prepare student athletes for the twenty-first century.

The ASC is advisory to the Chancellor and can make recommendations regarding any issue the committee deems important to academic integrity and success of the student athlete. Among the specific topics that the ASC is expected to address are:

- Team APR and how to ensure all sports stay above 925;
- Best practices for academic support, tutoring, class attendance, and study hall attendance;
- Housing of student athletes;
- Eligibility waivers for student athletes, with the expectation that eligibility is earned in the classroom;
- Sanctions for conduct problems, with special attention to arrests and convictions; and
- Others to be determined.

East Carolina University is committed to supporting all our students, including student-athletes to ensure a smooth transition from high school or community college to our campus. With the combination of the Starfish early warning system, a comprehensive summer orientation program and access to a Freshman Seminar, ECU strives to provide for a seamless transition from orientation through graduation. One of ECU's strategic goals is to increase retention and ultimately graduation by building a strong foundation of academic skills in the student's first year.

The following programs apply to all student-athletes throughout their tenure:

#### Monitoring Class Performance

University Starfish Alerts – The University's early alert system for academic performance allows faculty to "raise flags" regarding class attendance and academic performance. Requests for alerts are sent to faculty by university administration three times a semester. Major advisors, athletic academic coordinators and the students receive the alert emails.

Student-Athlete Progress Reports – The Office of Student Development sends an academic progress report request to faculty twice a semester. In this request, faculty are asked to report the number of absences for each student-athlete enrolled in their courses and course grade information including homework, quiz, project and test grades as well as current overall current course grade.

Mandatory Class Attendance Policy – The athletic department attendance policy requires all student-athletes to attend and be on time for every class. Failure to meet academic expectations as it pertains to class attendance results in specific disciplinary action. Following is the policy in full:

#### ATHLETICS DEPARTMENT CLASS ATTENDANCE POLICY

The Athletics Department has an obligation to every students-athlete, the student-athlete's family, and our university's integrity to insure that ECU student-athletes have the very best opportunity to achieve academic success. In order to meet this obligation, GRADUATION MUST BE EVERY STUDENT-ATHLETE'S, EVERY COACH'S, EVERY ADMINISTRATOR'S TOP PRIORITY.

To pursue success in athletics, student-athletes must attend and be on time for every practice and meeting while respecting the team's policies and procedures as well as individual teammates and coaches. That is also the expectation for student-athletes academically – to attend and be on time for every class and academic appointment while respecting the university's policies and procedures as well as their individual classmates, professors and academic coaches.

To maintain focus on this top priority, the Athletics Department has implemented several policies to assist in the monitoring of each student-athlete's progress.

#### CLASS ATTENDANCE

Regular attendance in class sessions is a critical component of a student-athlete's academic progress and success. This class attendance policy requires student-athletes to attend classes daily and complete all assigned academic work to avoid academic failure. Student-athletes must be on time for their classes and prepared with all necessary textbooks and course assignments.

To assist the student-athlete in complying with this policy, the following procedures will be implemented:

- Within the first week of each semester, student-athletes will communicate with their individual course instructors regarding class sessions that will be missed as a result of team travel. During this time, each student-athlete should present his/her instructor with a copy of the "team travel letter" provided by the

Office of Student Development. Student-athletes must make arrangements with instructors for completing any missed work and must communicate any changes in their travel schedule to instructors as soon as possible.

- A student-athlete will be considered absent if he/she is not present when the class is checked. The student-athlete is responsible for reporting each missed class and late arrival in class to their assigned coach and the Office of Student Development.
- Class attendance will also be monitored through direct communication with professors and through progress reports. Students are to arrive on time for each class and to remain for the duration of class.
- Other than team-related travel, excused absences are based on the University's attendance policy. If a student-athlete is ill and unable to attend class or a scheduled academic appointment, he/she is expected to contact his/her athletic trainer and academic coordinator immediately. If a student-athlete has a family emergency, he/she should contact his/her assigned coach and his/her athletics academic coordinator.
- A head coach may impose additional penalties for unexcused absences as long as the penalties are provided in writing and are distributed to all student-athletes at the beginning of each academic year. The head coach must also provide a copy of the additional penalties to his/her sport administrator.
- Student-athletes should also be mindful that some academic departments have a much stricter unexcused absence policy. It is the responsibility of the student to know and adhere to each academic department's policy in addition to the Athletics Department's policy on class attendance.

Failure to meet academic expectations as it pertains to class attendance will result in specific actions.

#### DISCIPLINARY ACTIONS

This policy applies to all terms including summer.

- **1 Unexcused Absence:**
  - E-mail warning from the sport administrator to coach and student-athlete.
  - Parents may be notified.\*
- **2 Unexcused Absences in the same class:**
  - E-mail warning from the sport administrator to coach and student-athlete.
  - Miss the next practice session.
  - Parents may be notified.\*
- **3 Unexcused Absences in the same class:**
  - E-mail from sport administrator to student-athlete, coach.
  - Suspension from next scheduled competition.
  - Parents will be notified informing them about the sanctions for the next two violations, e.g. suspension from additional competitions and possible scholarship cancellation.\*
- **4 Unexcused Absences in the same class:**
  - Suspension from next competition(s) as follows:
    - 1 competition – cross country, football, golf, soccer, swimming, track
    - 2 competitions – basketball, tennis, volleyball
    - 3 competitions – baseball, softball
  - E-mail from sport administrator to student-athlete and coach.
- **5 Unexcused Absences in the same class:**
  - Suspension for the remainder of season (practice and competition).
  - May result in cancellation of scholarship for next semester (Letter sent from the Director of Athletics).

- o Meeting occurs with student-athlete, sport administrator, coach, Assistant Athletics Director for Student Development.

#### NOTES:

- o Three tardies in the same class equals one absence.
- o Student-athletes are allowed to appeal a reported absence according to the procedures outlined in the *System for Monitoring Student-Athlete Attendance*. Students who falsify an appeal will have their appeal denied and will receive two levels of disciplinary action – one for the missed class and one for fabrication and falsification of the appeal.
- o Missed classes accumulate within each semester (fall semester; spring semester). For summer session I and summer session II, the count will start over for each session.
- o If the maximum violation occurs in the fall semester, then the scholarship may be revoked for the following spring semester.
- o If the maximum violation occurs in the spring semester, then the scholarship may be revoked for the following summer session.
- o If the maximum violation occurs in the summer session, then the scholarship may be revoked for the following fall semester.

#### PROCESS

The athletics department uses three primary methods for monitoring the class attendance of its student-athletes as follows:

1. University Starfish Alerts
2. Student-Athlete Progress Reports
3. Athletics Department Class Checkers

In addition, the department may use any other credible reporting sources in determining student-athlete class attendance.

The communication process for reporting student-athlete absences is outlined in the *System for Monitoring Student-Athlete Attendance* document and is provided to all head coaches and sport administrators.

\* Student-athletes should complete the Buckley/FERPA form on OneStop to authorize parent(s) and/or third parties to have access to and inquire about their attendance record at ECU. Four options are available and the student-athlete may choose any combination (Academic, Financial, Judicial and Other). If "Other" is selected, the student-athlete must enter specific records they are authorizing.

In addition to the above measures the freshmen experience program is required of all freshmen student-athletes.

#### The Freshmen Experience Program

The freshmen experience program focuses on providing the freshmen student-athlete with a first year program that centers on the student's transition from high school to college. Freshmen student-athletes participate in the following first year programs related to academic success:

**Freshmen Orientation** – All freshmen student-athletes attend a half-day orientation program the day before fall classes begin. Topics covered include: academic integrity, classroom expectations, appreciating diversity, campus life, and codes of conduct.

**Academic Screenings** – Academic screenings are provided to those freshmen student-athletes identified as high risk based on their admissions data. Student-athletes may also be referred for screenings by their academic coordinator based on the student's current academic performance. These screenings are used to identify potential

problem areas related to learning/college transition. Based on the screening results, the learning specialist develops a success plan for the student to best meet the student's individual needs.

Academic Integrity Education Program – All entering freshmen are administered the Academic Integrity Quiz at the beginning of their first term of enrollment. This initial quiz is designed as a pre-test to determine the incoming student-athlete's knowledge of the academic integrity policies of East Carolina University and the NCAA. Students who score less than 100% on their first attempt are required to attend an educational seminar. Those student-athletes are then retested. Students who score below 95% on the post-test are then required to meet one-on-one with their academic coordinator to review the principles of academic integrity. Those students then sign a form indicating their understanding of the principles.

Freshmen Study Hall and FAST (Freshmen Academic Success Training) Programs – All freshmen attend an objectives-based study hall program designed to instill the habits of time management, prioritization and goal setting. Each week student-athletes set the academic objectives that they will complete that week based on their course syllabi schedules. Objectives are reviewed by study hall leaders and approved as satisfactory and then when completed. In addition to setting and completing objectives, students participate in weekly FAST seminars during study hall. FAST topics include: learning styles, reading a textbook, test anxiety, staying motivated and note-taking skills. Tutors and academic mentors are also available during the study hall.

Weekly Academic Meetings – All freshmen are required to have a weekly academic meeting with their academic coordinator where current academic status is discussed as well as ways to improve.

#### PROCESS FOR ADMITTING STUDENT-ATHLETES WITH SPECIAL TALENT WAIVERS

The Chancellor has delegated much of the authority to the Academic Success Committee (ASC) to determine admission decisions on student-athletes requesting a Special Talent Waiver. The Chancellor reserves the right to overrule all admission decisions made by the ASC as indicated in the policy below. The complete process follows:

1. The need for a Special Talent Admission request will be determined through the Preliminary Evaluation Process completed by the Office of Compliance in conjunction with the Office of Admissions.
2. **All Special Talent Admissions Requests will be reviewed by the Academic Success Committee (ASC).** The ASC, appointed by the Chancellor, is chaired by the Faculty Athletics Representative and meets once a month. The committee is comprised of four (4) faculty members, four (4) athletic administrators, three (3) academic administrators, and one (1) head coach.
3. Once a prospective student-athlete (PSA) has been identified as a Special Talent scenario, the coach will initiate the process by submitting the "Special Talent Admissions Request Checklist" to the Office of Compliance. To note, Sport Administrator approval is required for all Special Talent Requests.
4. The Office of Compliance will confirm the PSA has a complete admissions file (e.g. high school transcripts, test scores, application, application fee, etc.). A Special Talent Request will not move forward until a PSA has a complete admissions file.

5. The Office of Compliance will create the "Special Talent Admissions Request Packet." This packet will include the following:

Documents included for a FRESHMAN:

- The Projected Grade Point Average (PGA) from Banner;
- Copies of transcripts from ALL institutions attended;
- Copies of ALL test scores; and
- Copy of the Preliminary Evaluation.

Documents included for a TRANSFER:

- Copies of transcripts from all institutions attended;
- Copies of all test scores (if applicable);
- Completed TRACER from all institutions attended;
- Completed Transfer Assessment Form; and
- Copy of the Preliminary Evaluation, which will include the transfer GPA.

6. The Office of Compliance will provide the Head Coach the "Special Talent Admissions Packet" to be reviewed and signed by Jeff Compher.
7. The Head Coach will work directly with the Office of Compliance to provide the required documentation to the ASC for review.
8. Once a decision is made by the Academic Success Committee, the ASC Designee will sign the form and return to the Office of Compliance.
9. The Office of Compliance will provide the form to the Office of Admissions who will then update Banner to reflect the decision rendered. Once this update is made, the Office of Admissions will notify the Office of Compliance in writing.
10. If a prospective student-athlete falls under one of the following categories, the sport must present additional documentation for review by the ASC:
  - Students with a PGA below a 2.10;
  - Students who are projected or deemed nonqualifiers;
  - Transfer students with a transfer GPA of 2.100 or lower; or
  - Students who will need a NCAA/Conference USA waiver to be eligible.

