

Research A&T

DIVISION OF RESEARCH & ECONOMIC DEVELOPMENT
NORTH CAROLINA A&T STATE UNIVERSITY
EDWARD B. FORT INTERDISCIPLINARY RESEARCH CENTER

EDITOR'S NOTE:

This is the sixth in a series of stories featuring University Approved Centers.

Saving Energy...

UPCOMING EVENTS

**Complimentary
Fields of
Innovation and
Entrepreneurship
Thursday,
February 21, 2008
12:00 p.m.—1:00
p.m.
Fort IRC Building
Room 410**

For more information
contact The Office of
Research Services at
(336) 334-7995



According to the Energy Information Administration, North Carolina's energy consumption is among the highest in the nation. Reducing energy consumptions is the reason behind the Center for Energy Research and Technology (CERT). CERT was founded to reduce the environmental impact that results from excessive energy consumption. The Center's research focuses on energy use and energy efficiency in buildings and industrial processes as they relate to technological, economic, political and environmental issues.

CERT is currently working on a three year project that will be completed within the next two to three months. This \$541,320 project was the only one in the nation to be funded by the federal government as an open bid in 2005. After the Sept. 11 tragedy the government decided to educate building professionals (architects, engineers, real estate owners and managers, facilities managers, etc.) on designing buildings to minimize damage if there were to be a chemical or biological weapon released inside the building. CERT was tasked with providing educational and training materials for this grant.

Another project in the works for CERT involves improving the energy efficiency of state, county and city owned buildings in Greensboro. One of the foci of this project is the Energy Efficient Building Program. This program is constructed of a Commercial Building Program, which involves an energy efficient renovation demonstration, an Institutional Building Program, which consists of a Guilford County school energy management demonstration, and Manufactured Housing, which involves a "Best Practices" and "New Technology" demonstration program. Along with the Energy

Efficient Building program, the Alternative Fuels program, the Community Energy program and the Energy Education program are part of this project funded by the State Energy Office. The grant which is for 18 months began January 2008 and will end June 2009. It is funded for \$720,000, and is one of three universities in the state to have been.

"Buildings use 35%-40% of the total energy consumption in the U.S." says Dr. Harmohindar Singh, Director of CERT and Engineering Professor, "We use a lot more energy than the rest of the world and that is why the main purpose of this project is to reduce energy consumption."



Dr. Harmohindar Singh, Director of the Center for Energy Research and Technology and Engineering Professor

To find out more information please visit the Center's website at:
<http://www.cert.ncat.edu/>



Dr. Ronnie Bolick displaying most recent modified version of his invention H-VARTM.

Dr. Bolick Enhances Composite Molding Process

Dr. Ronnie Bolick continues to contribute to A&T with his patent pending invention, Heated Vacuum Assisted Resin Transfer Molding (H-VARTM). The H-VARTM is used to manufacture composites without the use of autoclave, oven and/or press. This process produces lower porosity and improves the fiber volume content to the conventional VARTM procedure, and reduces cost and production time. Dr. Bolick came up with the

idea of H-VARTM due to his experience with VARTM. In the past, Dr. Bolick and fellow researchers would have to heat the laboratory room to 95 degrees F to complete the molding process. He wanted to create a way to make this process easier and more comfortable.

According to Dr. Bolick, the hardest part of this invention was writing down the procedures for others to follow. After the procedures were

placed on paper, students were also able to complete the process. Now the students along with Dr. Bolick come up with new ways to modify and improve the H-VARTM and other composite processing. Students and researchers from other universities come to NCA&T to learn Dr. Bolick's techniques and process.

Dr. Bolick came to A&T as a consultant in 1998 and has been working on H-VARTM since 2004.

REMINDERS FROM THE COMPLIANCE OFFICE

The compliance office has developed new policies on human subjects research:

- All Principle Investigators (PIs), Co-PIs and advisors must complete CITI (Collaborative IRB Training Initiative), which is the required education for conducting human subjects research.
- All PIs, Co-PIs and advisors must submit a bio sketch to the compliance office with research protocol application.
- Two copies of the research protocol application and supporting documents (consents, surveys, etc.), are needed (one hard copy and a copy on a CD.)

