



# ADMI Participation in the NSF CI-TEAM and CReSIS Projects

The vision and goals of the National Science Foundation CI-TEAM at ECSU project titled “Cyberinfrastructure for Remote Sensing of Ice Sheets,” are based on the fact that “educational settings, audiences, and goals are too important to be adequately addressed as afterthoughts or add-ons to cyberinfrastructure projects and, instead, must be treated as high priorities integrated in a project’s overall design”. The NSF CI-TEAM at ECSU project, through the Association of Computer and Information Science/Engineering Departments at Minority Institutions (ADMI), aggressively engages computer science and engineering students from eleven minority universities in the Grid, remote sensing, and CReSIS training, seminars, workshops and classes. ADMI serves as a forum through which faculty and students in computer and information science/computer engineering departments at minority institutions may exchange information and ideas for improving the quality and effectiveness of computer and information science/engineering education at minority institutions. Dr. Linda Hayden is the principal investigator. Co-investigators in the project are Dr. Geoffrey Fox of Indiana University and Dr. Prasad Gogineni of The University of Kansas. Dr. Diana R. Rhoten is the NSF Program Officer.

## Global Warming Nobel Peace Prize Winner - Dr. Mohan Munasinghe

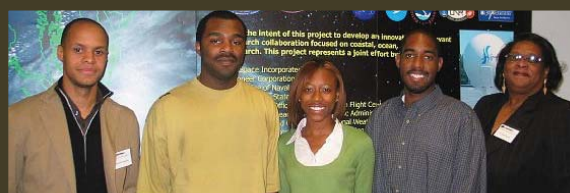
On July 21, 2008, Elizabeth City State University welcomed Dr. Mohan Munasinghe to speak at the Chancellor’s Distinguished International Visiting Lecture Series luncheon. Dr. Munasinghe is the Vice Chairman of the United Nations Intergovernmental Panel on Climate Change (IPCC) in Geneva and co-winner of the 2007 Nobel Peace Prize for work on global warming.

The program was opened by Dr. Ali Khan, Vice Chancellor for Academic Affairs at ECSU. Dr. Willie J. Gilchrist, Chancellor, ECSU, extended greetings to Dr. Munasinghe and guests in attendance. Fifteen students from ADMI institutions participated.



## Distinguished Lecture Series with Dr. Richard Moore and Dr. Derrick Lampkin

The Center of Excellence in Remote Sensing Education and Research welcomed Dr. Richard Moore, Professor Emeritus of Computer and Electrical Engineering at the University of Kansas and Dr. Derrick Lampkin, Department of Geography at Pennsylvania State University. Dr. Moore’s presentation on the history of microwave remote sensing was titled Microwave Remote Sensing from its Beginning to its Current State of the Art. Dr. Lampkin’s presentation was entitled Monitoring the Antarctic Ice Shelf Energy Balance using Robotic Rovers which gave an overview of his research project on gathering meteorological data from points outside the current Antarctic Automatic Weather Station (AWS) system. The lectures, co-sponsored by the NSF CI-TEAM project were webcast to all ADMI Partners. The lectures, co-sponsored by the NSF CI-TEAM were webcast to ADMI and CReSIS partners. Representing ADMI at the events were Dr. Andrea Lawrence of Spelman College along with Tyrone Whitehurst, Phillip Hayes Jr., and Brittany Herring from Norfolk State University.



## ADMI

President - Robert A. Willis Jr.  
Secretary - Iretta B. C. Kearse

Vice-President for Programs - Deidre W. Evans  
Treasurer - Gail T. Finley

Vice-President for Information - Alfred Watkins  
info@admiusa.org <http://www.admiusa.org/>



**Undergraduate Research Experience Summer 2008**

**Temporal and Spatial Variations of Sea Surface Temperature and Chlorophyll a in Coastal Waters of North Carolina**

Mentor: Dr. Jinchun Yuan

Phillip Moore - Saint Augustine's College

Yao Selom Messan - North Carolina A&T

Brittany Maybin - Spelman College

Chelsea Goins – Elizabeth City State University

**Younger Dryas Impact Study**

Mentor: Dr. Malcolm LeCompte

MyAsia Reid – Elizabeth City State University

Devina Hughes - Mississippi Valley State University

Leroy Lucas - Mississippi Valley State University

**Designing and Developing a Portal for the Polar Grid High Performance Computing System at ECSU**

Mentor: Mr. Jeffrey Wood

Patrina Bly – Elizabeth City State University

Justin Deloatch - Mississippi Valley State University

Camden Hearn - Mississippi Valley State University

Jonathan Henderson - Mississippi Valley State University

**The Modeling of Beach Erosion and Shoreline Changes Supported by Prior Research Based on Video Image Processing in Duck, North Carolina**

Mentors: Mr. Ernst Wilson/Dr. Arvin Agah

Omotilewa Oluwatoba - Nigeria

William Shannon - Winston Salem State University

Michael Jefferson – Elizabeth City State University

**Polar Grid July 2008 Field Season - Ilulissat, Greenland**

The goals of the Polar Grid project in support of the Center for Remote Sensing of Ice Sheets (CReSIS) project were to provide backup facilities for all data collected on the CReSIS flights; provide processing facilities to test data in the field; to send processed images to the University of Indiana for geographical based image feeds.