**Guidelines for Special Talent Admissions Requests & Reviews Requiring Additional Documentation:**

11. Each sport submitting a Special Talent Admissions Request will be subject to an APR analysis as defined by the Academic Success Committee. This analysis will be conducted by designated committee members using methodology designed to obtain a projection of the team's APR for the subsequent academic year; no sport with an APR below the NCAA minimum will be allowed a Special Talent Waiver.
12. Each sport will be subject to an historical review of the success of prior students admitted via the special talent process. This information will be used by the Academic Success Committee to determine whether the PSA should receive a Special Talent Admissions Acceptance. For example, if the requesting sport has not been able



to graduate their student-athletes admitted through this process and at a rate commensurate with their overall graduation rate, this information will be considered by the committee in making their final admission decision.

13. Sports that have a prospective student-athlete fall into one or more of the categories listed above, must present the following items of support:
  - A written statement from the ECU head coach to justify why ECU should take a risk on the applicant;
  - A written statement from the applicant describing his or her academic goals, life plans and any special, mitigating or extenuating circumstances related to the applicant's poor academic record; and
  - A letter from a high school teacher and/or guidance counselor describing the applicant's commitment to academics and his or her belief that the applicant can successfully complete college level work and earn a degree from ECU.
  
14. After reviewing the applicant's complete file and supporting documents, the committee votes on whether to grant the applicant special admission status. The committee's recommendation is communicated to the Chancellor for consideration by the committee chair. To note, the Chancellor retains the right to overrule all admission decisions.



## UNC Intercollegiate Athletics Survey: 2014-15

### 14. "Booster" Club Related Reporting Requirements

---

The following three items are related to "booster" club organizations and are required [UNC Regulation 1100.1.1\[R\]](#).

---

14.1. Please upload the most recent financial information provided to your Board of Trustees regarding "booster" club activities. If there are multiple documents, please combine them into one PDF file and upload that below.

- Please name the uploaded file in the following manner: XXXX\_Booster\_Financials where XXXX=your campus abbreviation.
- 

ECU\_Booster\_Financials.pdf

**0.3 MB**

application/pdf

---

14.2. Please provide the URL to OR upload of your "booster" club's operating procedures. These policies were required to be in place by January 1, 2015 per policy. If there are multiple documents, please combine them into one PDF file and upload that below.

---

**OR**

---

ECU\_Booster\_Operating\_Procedures.pdf

0.4 MB

application/pdf

---

14.3. Please upload a PDF copy of the most recent annual audit review of your "booster" club organization. If there are multiple documents, please combine them into one PDF file and upload that below.

- *Please name the uploaded file in the following manner: XXXX\_Booster\_Audit where XXXX=your campus abbreviation.*
- 

Drop files or click here to upload

<<

>>

EAST CAROLINA UNIVERSITY  
EDUCATIONAL FOUNDATION, INC.

Financial Statements

June 30, 2014 and 2013

**EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.**

Table of Contents

	<b>Page(s)</b>
Management’s Discussion and Analysis .....	1 - 5
Independent Auditors’ Report.....	6 - 7
Financial Statements:	
Statements of Financial Position.....	8
Statements of Activities .....	9 - 10
Statements of Cash Flows .....	11
Notes to Financial Statements.....	12 - 27



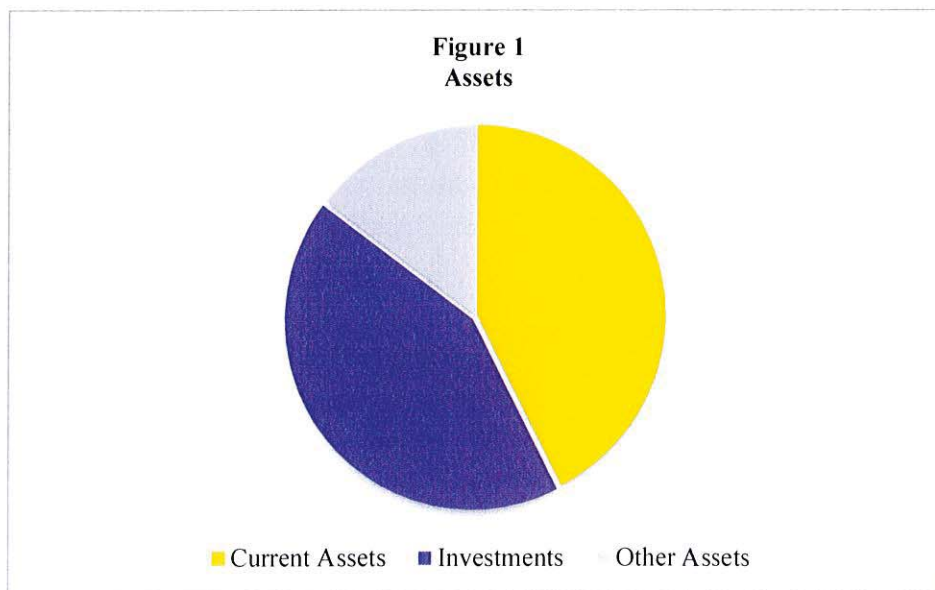
## Management's Discussion and Analysis

November 25, 2014

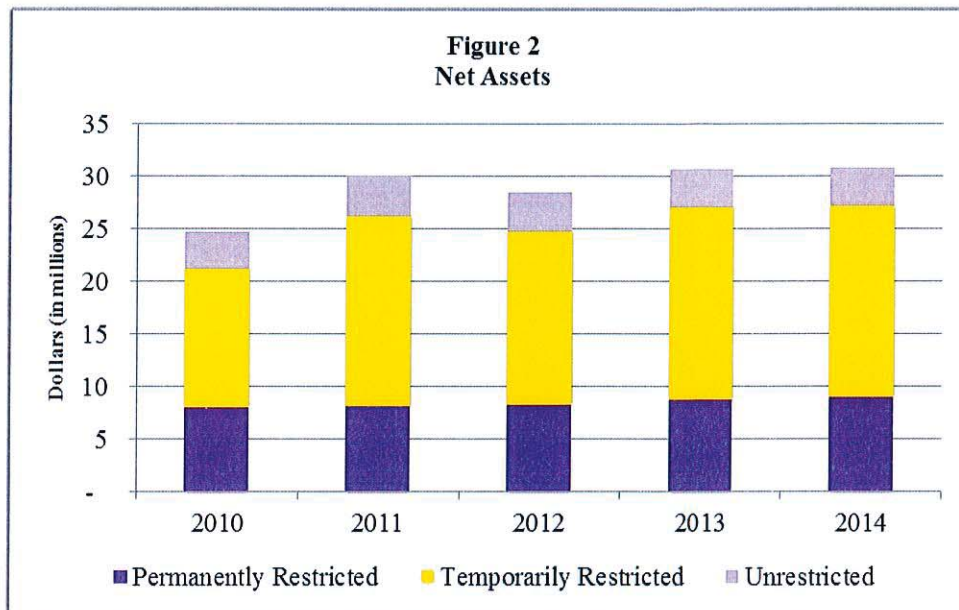
The East Carolina University Educational Foundation, Inc. (the "Foundation"), is a 501(c)(3) organization whose mission is to be the friend-raising and fund-raising arm of East Carolina University's Division I athletics program. The attached financial statements, audited by the firm of Dixon Hughes Goodman LLP, received an unmodified opinion. The unmodified opinion from our auditors reflects the commitment of our volunteers and staff to stewarding the Foundation's resources in a responsible manner while fulfilling the Foundation's mission with honesty and integrity and in compliance with the rules and regulations that govern its operations.

As the financial statements illustrate for the fiscal year ended June 30, 2014, an increase in both contributions revenue and investment returns coupled with an increase in program services resulted in virtually no change in net assets. The following graphs summarize the financial results for the year ended June 30, 2014.

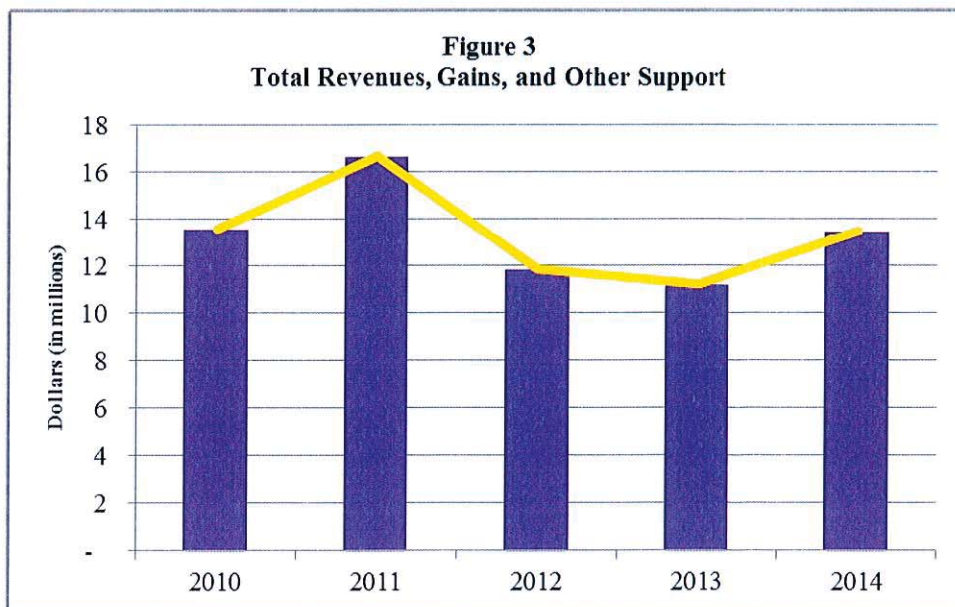
Total assets of the Foundation at June 30, 2014 were \$31.4 million. The Foundation's current assets and investments represented an equal percentage of the Foundation's assets at the end of the fiscal year (see Figure 1).



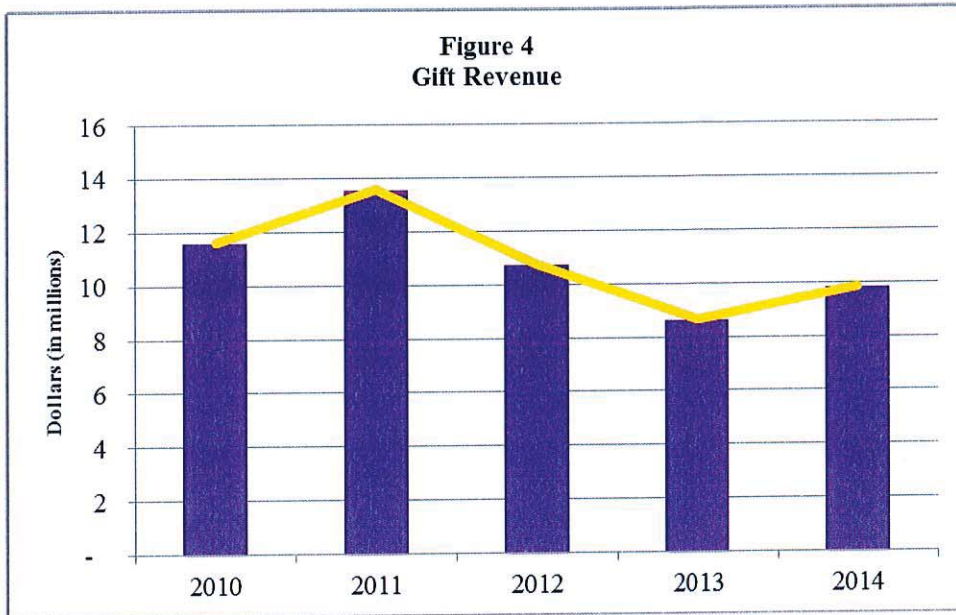
The Foundation's ending total net assets of \$30.8 million increased 0.2% from the prior year's ending net assets (see Figure 2).