A request can be made for a Compliance presentation to be given for department meetings or individual classes. Presentations can be scheduled to take place at the Fort IRC Building or at any desired location.

Compliance Forms/Tests are available on the current DORED website and are the **ONLY** valid forms/tests. **Old forms/ tests are no longer valid.**

What's New: The Compliance Office has a new suggestion box. If there are any questions or concerns they may be submitted anonymously directly to the Compliance Office.

For more information about the IRB ([Institutional Review Board](http://www.ncat.edu/~divofres/compliance/irb/index.php)) Process please feel free to visit the website; <http://www.ncat.edu/~divofres/compliance/irb/index.php> or contact Donna Eaton, Compliance Officer at 334-7995.

Tell My IRB

Any suspected misconduct in human subjects research should be reported using the anonymous system <http://www.tellmyirb.com>;

The Office of Research Services presents...

Cindia Hairston



Cindia Hairston, Administrative Officer for the Office of Research Services in DORED

As the newest member in the Office of Research Services (RS), Cindia Hairston is responsible for assisting Principal Investigators (PI) on budget revisions, purchase orders, grant compliance, scholarships, travel reimbursements, and student payroll. Ms. Hairston joined RS on November 1, 2007. Cindia Hairston, however, is no stranger to A&T's campus, with 16 years of experience under her belt in the Division of Research. Ms. Hairston has

been a member of the Aggie family since 1991 when she came as a program assistant at the Center for Composite Materials. She then moved to the Mechanical and Chemical Engineering department in 1999 as an administrative secretary, and from there to Computational Science and Engineering under Dr. Ajit Kelkar as an executive assistant in 2005. It is no surprise then with so much knowledge regarding A&T the move from Computational Science and Engineering to RS

was simple. "I basically do the same thing now that I was doing before when I was working with Electrical Engineering and Mechanical Engineering," said Cindia Hairston, Administrative Officer for RS, "the only difference is where I sit;" however, don't look for Ms. Hairston to be seated for too long, every Monday, Wednesday and Friday Ms. Hairston is located in McNair hall working directly with professors on grants.

FUNDED PROPOSALS January 1, 2008—January 25, 2008
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<u>PI</u>	<u>COLLEGE /SCHOOL</u>	<u>PROJECT TITLE</u>	<u>FUNDED AMOUNT</u>
Kunigal Shivakumar	COLLEGE OF ENGINEERING	NOVEL MATERIALS AND EVALUATION OF THEIR STRUCTURAL PERFORMANCE FOR MHAV APPLICATIONS	\$ 61,008.00
Harmohindar Singh	COLLEGE OF ENGINEERING	PERFORMANCE OF PRELIMINARY ENERGY AUDITS IN NORTH CAROLINA	\$ 53,000.00
Jothi Kumar	COLLEGE OF ARTS AND SCIENCES,	Science and Technology Enrichment Program	\$ 60,000.00
Gloria Warren	SCHOOL OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES	4- H YOUTH ENTREPRENEURSHIP PROJECT	\$ 2,000.00
Mohamed Ahmedna	SCHOOL OF AGRICULTURAL AND ENVIRONMENTAL SCIENCES,	Rapid Assessment of Food Allergens and Allergy Biomarkers	\$ 30,477.00

Institutes for Advanced Topics in the Digital Humanities 20080409-HT

National Endowment for the Humanities/Natl. Fndn. on the Arts & Humanities
Room 429, 1100 Pennsylvania Avenue, NW, Washington, DC 20506
Tel: 1-800-518-4726 Email:

dhi@neh.gov
Website: <http://www.neh.gov/grants/guidelines/IATDH.html#poc>
<http://www.neh.gov/grants/guidelines/IATDH.html>

Deadline: 4/9/2008
Funding Limit: \$250,000

NEA Literature Fellowships: Creative Writing, FY2009

National Endowment for the Arts
Funding Opportunity Number: 2008NEA03LFCW

Closing Date for Applications: Mar 03, 2008

Archive Date: Apr 02, 2008
Award Ceiling: \$25,000 Link to Full Announcement: <http://www.arts.gov/grants/apply/Lit/GrantProgDescription.html>