The 2008 Ilulissat, Greenland Field Team included Dr. Eric Akers, ECSU professor, and Mr. Je'aime Powell, ECSU graduate student. Participating in broadcasts from Ilulissat, Greenland were students from Mississippi Valley State University, Spelman College, Elizabeth City State University, North Carolina A&T University, Winston-Salem State University, and St. Augustine's College.



## ADMI 2008 :: Scholarships for Students

Each year, the Association of Computer and Information Science/Engineering Departments at Minority Institutions (ADMI) hosts a symposium devoted to computing issues relevant to minority students, education and institutions. The 2008 Symposium was held in Virginia Beach, Virginia on April 3-6. The symposium highlighted undergraduate and graduate research. Dr. Geoffrey Fox, Indiana University, conducted a workshop for faculty on cyberinfrastructure opportunities for MSI's during ADMI 2008.

Awards were given for the oral and poster presentations. Presentation of the awards and certificates was presided over by Dr. Robert Willis, ADMI President and Dr. Lawrence Oliver, ADMI Ex-Officio. Dr. Linda Hayden also presented awards and certificates to those students in the NSF CI-Team Project. Seventeen students from ADMI institutions received CI-TEAM scholarships.



## ADMI 2007 :: Scholarships for Students

The 2007 ADMI Symposium was held in Atlanta, Georgia on February 8-10. The theme 2007 symposium was "Computing: Innovation Without Boundaries." Twenty-two students from ADMI institutions received CI-TEAM scholarships.



### CI-TEAM Scholarship Recipients

#### 2008

##### Elizabeth City State University

Tiwana Walton      Wanda-Marie Carey  
Jamika Baltrop

##### Florida A&M University

Kevin Lawrence      Rodney DuBose

##### Hampton University

Noah Kithcart

##### Mississippi Valley State University

DeMarcus Thomas      Marcus Winn  
Alvin McClerkin      Benjamin Harvey

##### Spelman College

Chanelle Green      LaTorria Jones

##### University of the District of Columbia

Travis Brenhan

##### Winston-Salem State University

Michael Robertson      Edward Jordan II  
Michaelyn Jackson      Ryan Folks

#### 2007

##### Elizabeth City State University

Unquiea Wade      Gregory Brown  
Bryce Carmichael

##### Hampton University

Noah Kithcart      Brittany Adams

##### Howard University

Jessica Battle

##### Jackson State University

Douglas Gavin

##### Mississippi Valley State University

Amanda Bland      Shundii Clay  
Keisha Jackson      Amber Williams  
Camden Hearn      Alvin McClerkin  
Daniel Smart      Thomas DeMarcus  
Cedric Foster      David Gregory II  
Marcus Winn

##### Winston-Salem State University

Georgette C. Gray      Michaelyn Jackson  
Timothy Campbell      Michael Robertson

## Installation and Implementation of a LAMP Documentation Server



Andrea Grumbles - ECSU  
Tyrone Whitehurst - NSU  
Amanda Bland - MVSU

Camden Hearn - MVSU  
Illiana Thomas - ECSU

Mentor: Mr. Je'aime Powell

The 2007 GRID Team project involved documenting the processes of creating an open-source documentation server. The server used the Linux, Apache, MySQL, and PHP (LAMP) components along with a MediaWiki interface to document future TeraGRID projects.

## Use of Microsoft Visual Studio Express Edition and DirectX to Simulate Movements of a Colony of Penguins to be tagged for a Science Mission

Sandy Harrison - WSSU  
Spencer Weeks-Jamieson  
Mentors: Dr. Arvin Agah / Mr. Tushar Majithia

Terrance Mason -MVSU  
Jasmin Rivers - ECSU

The 2007 Artica Team combined education and fun into a game in order to teach the players about polar research. The objective of this URE Summer project is to enhance an existing video game to educate young students on the Polar Regions including challenges that scientists face.



# EMERGING TRENDS AND TECHNOLOGIES

ADMI 2009 - THE SYMPOSIUM ON COMPUTING AT MINORITY INSTITUTIONS  
APRIL 17 - 19, 2009 MORGAN STATE UNIVERSITY, BALTIMORE, MD  
[HTTP://WWW.ADMIUSA.ORG/ADMI2009/](http://www.admiusa.org/admi2009/)



## Update on Future Partnerships

Dr. Andrea Lawrence has been identified as the ADMI point of contact in the newly submitted proposal to NSF for continuation of the CReSIS Science and Technology Center through years six through ten. The submitted ADMI budget is for \$606,690. Travel is requested for staff and students to attend CReSIS related events including NSF site visits, advisory committee meetings and required strategy sessions.

Support is also requested for participation of ADMI students in the summer eight week research training program on the campus of ECSU. Students will receive a stipend of \$300/week. Eight students will be supported in years six through ten.

Support is also requested for the involvement of MSI faculty members in CReSIS related training events and workshops. Fifteen faculty members will participate in years six through eight and ten in year nine. Support will not be available in year ten.

The primary goal of the Center's diversity program is to increase the number of students from groups underrepresented in science and engineering. A critical factor in achieving this goal is to also ensure CReSIS maintains diversity among the faculty; staff; and scientific and technical collaborators these K-12 and undergraduate



students will interface with and learn from. CReSIS achieved a 20% objective for graduate and undergraduate students from underrepresented groups in its initial phase. A continuing partnership with ECSU and a new partnership with ADMI offers CReSIS unique perspectives to scientific and technical problems while simultaneously providing the students greater access to graduate education at other Center universities. CReSIS will continue to devote the resources necessary to embed diversity considerations into our various programs, rather than treating it as "something else" we do.