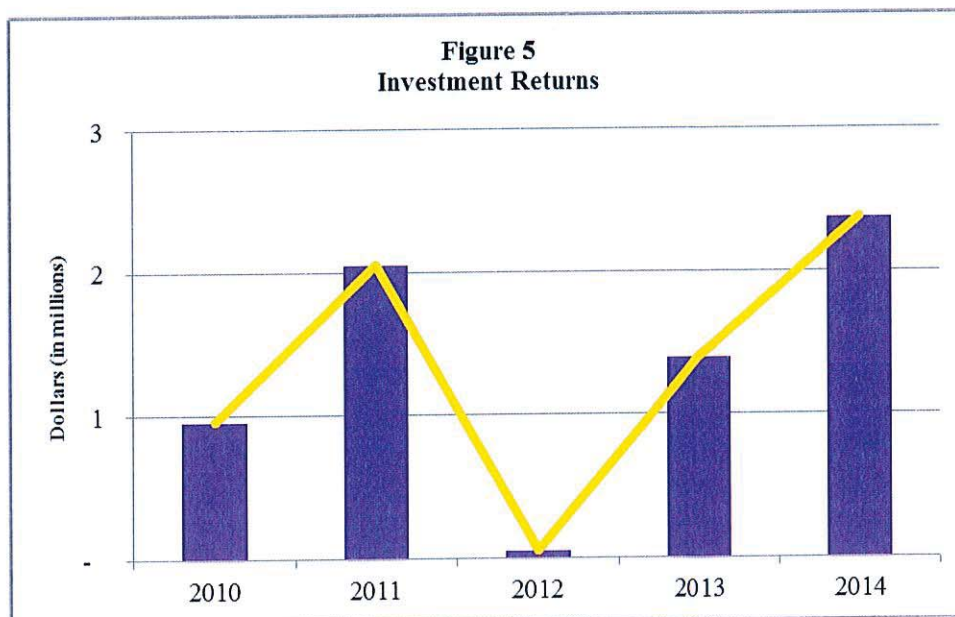
The total revenues, gains, and other support received by the Foundation during the year was \$13.5 million. As illustrated by Figure 3, the change in total revenues represented a 20% increase from the previous year's total revenue of \$11.2 million. This was primarily due to an increase in gift revenue and in investment returns for the current year compared to the prior year.



Gifts to the Foundation for fiscal year 2014 totaled \$9.9 million, an increase of 14% from the prior year (see Figure 4).

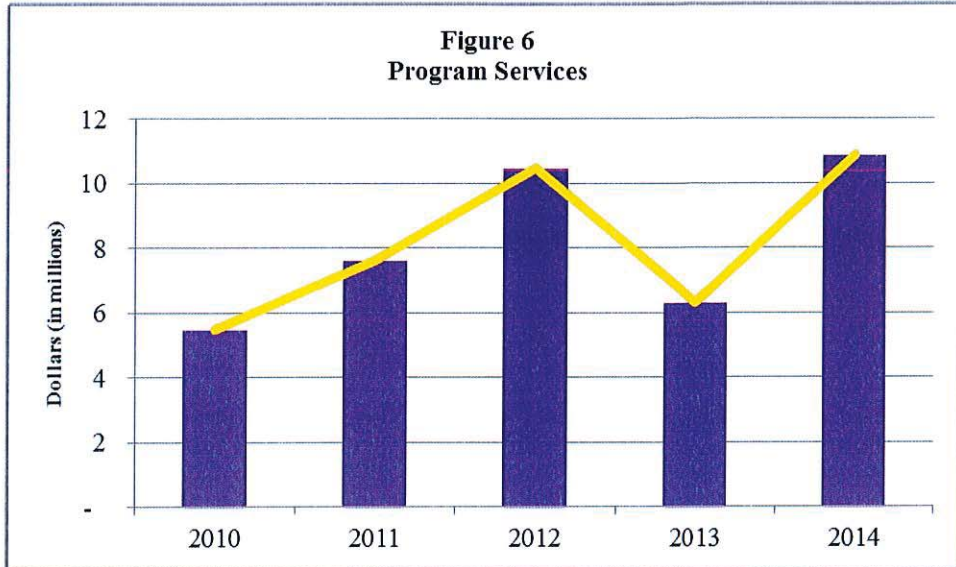


Investment returns for the fiscal year ended June 30, 2014 represent 17.6% of the Foundation's total revenues compared to 12.5% for the year ended June 30, 2013. As shown in Figure 5, the Foundation's investment returns have sustained a positive return and have increased by approximately \$1 million from the previous fiscal year.

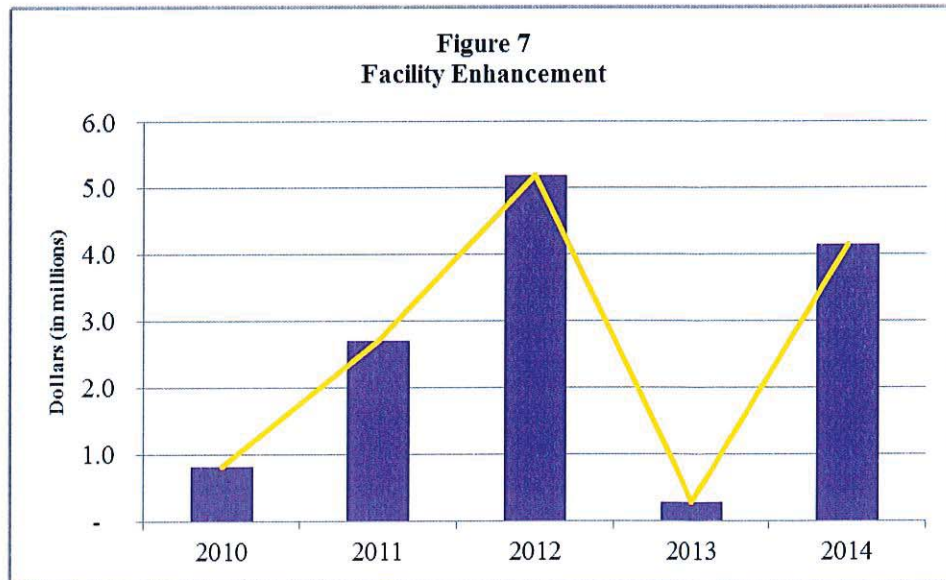




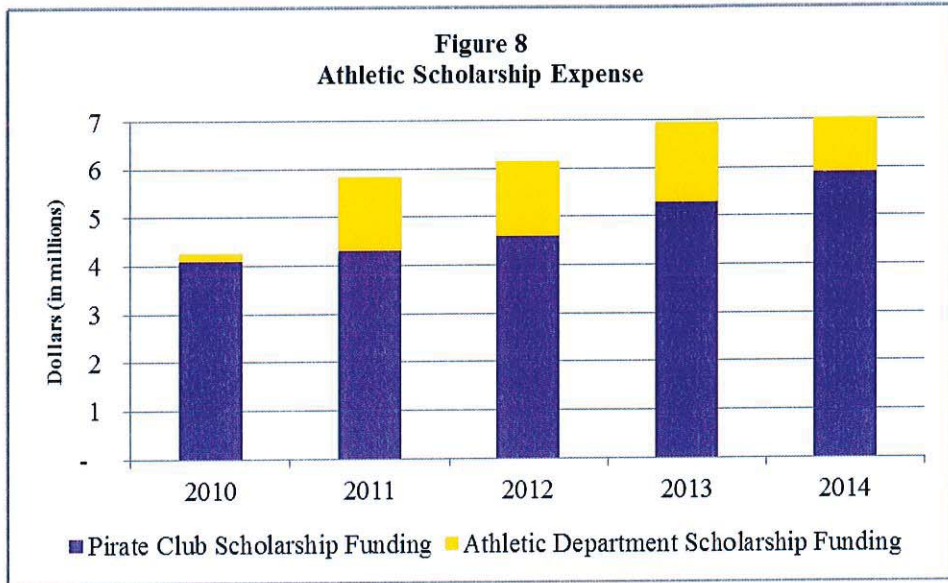
A major focus of the Foundation is to raise, manage, and provide private resources for program services for the student athletes of East Carolina University. The Foundation provided \$10.8 million in program services for the fiscal year ended June 30, 2014 (Figure 6).



The increase in total program services in fiscal year 2014 is a result of an increase in facility enhancement expenses. Facility enhancement expenses totaled approximately \$4.1 million in fiscal year 2014. The significant increase in facility enhancement expense was due to payments for the construction of the auxiliary gym facility.



Scholarship support is a key component of the program service support provided by the Foundation. The scholarship support for the fiscal year ended June 30, 2014 set a new record at \$5.9 million. Total athletic scholarship expense paid by the East Carolina University athletic department was \$7.1 million. The chart below indicates total scholarship cost and the portion funded by the Foundation (see Figure 8).



The Foundation is a vibrant, forward looking organization committed to playing a significant role in the future development of the University athletic program. The financial information that follows illustrates the Foundation is well positioned to fulfill its commitments both today and in the future.

If you have any questions, please contact us.

J. Batt  
Executive Director

Frederick Niswander  
Executive Treasurer  
Vice Chancellor for Administration & Finance,  
East Carolina University



**DIXON HUGHES GOODMAN** LLP  
Certified Public Accountants and Advisors

## **Independent Auditors' Report**

Board of Directors  
East Carolina University Educational Foundation, Inc.  
Greenville, North Carolina

We have audited the accompanying financial statements of East Carolina University Educational Foundation, Inc. (the "Foundation"), which comprise the statements of financial position as of June 30, 2014 and 2013, and the related statements of activities and cash flows for the years then ended, and the related notes to the financial statements.

### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Foundation as of June 30, 2014 and 2013, and the changes in its net assets and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

*Supplemental Information*

Our audits were conducted for the purpose of forming an opinion on the basic financial statements as a whole. Management's Discussion and Analysis is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United State of America, which consisted of inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquires, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

*Dixon Hughes Goodman LLP*

November 25, 2014

**EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.**

Statements of Financial Position

June 30, 2014 and 2013

	<u>2014</u>	<u>2013</u>
	<b><u>Assets</u></b>	
Current assets:		
Cash	\$ 9,300,320	\$ 10,372,147
Current portion of unconditional promises to give, net (Note 2)	4,050,123	3,613,226
Prepaid expenses	2,400	600
Other receivables (Note 9)	<u>7,528</u>	<u>4,086</u>
Total current assets	<u>13,360,371</u>	<u>13,990,059</u>
Investments:		
Investments (Notes 3 and 4)	13,189,554	11,252,492
Real estate held for investment (Notes 4 and 5)	<u>221,252</u>	<u>221,252</u>
Total investments	<u>13,410,806</u>	<u>11,473,744</u>
Leasehold improvements, net of amortization of \$150,966 and \$127,198 for 2014 and 2013, respectively (Note 12)	<u>130,442</u>	<u>154,210</u>
Other assets:		
Life insurance policy - cash surrender value	358,696	265,658
Beneficial interest in charitable remainder trusts (Note 4)	684,210	635,300
Unconditional promises to give, net, less current portion (Note 2)	<u>3,455,931</u>	<u>4,356,458</u>
Total other assets	<u>4,498,837</u>	<u>5,257,416</u>
Total assets	<u>\$ 31,400,456</u>	<u>\$ 30,875,429</u>
	<b><u>Liabilities and Net Assets</u></b>	
Current liabilities:		
Accounts payable	\$ 43,226	\$ 34,878
Accrued expenses	560,331	120,083
Deferred revenue	<u>2,581</u>	<u>2,581</u>
Total current liabilities	<u>606,138</u>	<u>157,542</u>
Net assets:		
Unrestricted (Note 7)	3,655,888	3,583,261
Temporarily restricted (Notes 6 and 7)	18,075,329	18,352,220
Permanently restricted (Notes 6, 7 and 8)	<u>9,063,101</u>	<u>8,782,406</u>
Total net assets	<u>30,794,318</u>	<u>30,717,887</u>
Total liabilities and net assets	<u>\$ 31,400,456</u>	<u>\$ 30,875,429</u>