If you have difficulty accessing

the full announcement electronically, please contact: National Endowment for the Arts, Web Site Manager, webmgr@arts.gov

OVW FY 2008 Rural Domestic Violence, Dating Violence, Sexual Assault and Stalking Assistance Program

United States Department of Justice. Office of Justice Programs. Office of Violence against Women Funding Opportunity Number: OVW-2008-1771 **Closing Date for Applications: Feb 26, 2008**
Archive Date: Mar 27, 2008 Link

to Full Announcement: <http://www.ovw.usdoj.gov/current-solicitations.htm>

Funding Notices

If you have difficulty accessing

the full announcement electronically, please contact: Kara Moller ovw.rural@usdoj.gov

Biotechnology Risk Assessment Research Grants Program

United States Department of Agriculture CSREES Funding Opportunity Number: USDA-CSREES-BRAP-001212

Closing Date for Applications: Feb 28, 2008

Archive Date: Mar 29, 2008
Estimated Total Program Funding: \$3,000,000
Award Ceiling: \$400,000 Link to Full Announcement: [http://](http://www.csrees.usda.gov/funding/rfas/bio-tech_risk.html)

For a complete list of Funding Announcements, Visit our website: <http://research.ncat.edu>

www.csrees.usda.gov/funding/rfas/bio-tech_risk.html
If you have

difficulty accessing the full announcement electronically, please contact: CSREES Help Desk, Phone: 202-401-5048, electronic@csrees.usda.gov
Business hours are M-F, 7:00 am -5:00 pm ET

Conservation Innovation Grants

United States Department of Agriculture
Natural Resources Conservation Service

Funding Opportunity Number: NRCSNHQ0801

Closing Date for Applications: Feb 20, 2008

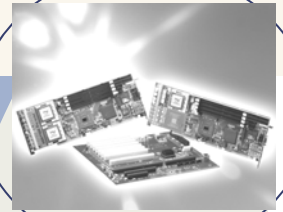
Archive Date: Mar 31, 2008
Expected Number of Awards: 60

Estimated Total Program Funding: \$20,000,000
Award Ceiling: \$1,000,000
Link to Full Announcement: <http://www.nrcs.usda.gov/programs/cig>



Conquering the Work Load...

RESEARCH
A&T
Issue 1 Vol. 2
February 2008



Although her work load is full Dr. Mitzi Bond, Assistant Vice Chancellor for Research Administration, manages to keep a positive attitude. Dr. Bond's primary responsibilities are to manage and support the Office of Research Services, the Office of Sponsored Programs (OSP) and the Compliance Office.



Dr. Mitzi Bond, Assistant Vice Chancellor for Research Administration

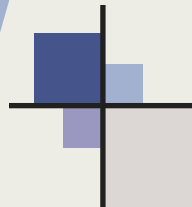
The Office of Research Services offers information for funding opportunities for research programs and expertise of A&T faculty. The OSP provides information and knowledge to ensure that researchers are in compliance with federal and state laws. The Compliance Office provides a service that helps researchers, study participants, federal agencies, and the research committees comply with the ethical conduct of research at A&T.

When A&T does business

with agencies of the federal government and government contractors all parties must negotiate the basic terms and conditions, which is called the Basic Ordering Agreements (BOAs). Dr. Bond has the duties of writing the proposals for BOAs with industry partners and responding to Requests for Proposals (RFPs) for such agreements.

Dr. Bond has other responsibilities and duties which include developing and writing poli-

cies and procedures for DORED, which consists of policies for Research Misconduct, Conflict of Interest and Export Control. The policies are dynamic as they constantly change. The University of North Carolina General Administration (UNC-GA) provides a basic template for policies in which a research institute must have in place. It is up to the university to adapt the policies or add to the guidelines provided, as the policies should fit the university needs. The policies must be better or equal the ones established by the UNC-GA.



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