*The accompanying notes are an integral part of these financial statements.*

*Page 8*

**EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.**

Statements of Activities  
Year Ended June 30, 2014

	2014			Total
	Unrestricted	Temporarily Restricted	Permanently Restricted	
Revenues, gains, and other support:				
Contributions	\$ 7,173,536	\$ 2,349,879	\$ 160,547	\$ 9,683,962
Gifts in kind	115,862	53,769	-	169,631
Contributed services and facilities (Note 9)	571,301	-	-	571,301
Return on investments:				
Interest and dividends	25,505	239,095	-	264,600
Net realized and unrealized gains on investments	84,508	2,020,701	90	2,105,299
Other income	531,181	25	-	531,206
Gain on sales of property	3,006	-	-	3,006
Change in value of split interest agreements	-	-	48,910	48,910
Change in value of life insurance	271	-	92,767	93,038
Net assets released from restrictions (Note 6)	<u>4,849,356</u>	<u>(4,849,356)</u>	<u>-</u>	<u>-</u>
Total revenues, gains, and other support	<u>13,354,526</u>	<u>(185,887)</u>	<u>302,314</u>	<u>13,470,953</u>
Expenses (Note 10):				
Program services:				
Program development	804,605	-	-	804,605
Scholarships	5,898,300	-	-	5,898,300
Facility enhancement	<u>4,135,686</u>	<u>-</u>	<u>-</u>	<u>4,135,686</u>
Total program services	10,838,591	-	-	10,838,591
General and administrative	2,012,619	-	-	2,012,619
Fundraising	<u>430,560</u>	<u>-</u>	<u>-</u>	<u>430,560</u>
Total operating expenses	13,281,770	-	-	13,281,770
Bad debt losses	<u>129</u>	<u>91,004</u>	<u>21,619</u>	<u>112,752</u>
Total expenses	<u>13,281,899</u>	<u>91,004</u>	<u>21,619</u>	<u>13,394,522</u>
Changes in net assets	72,627	(276,891)	280,695	76,431
Net assets, beginning of year	<u>3,583,261</u>	<u>18,352,220</u>	<u>8,782,406</u>	<u>30,717,887</u>
Net assets, end of year	<u>\$ 3,655,888</u>	<u>\$ 18,075,329</u>	<u>\$ 9,063,101</u>	<u>\$ 30,794,318</u>

**EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.**

Statements of Activities  
Year Ended June 30, 2013

	2013			
	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Revenues, gains, and other support:				
Contributions	\$ 6,408,470	\$ 1,486,615	\$ 675,514	\$ 8,570,599
Gifts in kind	75,121	-	-	75,121
Contributed services and facilities (Note 9)	515,403	-	-	515,403
Return on investments:				
Interest and dividends	24,693	245,429	-	270,122
Net realized and unrealized gains on investments	43,996	1,083,377	90	1,127,463
Other income	534,696	-	-	534,696
Change in value of split interest agreements	-	-	39,570	39,570
Change in value of life insurance	1,026	-	66,849	67,875
Net assets released from restrictions (Note 6)	<u>982,593</u>	<u>(982,593)</u>	<u>-</u>	<u>-</u>
Total revenues, gains, and other support	<u>8,585,998</u>	<u>1,832,828</u>	<u>782,023</u>	<u>11,200,849</u>
Expenses (Note 10):				
Program services:				
Program development	725,315	-	-	725,315
Scholarships	5,300,000	-	-	5,300,000
Facility enhancement	<u>272,559</u>	<u>-</u>	<u>-</u>	<u>272,559</u>
Total program services	6,297,874	-	-	6,297,874
General and administrative	2,021,777	-	-	2,021,777
Fundraising	<u>436,777</u>	<u>-</u>	<u>-</u>	<u>436,777</u>
Total operating expenses	8,756,428	-	-	8,756,428
Bad debt losses	<u>26,206</u>	<u>4,675</u>	<u>235,080</u>	<u>265,961</u>
Total expenses	<u>8,782,634</u>	<u>4,675</u>	<u>235,080</u>	<u>9,022,389</u>
Changes in net assets	(196,636)	1,828,153	546,943	2,178,460
Net assets, beginning of year	3,777,039	16,526,925	8,235,463	28,539,427
Reclassification of net assets (Note 6)	<u>2,858</u>	<u>(2,858)</u>	<u>-</u>	<u>-</u>
Net assets, end of year	<u>\$ 3,583,261</u>	<u>\$ 18,352,220</u>	<u>\$ 8,782,406</u>	<u>\$ 30,717,887</u>

**EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.**

Statements of Cash Flows

June 30, 2014 and 2013

	2014	2013
Cash flows from operating activities:		
Change in net assets	\$ 76,431	\$ 2,178,460
Permanently restricted contributions	(160,547)	(675,514)
Adjustments to reconcile change in net assets to net cash provided (used) by operating activities:		
Amortization of leasehold improvements	23,768	49,354
Bad debt expense	112,752	265,961
Change in cash value of life insurance	(93,038)	(67,875)
Gifted common stock	(50,274)	-
Gain on sale of property	(3,006)	-
Change in value of split-interest agreement	(48,910)	(39,570)
Net realized and unrealized gain on investments	(2,105,299)	(1,127,463)
Effect of changes in operating assets and liabilities:		
Unconditional promises to give and other receivables	347,436	1,094,273
Prepaid expenses	(1,800)	44,969
Accounts payable	8,348	(14,523)
Accrued expenses	440,248	34,250
Deferred revenue	-	2,581
Net cash provided (used) by operating activities	(1,453,891)	1,744,903
Cash flows from investing activities:		
Purchases of investments	(4,824,719)	(4,323,876)
Proceeds from sale of investments, net	5,043,230	4,403,672
Proceeds from sale of property	3,006	-
Net cash provided by investing activities	221,517	79,796
Cash flows from financing activities:		
Contributions for endowment	160,547	675,514
Net cash provided by financing activities	160,547	675,514
Change in cash and cash equivalents	(1,071,827)	2,500,213
Cash, beginning of year	10,372,147	7,871,934
Cash, end of year	\$ 9,300,320	\$ 10,372,147

*The accompanying notes are an integral part of these financial statements.*

*Page 11*



# EAST CAROLINA UNIVERSITY EDUCATIONAL FOUNDATION, INC.

## Notes to Financial Statements

June 30, 2014 and 2013

### 1. Summary of Significant Accounting Policies

#### **Nature of Activities**

East Carolina University Educational Foundation, Inc. ("Foundation") is a non-profit corporation organized under the laws of the State of North Carolina. The primary purpose of the Foundation is to be the friend-raising and fund-raising arm of East Carolina University's Division I athletics program, representing the highest principles of honesty and integrity. By conducting annual fund, endowment, and capital campaigns in support of student-athlete scholarships, athletic facility enhancements and other programmatic needs, the Foundation seeks to bring positive recognition to East Carolina University and the region it serves through a competitive athletics program.

#### **Basis of Presentation**

The accompanying financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America for the non-profit industry. Net assets and revenues, expenses, gains, and losses are classified based on the existence or absence of donor-imposed restrictions. Accordingly, net assets of the Foundation and changes therein are classified and reported as follows:

- Unrestricted net assets – Net assets not subject to donor-imposed stipulations.
- Temporarily restricted net assets – Net assets subject to donor-imposed stipulations for specified purposes of the Foundation and/or the passage of time.
- Permanently restricted net assets – Net assets subject to donor-imposed stipulations that they be maintained permanently by the Foundation. Generally, the donors of these assets permit the Foundation to use all of, or part of, the income earned on related investments for general or specific purposes.

Revenues are reported as increases in unrestricted net assets unless use of the related assets is limited by donor-imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments and other assets or liabilities are reported as increases or decreases in unrestricted net assets unless their use is restricted by explicit donor stipulation or by law. Expirations of temporary restrictions on net assets (i.e., the donor-stipulated purpose has been fulfilled and/or the stipulated time period has elapsed) are reported as reclassifications on the Statements of Activities between the applicable classes of net assets as "Net assets released from restrictions."

## 1. Summary of Significant Accounting Policies (Continued)

### Use of Estimates in Preparation of Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (GAAP) requires management to make estimates and assumptions that directly affect the results of reported amounts and disclosures. Accordingly, actual results may differ from these estimates.

### Fair Value of Financial Instruments

The carrying amounts of cash, prepaid expenses, other receivables, accounts payable, and accrued expenses approximate fair value because of the short maturity of these instruments. The fair value of investments is described in Notes 3 and 4, and is in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 820, *Disclosures About Fair Value of Instruments*, which defines fair value of a financial instrument as the amount at which the instrument could be exchanged in a current transaction between willing parties.

### Cash and Cash Equivalents

Cash and cash equivalents include interest-bearing money market accounts and short-term investments with an original maturity of three months or less at the time of purchase. Amounts excluded from cash and cash equivalents include short-term investments that are held in the investment pool.

### Unconditional Promises to Give

Unconditional promises to give are recorded as receivables in the year pledged and are recognized as revenues in the period when pledged. Conditional promises to give are not recognized until they become unconditional, that is when the conditions on which they depend are substantially met. Contributions of assets other than cash are recorded at their estimated fair value at the time of donation. Contributions to be received after one year are discounted at an appropriate discount rate commensurate with the risks involved. Amortization of discounts is recorded as additional contribution revenue in accordance with donor-imposed restrictions, if any, on the contributions. An allowance for uncollectible unconditional promises to give is provided based upon management's judgment including such factors as prior collection history, the type of contribution, and the nature of fundraising activity.

### Investments

Investments are reported at fair value with gains and losses included in the Statements of Activities. All temporarily and permanently restricted funds are combined with unrestricted funds into one investment pool. Once a year, the interest, dividends, realized and unrealized gains/losses, and investment fees are allocated to the funds based on the fund's percentage of ownership interest in the pool of investments. Other investments, including real estate held for investment, are carried at fair value.

As explained in Note 3, the financial statements include alternative investments consisting of a hedge fund that is valued at \$613,785 (2% of net assets) and \$570,902 (2% of net assets) at June 30, 2014 and 2013, respectively. Management has estimated the fair value of this hedge fund using the methodology discussed in Note 4.

**1. Summary of Significant Accounting Policies (Continued)****Allocation of Investment Income**

Income and realized and unrealized net gains on investments of endowment and similar funds are reported as follows:

- As increases in permanently restricted net assets if the terms of the gift or the Foundation's interpretation of relevant state law require that they be added to the principal of a permanent endowment fund.
- As increases in temporarily restricted net assets if the terms of the gift impose restrictions on the use of the income.
- As increases in unrestricted net assets in all other cases.

In accordance with FASB ASC 958-205, any losses on the investments of a donor-restricted endowment fund reduce temporarily restricted net assets to the extent that donor-imposed temporary restrictions on net appreciation of the fund have not been met before a loss occurs. Any remaining loss reduces unrestricted net assets. If losses reduce the assets of a donor-restricted endowment fund below the level required by the donor stipulations or law, gains that restore the fair value of the assets of the endowment fund to the required level are classified as increases in temporarily restricted net assets.

**Leasehold Improvements**

Leasehold improvements to make properties suitable for the Foundation's intended use are amortized over the shorter of the estimated life of the asset or the remaining life of the lease, which ranges from 3 to 10 years.

**Cash Surrender Value of Life Insurance**

Life insurance policies owned by the Foundation are reported at the cash surrender value of the policy. Changes in cash surrender value of life insurance are reported as changes in value of life insurance under the revenues, gains, and other support section in the Statements of Activities.

**Beneficial Interest in Charitable Remainder Trust**

The Foundation has a beneficial interest in four charitable remainder trusts. A receivable has been recognized for the Foundation's beneficial interest in the remainder trusts at the present value of the estimated future distributions expected to be received. The Foundation is not the named trustee for any of the trusts. Adjustments to reflect revaluations of the present value of the estimated future payments and changes in actuarial assumptions are recognized in the Statements of Activities as a change in value of the split-interest agreements.

## 1. Summary of Significant Accounting Policies (Continued)

### **Income Taxes**

The Foundation is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code, except on net income derived from unrelated business activities. At June 30, 2014 and 2013, the Foundation has not recorded any tax liabilities. The Foundation believes that it has appropriate support for any tax positions taken and, as such, does not have any uncertain tax positions that are material to the financial statements.

The Foundation's Return of Organization Exempt From Income Tax (Form 990) and Federal Exempt Organization Business Income Tax Returns (Form 990T) for fiscal years 2013, 2012, and 2011 are subject to examination by the IRS, generally for three years after they were filed.

### **Contributions**

Unconditional contributions are considered available for unrestricted use unless specifically restricted by the donor. The gifts are reported as either temporarily or permanently restricted support if they are received with donor stipulations that limit the use of the donated assets. When a donor restriction expires, that is when a stipulated time restriction ends or purpose restriction is accomplished, temporarily restricted net assets are reclassified as unrestricted net assets and reported in the Statements of Activities as net assets released from restrictions. Donor contributions whose restrictions are met within the same year as received are reflected as unrestricted contributions in the accompanying financial statements.

### **Contractual Services**

The staff of the Foundation is paid by East Carolina University (ECU) and they are employees of ECU for payroll and benefit purposes. The Foundation reimburses ECU for all payroll and benefit costs related to the Foundation staff. The reimbursement is recorded as contractual services.

### **Recent Accounting Pronouncements**

The following is a summary of recent authoritative pronouncements that could impact the accounting, reporting, and/or disclosure of financial information by the Foundation.

Accounting Standards Update ("ASU") 2013-06 was issued in April 2013 to amend the *Not-for-Profit Entities* topic of the ASC to specify the guidance that not-for-profit entities apply for recognizing and measuring services received from personnel of an affiliate. The amendments will be effective for the Foundation beginning July 1, 2014, and management believes that the Foundation is in compliance with the requirements outlined in the ASU regarding the recognition of services received from personnel of an affiliate (i.e., contributed services). Contributed services are recognized at the cost to the affiliate, including salaries/wages and benefits, at the time the cost by the affiliate is incurred.

### **Subsequent Events**

Management evaluated subsequent events through November 25, 2014, the date the financial statements were available to be issued. There were no events or transactions occurring after June 30, 2014, but prior to the date these financial statements were issued that provided additional evidence about conditions that existed at June 30, 2014.

**2. Unconditional Promises to Give**

Unconditional promises to give at June 30, 2014 and 2013 are summarized as follows:

	<u>2014</u>	<u>2013</u>
Receivables due in less than one year	\$ 5,238,094	\$ 5,284,417
Receivables due in one to five years	3,818,487	4,892,410
Receivables due in more than five years	<u>26,200</u>	<u>8,000</u>
	9,082,781	10,184,827
Less: Allowance for unamortized discount	(241,190)	(303,387)
Less: Allowance for uncollectible receivables	<u>(1,335,537)</u>	<u>(1,911,756)</u>
<b>Net unconditional promises to give</b>	<b><u>\$ 7,506,054</u></b>	<b><u>\$ 7,969,684</u></b>

Unconditional promises to give are discounted using a rate determined by management at the time the unconditional promises to give are initially recognized. Unconditional promises to give recognized during the years ended June 30, 2014 and 2013 are discounted at a rate of 2.2% and 1.2%, respectively, to estimate the present value of future payments.

**3. Investments**

The aggregate fair values of investments at June 30, 2014 and 2013, by type of investment, are as follows:

	<u>2014</u>	<u>2013</u>
Common stock	\$ 9,520,409	\$ 7,824,584
Corporate bonds	1,814,287	1,119,107
Government bonds	4,975	7,906
Mutual funds	761,943	1,136,918
Money market funds	<u>474,155</u>	<u>593,075</u>
Total marketable securities	12,575,769	10,681,590
Alternative investments	<u>613,785</u>	<u>570,902</u>
 Total investments	 <b><u>\$ 13,189,554</u></b>	 <b><u>\$ 11,252,492</u></b>

**4. Fair Value Measurements**

Fair value as defined under GAAP is an exit price, representing the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. In determining fair value, the Foundation uses various valuation approaches within the FASB ASC 820 fair value measurement framework. Fair value measurements are determined based on the assumptions that market participants would use in pricing an asset or liability.

FASB ASC 820 establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. FASB ASC 820 defines levels within the hierarchy based on the reliability of inputs as follows:

- Level 1 – Valuations based on unadjusted quoted prices for identical assets or liabilities in active markets;

**4. Fair Value Measurements (Continued)**

- Level 2 – Valuations based on quoted prices for similar assets or liabilities or identical assets or liabilities in less active markets, such as dealer or broker markets; and
- Level 3 – Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable, such as pricing models, discounted cash flow models and similar techniques not based on market, exchange, dealer or broker-traded transactions.

The following is a description of the valuation methodologies used for instruments measured at fair value and their classification in the valuation hierarchy. These valuation methodologies have not changed and are consistent with prior years.

Marketable securities, including common stock, corporate bonds, government bonds, mutual funds, and money market funds listed on a national market or exchange, are valued at the last sales price. If there is no sale, and the market is considered still active, they are valued at the last transaction price before year-end. Such securities are classified within Level 1 of the valuation hierarchy.

Investments in real estate are valued based on independent appraisals and county tax records and are classified within Level 2 of the valuation hierarchy.

Investments in hedge funds are valued at the estimated exit price as of June 30, 2014 and 2013. The Foundation's estimate of the exit price is based upon the net asset value of the Foundation's interest as reported by the investee. The net asset value is the amount the Foundation would expect to receive in liquidation after the satisfaction of all investee liabilities, which serves as a practical expedient to determine the fair value of the funds. These investments are classified as Level 3 of the valuation hierarchy.

Beneficial interest in charitable remainder trusts are valued at the market price of the investments and are classified as Level 3 of the valuation hierarchy. While the Foundation has access to a detailed listing of the underlying assets held in these trusts, the majority of which are publically traded and readily available in active markets, the beneficial interests are determined through discounted cash flow analysis.

The following tables present assets measured at fair value by classification within the fair value hierarchy as of June 30, 2014 and 2013, respectively:

	<u>Financial Assets at Fair Market Value as of June 30, 2014</u>			
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Investments in marketable securities	\$ 12,575,769	\$ -	\$ -	\$ 12,575,769
Investments in real estate	-	221,252	-	221,252
Investments in hedge funds	-	-	613,785	613,785
<b>Total</b>	<u>\$ 12,575,769</u>	<u>\$ 221,252</u>	<u>\$ 613,785</u>	<u>\$ 13,410,806</u>
Beneficial interest in charitable remainder trusts	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 684,210</u>	<u>\$ 684,210</u>

**4. Fair Value Measurements (Continued)**

	Financial Assets at Fair Market Value as of June 30, 2013			
	Level 1	Level 2	Level 3	Total
Investments in marketable securities	\$ 10,681,590	\$ -	\$ -	\$ 10,681,590
Investments in real estate	-	221,252	-	221,252
Investments in hedge funds	-	-	570,902	570,902
Total	<u>\$10,681,590</u>	<u>\$ 221,252</u>	<u>\$ 570,902</u>	<u>\$ 11,473,744</u>
Beneficial interest in charitable remainder trusts	\$ -	\$ -	\$ 635,300	\$ 635,300

Management determines the fair value measurement valuation policies and procedures, including those for Level 3 recurring and nonrecurring measurements. The Foundation's Board of Directors assesses and approves these policies and procedures. At least annually, management: (1) determines if the current valuation techniques used in fair value measurements are still appropriate, and (2) evaluates and adjusts the unobservable inputs used in the fair value measurements based on current market conditions and third-party information.

The following is a reconciliation of the beginning and ending balances of assets measured at fair value on a recurring basis using significant unobservable (Level 3) inputs during the years ended June 30, 2014 and 2013:

	2014	2013
Balance, beginning of year	\$ 1,206,202	\$ 1,112,162
Net realized gains	49,148	3,369
Net unrealized gains (losses)	(6,265)	51,101
Change in value of split interest agreements	<u>48,910</u>	<u>39,570</u>
Balance, end of year	<u>\$ 1,297,995</u>	<u>\$ 1,206,202</u>

Realized and unrealized gains and losses applicable to instruments valued using significant unobservable inputs (Level 3) shown above are included in the change in net assets for 2014 and 2013 reported in the Statements of Activities.

**Quantitative Information about Significant Unobservable Inputs Used in Level 3 Fair Value Measurements**

The following table represents the Foundation's Level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, and the significant unobservable inputs and ranges of values for those unobservable inputs.

4. Fair Value Measurements (Continued)

<u>Significant Unobservable Inputs at June 30, 2014</u>				
	<u>Fair Value</u>	<u>Principal Valuation Technique</u>	<u>Unobservable Inputs</u>	<u>Range of Significant Input Values</u>
Investments in hedge funds	\$ 613,785	Fundamental Analysis	NAV*	N/A
Beneficial interest in charitable remainder trusts	684,210	Discounted Cash Flows	Payout Rate Discount Rate	1-10% 1-9.7%

<u>Significant Unobservable Inputs at June 30, 2013</u>				
	<u>Fair Value</u>	<u>Principal Valuation Technique</u>	<u>Unobservable Inputs</u>	<u>Range of Significant Input Values</u>
Investments in hedge funds	\$ 570,902	Fundamental Analysis	NAV*	N/A
Beneficial interest in charitable remainder trusts	635,300	Discounted Cash Flows	Payout Rate Discount Rate	5-6% 1.2%

\*Net asset value allocated to the fund

The following tables summarize the Foundation's alternative investments at June 30, 2014 and 2013, which consist solely of hedge funds:

<u>Alternative Investments at June 30, 2014</u>				
	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (if currently available)</u>	<u>Redemption Notice Period</u>
Hedge Funds: AIP Global	\$ 613,785	\$ -	Monthly	30 days

<u>Alternative Investments at June 30, 2013</u>				
	<u>Fair Value</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency (if currently available)</u>	<u>Redemption Notice Period</u>
Hedge Funds: AIP Global	\$ 570,902	\$ -	Monthly	30 days

The Foundation invests in alternative investment vehicles as a hedge against broader market risks by further diversifying the portfolio holdings. The hedge fund investments pursue a variety of hedging strategies.



**4. Fair Value Measurements (Continued)**

The Foundation invests in various types of investment securities which are exposed to various risks, such as interest rate, market, and credit risk. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term, and that such changes could materially affect the amounts reported in the Statements of Financial Position.

**5. Real Estate Held for Investment**

The real estate, recorded at appraised value on the dates received and adjusted for changes in fair value, consists of 164 acres in Carteret County; three residential lots in the Brook Valley subdivision, and one lot in the River Hills subdivision; two lots in the Rolling Pines subdivision in Washington County; and a time share located in Horry County, South Carolina.

	<u>2014</u>	<u>2013</u>
Carteret County, North Carolina	\$ 159,402	\$ 159,402
Pitt County, North Carolina	50,750	50,750
Washington County, North Carolina	10,600	10,600
Horry County, South Carolina	<u>500</u>	<u>500</u>
Total	<u>\$ 221,252</u>	<u>\$ 221,252</u>

**6. Temporarily and Permanently Restricted Net Assets**

Temporarily restricted net assets at June 30, 2014 and 2013 are available for the following purposes:

	<u>2014</u>	<u>2013</u>
Scholarships	\$ 5,151,753	\$ 3,572,385
Support of various programs	285,949	199,258
Facility enhancements	<u>12,637,627</u>	<u>14,580,577</u>
Total	<u>\$ 18,075,329</u>	<u>\$ 18,352,220</u>

Permanently restricted net assets at June 30, 2014 and 2013 are restricted to investment in perpetuity, the income from which is expendable to support:

	<u>2014</u>	<u>2013</u>
Scholarships	\$ 8,063,101	\$ 7,782,406
Student development	<u>1,000,000</u>	<u>1,000,000</u>
Total	<u>\$ 9,063,101</u>	<u>\$ 8,782,406</u>

**6. Temporarily and Permanently Restricted Net Assets (Continued)**

Net assets totaling \$4,849,356 and \$982,593 were released from donor restrictions in 2014 and 2013, respectively, by incurring expenses satisfying the restricted purposes, or by the passage of time.

	<u>2014</u>	<u>2013</u>
Facility enhancement	\$ 4,135,686	\$ 272,559
General and administrative	87,865	75,515
Program development	<u>625,805</u>	<u>634,519</u>
Total	<u>\$ 4,849,356</u>	<u>\$ 982,593</u>

The fair value of certain donor-restricted endowment funds was less than the level required by donor stipulation as of June 30, 2012. For the year ended June 30, 2013, these endowment funds fully recovered and this recovery was reported as a reclassification of net assets as an increase in unrestricted net assets in the accompanying financial statements.

**7. Endowments**

The Foundation follows the guidance for endowments of Not-For-Profit Organizations, which includes a requirement to classify the portion of a donor-restricted endowment fund that is not classified as permanently restricted net assets as temporarily restricted net assets until appropriated for expenditure. This guidance also requires expanded disclosures for all endowment funds.

The Foundation's endowment consists of twenty-six individual funds established for a variety of purposes. Endowments include donor-restricted endowment funds. As required by GAAP, net assets associated with endowment funds, including funds designated by the Board to function as endowments, are classified and reported based on the existence of donor-imposed restrictions.

**Interpretation of Relevant Law**

The Foundation's management has interpreted the Uniform Prudent Management of Institutional Funds Act (UPMIFA) as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, the Board classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure, by the Foundation, in a manner consistent with the standard of prudence prescribed by UPMIFA.

## 7. **Endowments (Continued)**

### **Interpretation of Relevant Law (Continued)**

In accordance with UPMIFA, the Foundation considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

- (1) The duration and preservation of the fund;
- (2) The purposes of the organization and the donor-restricted endowment fund;
- (3) General economic conditions;
- (4) The possible effect of inflation and deflation;
- (5) The expected total return from income and the application of investments;
- (6) Other resources of the institution; and
- (7) The investment policies of the organization.

### **Return Objectives and Risk Parameters**

The Foundation has adopted investment and spending policies for endowment assets that attempt to provide a predictable stream of funding to programs supported by its endowments while seeking to maintain the purchasing power of the endowment assets. Endowment assets include those assets of donor-restricted funds that the Foundation must hold in perpetuity. Under this policy, as approved by the Foundation Board of Directors, the endowment assets are invested in a manner that is intended to produce results that exceed the rate of inflation as measured by the annual Consumer Price Index plus the annual spending distribution and fees as adopted by the Board. Actual returns in any given year may vary from this amount.

### **Strategies Employed for Achieving Objectives**

To satisfy its long-term rate of return objectives, the Foundation relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The Foundation targets a diversified asset allocation that places a greater emphasis on equity-based investments to achieve its long-term return objectives within prudent risk constraints.

### **Spending Policy and How the Investment Objectives Relate to Spending Policy**

The Foundation has a policy of appropriating for distribution each year a five percent (5%) allocation based on its year-end endowment fund's twelve-month weighted average balance inclusive of the current year investment return. In establishing this policy, the Foundation considered the long-term expected return on its endowment.

7. Endowments (Continued)

Endowment net asset composition by fund type as of June 30:

	2014			
	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Donor-restricted funds	\$ -	\$ 5,151,754	\$ 8,378,891	\$ 13,530,645

	2013			
	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Donor-restricted funds	\$ -	\$ 3,572,385	\$ 8,147,106	\$ 11,719,491

Changes in endowment net assets for the fiscal years ended June 30:

	2014			
	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Endowment net assets, beginning of year	\$ -	\$ 3,572,385	\$ 8,147,106	\$ 11,719,491
Investments income (including realized and unrealized gains and losses)	-	2,139,369	-	2,139,369
Contributions	-	-	160,547	160,547
Change in value of life insurance	-	-	92,767	92,767
Scholarship expense	-	(560,000)	-	(560,000)
Other changes	-	-	(21,529)	(21,529)
Endowment net assets, end of year	\$ -	\$ 5,151,754	\$ 8,378,891	\$ 13,530,645

	2013			
	<u>Unrestricted</u>	<u>Temporarily Restricted</u>	<u>Permanently Restricted</u>	<u>Total</u>
Endowment net assets, beginning of year	\$ (2,858)	\$ 2,925,862	\$ 7,639,733	\$ 10,562,737
Net asset reclassification, due to realized and unrealized gains in endowment funds with prior year deficits	2,858	(2,858)	-	-
Endowment net assets, after reclassifications	-	2,923,004	7,639,733	10,562,737
Investments income (including realized and unrealized gains and losses)	-	1,223,794	-	1,223,794
Contributions	-	-	675,514	675,514
Change in value of life insurance	-	-	66,849	66,849
Scholarship expense	-	(574,413)	-	(574,413)
Other changes	-	-	(234,990)	(234,990)
Endowment net assets, end of year	\$ -	\$ 3,572,385	\$ 8,147,106	\$ 11,719,491

**7. Endowments (Continued)**

In addition, the Foundation, under the direction of the Board of Directors, established quasi-endowments for scholarships within the board designated unrestricted net assets. The activity in the quasi-endowments is as follows:

	<u>2014</u>	<u>2013</u>
Quasi-endowment net assets, beginning of year	\$ 432,990	\$ 384,719
Investment income (including realized and unrealized gains and losses)	<u>86,600</u>	<u>48,271</u>
Quasi-endowment net assets, end of year	<u>\$ 519,590</u>	<u>\$ 432,990</u>

**8. Permanently Restricted Net Assets**

Permanently restricted net assets at June 30, 2014 and 2013 relate to the following:

	<u>2014</u>	<u>2013</u>
Endowments	\$ 8,378,891	\$ 8,147,106
Beneficial interest in charitable remainder trusts	<u>684,210</u>	<u>635,300</u>
Total permanently restricted net assets	<u>\$ 9,063,101</u>	<u>\$ 8,782,406</u>

Included in the endowment amounts above are net unconditional promises to give of \$533,925 and \$617,033 at June 30, 2014 and 2013, respectively.

**9. Related Party Transactions****East Carolina University**

The University provides certain support such as accounting, fundraising, general administrative services, and the use of facilities and equipment for the benefit of the Foundation. These contributed services and facilities have been recognized in the accompanying Statements of Activities as contributions and expenses at their estimated value. The amount of these contributed services and facilities for the years ended June 30, 2014 and 2013 was \$200,684 of \$571,301 total contributed services, and \$131,407 of \$515,403 total contributed services, respectively.

The Foundation accrued expenses of \$557,856 and \$114,135 at June 30, 2014 and 2013, respectively, owed to the University.

**East Carolina University Foundation, Inc.**

The East Carolina University Foundation, Inc. leased a piece of property to the Foundation under a 3-month lease agreement, expiring July 31, 2013, for \$2,500 per month. The lease was extended for an additional three months expiring October 31, 2013, as allowed by the lease agreement.

At June 30, 2014 and 2013, the Foundation had accounts receivable from the East Carolina University Foundation, Inc. in the amount of \$43 and \$238, respectively. These receivables are included in other receivables on the Statements of Financial Position.

**9. Related Party Transactions (Continued)****East Carolina University Alumni Association, Inc.**

The Foundation accrued expenses of \$0 and \$5,925 at June 30, 2014 and 2013, respectively, owed to the East Carolina University Alumni Association, Inc.

**10. Functional Expenses**

The costs of providing the various programs and activities have been summarized on a functional basis in the Statements of Activities. The following summarizes these expenses based on their natural classification:

	2014			
	Contributions to ECU	Management and General	Fund Raising	Total
Personnel services	\$ -	\$ -	\$ 6,084	\$ 6,084
Supplies and materials	150,920	138,108	62,537	351,565
Current services	211,114	1,643,592	336,491	2,191,197
Fixed charges	163,898	230,919	25,448	420,265
Aids and grants	254,905	-	-	254,905
Facility enhancement	4,135,686	-	-	4,135,686
Scholarships	5,898,300	-	-	5,898,300
Other expenses	23,768	-	-	23,768
<b>Total expenses</b>	<b><u>\$ 10,838,591</u></b>	<b><u>\$ 2,012,619</u></b>	<b><u>\$ 430,560</u></b>	<b><u>\$ 13,281,770</u></b>
	2013			
	Contributions to ECU	Management and General	Fund Raising	Total
Personnel services	\$ -	\$ -	\$ 9,086	\$ 9,086
Supplies and materials	139,293	198,277	81,490	419,060
Current services	109,647	1,607,473	316,851	2,033,971
Fixed charges	161,765	216,027	29,350	407,142
Aids and grants	265,256	-	-	265,256
Facility enhancement	272,559	-	-	272,559
Scholarships	5,300,000	-	-	5,300,000
Other expenses	49,354	-	-	49,354
<b>Total expenses</b>	<b><u>\$ 6,297,874</u></b>	<b><u>\$ 2,021,777</u></b>	<b><u>\$ 436,777</u></b>	<b><u>\$ 8,756,428</u></b>

Expenses of the Foundation reported in the Statements of Activities are categorized as relating to program services, general and administrative, and fund-raising. Under program services, expenses further categorized as expenses of the Foundation relating to program development, scholarships, and facility enhancements, relate to expenditures made by the Foundation or on behalf of the University's athletics program. General and administrative expenses relate to those expenditures incurred by the Foundation in its day-to-day operation. Lastly, expenses reported as fund-raising relate to expenses incurred by the Foundation or by its twenty-nine community chapter organizations in providing various friend-raising and fund-raising events. For the fiscal year ended June 30, 2014, \$94,182 of the \$430,560 in fund-raising expenditures reported was incurred by the twenty-nine community chapters. For the fiscal year ended June 30, 2013, \$82,846 of the \$436,777 in fund-raising expenditures reported was incurred by the twenty-nine community chapters.

**11. Leases**

The Foundation leases vehicles from non-related entities under operating leases with maturities ranging from August 2014 through May 2018 with monthly payments ranging from \$247 to \$643 at June 30, 2014.

On July 31, 2010, the Foundation began leasing real property from a non-related entity under an operating lease with a maturity of July 2020 and monthly payments ranging from \$7,000 to \$7,700 over the life of the lease.

As discussed in Note 9, the Foundation began leasing real property from an entity related to the University under an operating lease on May 1, 2013 with monthly payments of \$2,500, expiring July 31, 2013. The lease was extended for an additional three months expiring October 31, 2013, as allowed by the lease agreement.

The following is a schedule of future minimum rental lease payments at June 30, 2014:

<u>Year</u>	<u>Future Minimum Lease Payments</u>
2015	\$ 121,827
2016	118,179
2017	99,820
2018	98,584
2019	92,400
Thereafter	<u>100,100</u>
Total	<u>\$ 630,910</u>

**12. Leasehold Improvements**

Leasehold improvements for property leased consist of the following at June 30:

	<u>Estimated Useful Life</u>	<u>2014</u>	<u>2013</u>
Improvements	3-10 years	\$ 281,408	\$ 281,408
Less amortization		<u>150,966</u>	<u>127,198</u>
Total		<u>\$ 130,442</u>	<u>\$ 154,210</u>

**13. Concentration of Credit Risk****Financial Institutions**

The Foundation has deposits with one financial institution that, at times, may exceed federal depository insurance limits. Deposits at the financial institution were \$160,823 and \$64,154 at June 30, 2014 and 2013, respectively. The Foundation has deposits with eleven different financial institutions that total \$53,622 and \$61,985 at June 30, 2014 and 2013, respectively.

**13. Concentration of Credit Risk (Continued)**

**State of North Carolina Short-Term Investment Fund (STIF Account)**

The Foundation deposits substantially all of its funds not otherwise invested, into the State of North Carolina Short-Term Investment Fund (“STIF account”) that is managed by the North Carolina State Treasurer. This portfolio fund is the primary cash management account for the State and is managed to allow funds to be readily convertible in cash. The North Carolina Administrative Code requires depositories to collateralize all balances that are not insured and must maintain specified security types in a third party escrow account designated by the State Treasurer. The securities collateral must be governmental in origin or the highest grade commercial paper and bankers’ acceptances. The market value of the collateral must not be less than the value of the uninsured deposits; therefore, as of June 30, 2014 and 2013, the Foundation’s STIF account deposits would not be exposed to custodial credit risk.

**Investment Brokerage Accounts**

The Securities Investor Protection Corporation (SIPC) insures investments with registered brokers up to \$500,000, of which \$100,000 may be cash. Insurance protects assets held in the case of broker-dealer insolvency and not against decline in market values. As of June 30, 2014 and 2013, the Foundation has investments in excess of the SIPC insurance amount.



**Operating Agreement  
of  
East Carolina University  
and East Carolina University Educational Foundation, Inc.**

This Operating Agreement (Agreement) is made between East Carolina University (University) and the East Carolina University Educational Foundation, Inc. (Foundation).

**RECITALS**

University is an institution of higher education; and

Foundation is a North Carolina nonprofit corporation qualified under Section 501(c)(3) of the Internal Revenue Code and exists for the purposes of aiding and promoting educational and charitable purposes and lawful activities of University; and

University has officially recognized Foundation as satisfying the standards and eligibility requirements as a supporting associated entity set forth in University of North Carolina and University rules and regulations; and,

The parties previously executed an operating agreement on April 25, 2007 formalizing the relationship between University and Foundation by setting forth the manner in which University and Foundation were to provide support to each other, which relationship the parties desire to amend and extend under the terms provided in this Agreement.

**TERMS**

In consideration of the mutual covenants, promises and conditions herein contained, and for good and valuable consideration the adequacy of which is hereby acknowledged, University and Foundation agree as follows:

**1.0 Foundation Support of University.**

1.1 The Foundation's sole purpose is to provide support to University's Division I Varsity Athletics Program. In accordance with Foundation's governing documents, that support includes, but is not limited to:

1.1.1 Raising, receiving, investing, and administering funds for University in support of its intercollegiate athletics program;

1.1.2 Assisting the Office of University Advancement in its fundraising, marketing, public relations and alumni outreach activities and development programs with individuals, corporations, foundations, and other organizations;

1.1.3 Soliciting funds for student-athlete scholarships, athletics facilities improvements, and other programmatic needs of University's Athletics program;

1.1.4 Promoting the welfare and future development of University's Athletics Program;

- 1.1.5 Performing other acts as may be deemed appropriate in carrying out the purposes of University's Athletics Program, and
- 1.1.6 or other designated activities that are in furtherance of the mission of University's Athletics Program.

2.0 Use of University Name.

- 2.1 Foundation may, in connection with its lawful business and activities, use the name of University as well as University's logo, informal seal, and other symbols and marks of University, provided that Foundation clearly communicates that it is conducting business in its own name for the benefit of University. All correspondence, advertisements, and other communications by Foundation must clearly indicate that the communication is by Foundation and not from University. Foundation shall use the name of University as well as University's logo, informal seal, and other symbols and marks of University only in connection with the services rendered for the benefit of University and in accordance with the guidance and directions furnished to Foundation by University, or its representatives or agents, from time to time, and only if the nature and quality of the services in connection with which the aforesaid logo, seal, and other symbols and marks are used shall be satisfactory to University or as specified by it. University shall exercise control over and be the sole judge of whether or not Foundation has met or is meeting the standards of quality so established. The parties intend to execute a licensing agreement to establish more detailed parameters for Foundation's use of University's logo, seal, and other symbols and marks.
- 2.2 Foundation shall not delegate the authority to use University's name or symbols to any person or entity without the written approval of the Chancellor of East Carolina University (Chancellor).
- 2.3 Foundation agrees to cease using University's name and symbols in the event:
  - 2.3.1 Foundation dissolves;
  - 2.3.2 This Agreement is terminated as provided below (unless the parties agree otherwise); or,
  - 2.3.3 Foundation ceases to be a nonprofit corporation or ceases to be recognized by the Internal Revenue Service as described in section 501(c)(3) of the Internal Revenue Code.
  - 2.3.4 The Chancellor revokes such authority for failure to conform with the requirements of section 2.1, above. Such revocation shall not occur until after Foundation is provided notice of its failure to conform and a reasonable opportunity to cure such non-conformance.
- 2.4 Notwithstanding the provisions of section 2.1, Foundation agrees that it will not offer any course or seminar using University's name without first obtaining written permission from the Chancellor.

3.0 Relationship between Foundation and University.

- 3.1 University agrees to encourage and maintain the independence of Foundation and, at the same time, foster the cooperative relationship between University and Foundation.
- 3.2 The Chancellor shall be an ex officio voting member of Foundation's Executive Committee.
- 3.3 The Vice Chancellor for Administration and Finance, or the Vice Chancellor's designee, shall be an ex officio voting member of Foundation's Executive Committee, and shall serve as Executive Treasurer of the Foundation.
- 3.4 The University Director of Athletics shall be an ex officio voting member of Foundation's Executive Committee.
- 3.5 The Faculty Athletics Representative shall be an ex-officio voting member of Foundation's Executive Committee.
- 3.6 Other university employees may serve as ex-officio members of Foundation's governing board, with or without vote, as specified by Foundation's bylaws.
- 3.7 Foundation agrees to cooperate with the Chancellor and/or the Chancellor's designee to allow University to monitor the relationship between University and Foundation.
- 3.8 The Executive Committee of the Foundation shall be responsible for control and management of all assets of Foundation, including prudent management of all gifts to Foundation consistent with donor intent.
- 3.9 Foundation will maintain an audit committee which does not have any employees of University or of Foundation as a member. This committee will receive and review the annual audit of the Foundation and relevant annual tax forms to be submitted by the Foundation. If practical, the Foundation will ensure a financial expert is a member of the audit committee.

4.0 Foundation's Obligation to University.

- 4.1 Foundation agrees, before accepting gifts of real estate, or gifts with any restrictive terms and/or conditions that impose an obligation on the University or the State of North Carolina to expend resources in addition to the gift, to obtain written approval from the Vice Chancellor for Administration and Finance and the Director of Athletics unless such gift otherwise complies with University's gift acceptance policy which may then be in force and effect. In addition, Foundation agrees that it will not accept a gift that has any

restriction that is unlawful. In soliciting and accepting gifts in the name of the University, Foundation agrees to coordinate with University's Division of University Advancement.

- 4.2 Foundation agrees to advise prospective donors of restricted gifts that acceptance of such gifts is conditioned upon University's approval if the gift requires University approval under section 4.1.
- 4.3 Foundation agrees to coordinate with the University's Division of University Advancement comprehensive fund raising campaign efforts undertaken by University and its other approved associated entities.
- 4.4 Foundation shall make its donor records and other data reasonably available to University in accordance with existing University guidelines and UNC regulations and as otherwise required by applicable law. Notwithstanding the foregoing, Foundation shall maintain ownership of and control access to any prospect and donor information it collects and these records shall constitute a trade secret under N.C. Gen. Stat. § 132-1.2. Foundation shall appoint an officer or member of its governing board who is not employed by the University of North Carolina to be custodian of these records and employees of University will have access to them only for the purpose of providing services to the Foundation. Foundation agrees that it will establish and maintain a policy governing the retention and destruction of documents, including electronic files, and which prohibits destruction of documents if an investigation into wrongdoing or litigation is anticipated or underway.
- 4.5 Foundation shall administer its funds and make distributions to University's Athletics Program in accordance with policies and procedures established by the Foundation from time to time, with advice and counsel from University. Foundation agrees that all transfers of funds from Foundation to University's Athletics Program must be documented in writing or electronically in a form that has a retrievable transaction trail.

#### 5.0 Limitations on the Foundation.

- 5.1 Foundation agrees to operate using sound fiscal and business principles, to ensure that sound internal control structures are in place, and to follow generally accepted accounting procedures.
- 5.2 Foundation will submit an annual operations and capital budget to the Executive Committee for its approval.
- 5.3 Foundation agrees not to make any payments to a University employee and not to accept or distribute a gift to be used for the personal benefit of any University employee, except for approved expense reimbursements, without prior approval from the Chancellor of the University or the Chancellor's designee. All salary

and non-salary compensation of employees of the Foundation will be approved in advance by the Executive Committee of the Foundation.

- 5.4 Foundation officers and employees who have check signing authority or who handle cash or negotiable instruments must be bonded in an amount determined to be reasonable by the Foundation board.
- 5.5 Foundation must obtain general liability and directors/officers insurance in an amount determined to be reasonable by the Foundation board.
- 5.6 Foundation must not engage in substantial lobbying activities and may not engage in any political activities.
- 5.7 Foundation may not acquire debt in excess of five hundred thousand dollars (\$500,000.00) before consulting with the University's Director of Athletics and the Chancellor and Vice Chancellor for Administration and Finance, who will consult the Vice President of Finance of the University of North Carolina.

#### 6.0 University Support of and Obligations to Foundation.

- 6.1 University shall provide Foundation with office space under such terms and at such locations as are mutually acceptable, including utilities, janitorial service, facilities maintenance, furniture and fixtures, and use of campus mail service.
- 6.2 University shall provide an Employees Dishonesty bond in an amount determined from time to time by the parties for any University employee providing substantial services to Foundation.
- 6.3 University shall provide business systems to Foundation in a manner and form mutually acceptable to both parties. Business systems include all systems for: a) finance and accounting; b) the alumni database; c) gift records; and d) other business systems as deemed necessary between the parties to support Foundation. In providing business systems, University will provide all underlying supplies and services for provided systems, including but not limited to computer equipment (computer hardware/software/servers), IT services (programming/technical support/networking/internet access), and communication services (e-mail and telephone system). Foundation acknowledges that University may access any and all such systems and information thereon or generated thereby for repair, maintenance, upgrades, and other technological changes and for investigatory purposes when and to the extent consistent with University policy.
- 6.4 East Carolina University employees holding positions designated to serve the Foundation pursuant to N.C. Gen. Stats. Sec. 116-30.20 shall be subject to all applicable law and policies of East Carolina University, the University of North Carolina, and the State of North Carolina (collectively referred to as "Applicable

Law and Policies”). The University shall ensure that the scope of the duties for each employee in a position so designated to serve the Foundation and the manner in which those duties are performed meet or exceed the stated needs and performance standards established by the Executive Committee of the Foundation in consultation with the Chancellor. Whenever there is a conflict between the Foundation and the University, said employees shall be responsible for performing his or her duties in compliance with the Applicable Law and Policies.

- 6.5 All services provided to Foundation by University will be classified as either Reimbursed Services or Contributed Services. Reimbursed services are those to be reimbursed to University by Foundation and contributed services are those being contributed to Foundation by University. In consultation with University, Foundation will prepare an annual operating budget that identifies all services to be provided to Foundation by University, the respective value of those services, and, as mutually agreed upon between the parties, the classification of each service as either reimbursed or contributed.
- 6.6 University shall provide reasonable support to Foundation including personnel services consistent with the support outlined above and based upon an annual budget plan agreed to by the parties.
- 6.7 When University’s Athletics Program receives funds from Foundation for a specified or restricted purpose, University’s Athletics Program agrees to use such funds received for the specific or restricted purpose to the extent allowed by applicable law.
- 6.8 Foundation agrees that when University personnel provide services for the Foundation and there arises a conflict between University and the Foundation, the University employee must comply with the policies, regulations, and directives of the University; provided that said employee shall notify the Foundation in ample time to remedy the conflict or approve the intended action when feasible. If prior notification is not feasible, the Foundation shall be promptly notified in writing of the conflict and action taken.

7.0 Foundation Audits, Legal Representation, and Reporting.

- 7.1 Foundation agrees to select a certified public accounting (“CPA”) firm, to serve as Foundation’s independent auditor and to complete a full and complete annual audit of its finances and operations. Foundation agrees to notify University within thirty (30) days if it selects a different auditor. Foundation agrees that any CPA firm providing an annual audit of the Foundation will be used only for audit purposes and will not provide any non-auditing service to the Foundation except for tax preparation services that are approved in advance by the Foundation’s audit committee.

- 7.2 Foundation agrees to provide to the Chancellor:
- 7.2.1 Upon completion, the annual audit report, management letters and responses to management letters, and the Foundation's IRS Form 990;
  - 7.2.2 The list of Foundation governing board, officers, and employees immediately upon a change in membership, officers, or employment status;
  - 7.2.3 The names of the officers and governing board members of all Foundation associated or affiliated entities immediately upon a change in officers or in board membership;
  - 7.2.4 An annual report of operations that shows actual versus budgeted revenues and expenditures annually concurrent with the provision of the annual audit report referenced in subsection 7.2.1 of this section.
- 7.3 Foundation agrees to allow the Chancellor, the chair of the East Carolina University Board of Trustees, or the chair's or the Chancellor's designee, to inspect and audit all foundation books and records [that are relevant to an articulated legitimate reason] at reasonable times, and to provide timely such other reports of and information on its financial status and operations as required by the Chancellor.
- 7.4 North Carolina's State Auditor and ECU's internal auditor shall be provided access to persons and records that are generated as a result of, or are related to, the Agreement for the purposes of verifying accounts and data affecting fees or performance in accordance with N.C. General Statutes § 147-64.7 and N.C. Session Laws 2010-194, Section 21.

8.0 Conflicts of Interest.

Foundation will establish and maintain conflicts of interest policies pertaining to its relationship with University, members of the governing board and persons doing business with Foundation. Such policies shall provide that (a) all transactions (other than expense reimbursements set forth in 5.3), between Foundation and an officer, director, or employee of Foundation, must be approved by the Foundation Board; (b) no Foundation officer, director, or employee having a private business interest in a Foundation business transaction may be involved in the decision with respect to whether the Foundation should enter into such transaction; (c) no Foundation scholarship or fellowship award may be made to an officer, director, or employee of the Foundation or to a family member of such person unless the recipient of the award is approved by an independent awards committee established by Foundation according to Foundation by-laws.

9.0 Compliance with UNC and University policies and regulations and Foundation Bylaws.

Both University and Foundation agree to comply with the policies and regulations of the University of North Carolina Board of Governors, the East Carolina University Board of Trustees, the President of the University of North Carolina and the Chancellor pertaining to the relationship between University and associated entities, including amendments thereto. University shall provide Foundation with proposed amendments to such policies and regulations as soon as possible but, where practicable, not less than ninety (90) days prior to their effective date. Foundation agrees to provide University with a copy of its Bylaws and shall provide any proposed amendments as soon as possible but in no event less than ninety (90) days prior to the meeting of the Foundation at which they are considered for adoption.

Foundation agrees to abide by applicable bylaws, regulations, rules, and policies of the National Collegiate Athletic Association and any athletic conference in which University may be a member.

10. Effect of Agreement; Modification.

This Agreement (and its attachments, if any) contains all the terms between the parties and may be amended only in writing signed by an authorized representative of both parties.

11. Confidentiality.

Neither Foundation nor University shall disclose or use any private, confidential, proprietary, or trade secret information provided from one to the other except as required in and by the terms of this Agreement or as required by law. Foundation recognizes the obligation of University to comply with North Carolina Public Records laws.

12. Indemnification.

Foundation shall indemnify and hold harmless University, its governing board, officers, employees, agents, and students in their official and personal capacities, from and against any and all claim, damage, liability, injury, expense, demands, and judgments, including court costs and attorney's fees, arising out of Foundation's performance of this Agreement to the extent any such claim, damage, liability, injury, expense, demand or judgment is caused by the Foundation or any University employee acting at the direction of the Foundation Board or the Chair of the Foundation Board. This provision shall continue beyond termination or expiration of this Agreement.

University will be responsible for the conduct of its officers and employees arising out of the performance of this Agreement to the extent permitted and limited by the laws of North Carolina, including the North Carolina Tort Claims Act, the Defense of State Employees Act, and the Excess Liability Policy administered through the North Carolina Department of Insurance, subject to the availability of appropriations and in proportion to and to the extent that such liability for damages is caused by or results



from the acts of University, its officers or employees. This provision shall continue beyond termination or expiration of this Agreement.

13. Term and Termination.

13.1 The initial term of this Agreement shall be 5 years from the date of execution and shall be automatically renewed for successive 5 year terms, unless and until either party gives notice in writing to the other party of its intent not to renew the Agreement at least one hundred eighty (180) days prior to the beginning of a new term.

13.2 Either party shall have the continuing right to terminate this Agreement at any time without cause upon one hundred eighty (180) days written notice to the other party. Such termination of this agreement by the University must be approved by the Chancellor. Such termination of this agreement by the Foundation must be approved by the Executive Committee of the Foundation.

13.3 University may terminate this agreement at any time if the Foundation fails to abide by the policies or regulations of University or of the University of North Carolina which govern the relationship between University and the Foundation. Alternatively, Foundation may terminate this agreement at any time if University fails to abide by its own policies or regulations which govern the relationship or the terms of the Agreement. Notwithstanding the foregoing, the parties agree that the provisions of Section 12 and 14 of this Agreement shall survive the termination of this Agreement in any event and for any reason.

14. Dissolution.

It is the intent of the Foundation that it have perpetual existence. In the event of dissolution of the Foundation, either voluntary or involuntary, all assets and property which remain after the discharge of the Foundation's liabilities and unless otherwise designated by the donor of an asset shall be paid over or distributed by the Foundation's Executive Committee to University's Athletics Program or to any other nonprofit corporation or corporations organized to support University's Athletics Program as determined by the Executive Committee in its sole discretion, and shall be used or distributed for no other object or purpose whatsoever; provided, however, that any such organization must be exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code, as amended and be an associated entity approved by the University pursuant to regulations of the University of North Carolina. This provision shall continue beyond termination or expiration of this Agreement.

15. Compliance with Applicable Law and Non-Discrimination.

15.1 Foundation agrees to comply with all executive orders, federal, state and local rules, regulations, and laws, applicable to Foundation as currently in effect and as may be amended from time to time. Foundation further agrees not to discriminate

in any manner on the basis of sex, race, creed, age, color, national origin, religious belief, disability, veteran status, genetic information or sexual orientation, and to comply with all non-discriminatory laws and policies that University promulgates and to which Foundation is subject.

15.2 Foundation will maintain a confidential and anonymous mechanism to encourage employees to report any inappropriateness within the entity's financial or other management and will not punish or retaliate against any employee for reporting problems.

16. Notice.

Any notice to either party hereunder must be in writing signed by the party giving it, and shall be deemed given when mailed postage prepaid by U.S. Postal Service first class, certified mail, or other overnight mail service, or hand delivered, when addressed as follows:

To University:

East Carolina University  
Attn: Vice Chancellor for University Advancement  
2200 South Charles Boulevard  
Greenville, NC 27858

East Carolina University  
Attn: Chancellor  
105 Spilman Building  
East Fifth Street  
Greenville, NC 27858

East Carolina University  
Attn: Director of Athletics  
365 Ward Sports Medicine Building  
Greenville, NC 27858

East Carolina University  
Attn: University Attorney  
210 Spilman Building  
East Fifth Street  
Greenville, NC 27858

To Foundation:

The Executive President of Foundation as that person may be elected from time to time and as noticed to University pursuant to paragraph 7.2.2 of this Agreement

and

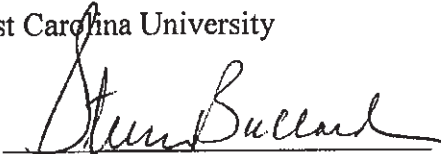
Walter L. Hinson  
Counsel to the Foundation  
Hinson & Rhyne, P.A.  
Wilson, NC 27895

Or to such other addressee as may be hereafter designated by written notice.

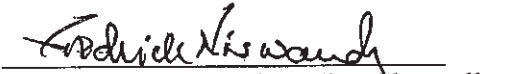
IN WITNESS WHEREOF, East Carolina University and the authorized representative(s) of East Carolina University Educational Foundation, Inc., have executed this Agreement on this 30<sup>th</sup> day of March, 2012.

East Carolina University

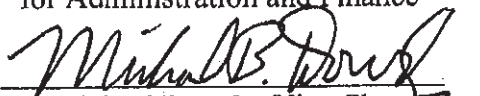
By

  
Steve Ballard, Chancellor

By


  
Frederick Niswander, Vice Chancellor  
for Administration and Finance

By


  
Michael Dowdy, Vice Chancellor  
For University Advancement

East Carolina University Educational  
Foundation, Inc.

By

  
Jimmy Creech, Executive President

By

  
Carl Rogers,  
Executive Vice President

ATTEST:

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

ATTEST:

BY:  \_\_\_\_\_

TITLE: Executive Secretary \_\_\_\_\_

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. Gerald Prokopowicz, Chair of the Department of History
Agenda Item	III. D.
Item Description	History Curriculum Update
Action Requested	Information and Discussion
Disposition	
Notes	

East Carolina University  
Board of Trustees  
September 24, 2015

Session	University Affairs Committee
Responsible Person	Dr. Virginia Hardy, Vice Chancellor for Student Affairs
Agenda Item	IV. A.
Item Description	Student Affairs Fall Update
Action Requested	Information and Discussion
Disposition	
Notes	

Opening semester picture (August 8<sup>th</sup> – September 9<sup>th</sup>)

### **New Student Convocation and Welcome**

- 4,200-4,300 first year students and transfer students attended
- Scott Avett (ECU alum/Avett Brothers member) delivered keynote
- Pre-convocation Lip Sync/Dance competition videos have gone viral nationwide

### **Pirate Palooza**

- 15<sup>th</sup> year of the event
- Held on-field and underneath Dowdy-Ficklen Stadium
- 5,398 students attended
  - 66% first year students

### **Counseling Center and Student Development**

- Number of appointments: 445 (total number)
- Number of crisis appointments: 50 (plus 4 referrals to Vidant Emer. Dept.)
- Approx. wait time: 10.98 days

### **Dean of Students Engagement**

- 50 - outreach presentations by Counseling Center
- 36 - ECU Cares cases
- 4 - UBCT Cases (3 students and 1 employee)

### **Of the 305 reports submitted to Office of Student Rights and Responsibilities:**

- 1 – Academic Integrity
- 8 – Admissions History
- 4- Campus living hall cancellations
- 203 – Conduct Cases
  - 1 – Conduct (Administrative Suspension)
  - 63 – Conduct (campus living)
  - 34 – Conduct (OSRR)
  - 105 – pending resolution with OSRR and/or Campus Living

### **Alcohol and drug cases**

- Reports submitted pertaining to drugs 39
- Reports submitted pertaining to alcohol 115

### **Campus Living Information - As of Sept. 8, 2015**

- On campus residents: 5,557 students
    - 4,188 Contracts with freshman
    - 47 Didn't show up to campus
    - 170 Residency exempt
- \*\*161 additional students housed at North Campus Crossing

- Living Learning Communities
  - Gateway Halls
    - Home to 14 of 17 LLC's
    - 680 of 720 students in Gateway are in LLC
  - 950 total LLC students
  
- Apartment Occupancy (Fall 2015)
  - 3,463 Available units
  - 10,220 Available beds
  - 9,237 Occupied beds
  - 958 Beds available
  - 94% Average occupancy

### **Greek Life Growth**

- Greek Life increased membership 117% from Fall 2006 – Spring 2015
  - Spring 2015
    - Total number 2,662
    - 4 Councils and 38 Chapters
  - Fall 2015/Spring 2016
    - Anticipated to surpass pass 3,000 members
    - Two new organizations joining with Sigma Pi (IFC) and Alpha Kappa Alpha (NPHC)
  
  - Interfraternity Council (IFC) Recruitment – Sept. 14-18
    - More than 500 men registered to participate - up from 412 last year
  
  - Panhellenic Recruitment ended Sept. 1<sup>st</sup>
    - 663 women placed in sororities (up from 608 in 2014)
    - 887 women registered for recruitment
    - 769 women showed up and completed first round of the process.
      - 86% placement rate for women who showed up.
      - Majority of the 14% not placed withdrew from recruitment
  
  - National PanHellenic Council (NPHC) hosted “*Meet the Greeks*” on Aug. 29<sup>th</sup>
    - 229 students attended in fall 2015
    - 153 students attended in spring 2015
  
  - The Multicultural Greek Council (MGC) held its Greek Diversity Invitational on Sept. 10th