The Center for Functional Nanoscale Materials has as its dual goals the preparation of talented young Americans for careers in science and technology and the advancement of our understanding of and technical capabilities at the nanoscale. Pursuant to these goals the Center conducts a variety of summer programs. During the Summer of 2011 the Center conducted the Summer Nanoscholars Program, the CFNM/PRISM Teacher Fellows Program, the CFNM/UTPA Nanoscholars Program and the CFNM/ACS High School Nanoscholars Program. The Center has had the pleasure of hosting a total of fifteen scholars.

This is the first year that the Center has participated in Project SEED and it was able to host three Atlanta area high school students. In this program the high school students were involved in scientific research in one of the laboratories of the Center under the supervision of both a faculty advisor and a graduate student mentor. The Center has an ongoing mentoring training program for its students.

The CFNM/PRISM Program is a joint program between the Center and Emory University, in which area middle and high school teachers are paired with Center graduate students. In the first part of the program these teacher-graduate student teams developed skills in the use of the Problem-Based-Learning methodology at Emory University and in the second part the teacher fellows worked alongside the graduate students in the Center’s laboratories. Each team, using the summer experience as a basis, will generate problem-based-learning cases, which will be implemented in the high schools by the teacher-graduate student teams during the following academic year. The Summer Nanoscholars Program and the CFNM/UTPA Nanoscholars Programs sought to provide a summer educational and research experiences for talented undergraduates who are majoring in one of the natural or physical sciences, engineering or mathematics. This is the first year for the CFNM/UTPA Nanoscholars Program, which is a component of the partnership between the Center and the University of Texas Pan American. The goal of all of these programs is to provide to promising students and teachers a summer experience that will for some provide an introduction to scientific inquiry and for others provide an opportunity for enrichment and skill development. Participants in these Programs have been active participants in and contributors to the ongoing research programs in the Center. In addition participants take part in an enrichment program which is designed to further develop their skills as scientists and give the participants a deeper appreciation of the scientific process. As a finale, the Center hosted a day-long symposium, in which the summer scholars presented their work. It is our opinion that their parents and teachers have every reason to be proud of them.

These scholars included three area high school teachers and students from Georgia Perimeter College, Lane College, the University of Texas Pan American, Alcorn State University, Fort Valley State University, and Tuskegee University. The High Schools were: Riverwood International, Chamblee Charter, Druid Hills, Tri-Cities and West Lake High Schools.

The CFNM/ACS Nanoscholars Program is a joint undertaking by the Center and the American Chemical Society Project SEED, which seeks to provide summer research experiences for economically disadvantaged students.
The Water Chemistry and Microbiology Summer Program is a six-week program for rising high school juniors and seniors. This program is hosted by Clark Atlanta University, a member of the National Science Foundation (NSF) Science and Technology (S&T) Center of Advanced Materials for Purification of Water with Systems (CAMPWS). The Center is funded by the National Science Foundation through a Cooperative Research and Development Agreement with the University of Illinois at Urbana-Champaign as the lead institution. Students in the program have an average GPA of 3.5 or above.

**Topics**
Topics of discussion included the following:
- Basic Chemistry and Microbiology
- Laboratory Techniques
- General Chemistry and Microbiology Principles

**Water Chemistry and Microbiology**

**Summer Program 2011**

**DR. ERIC MINTZ, PRINCIPAL INVESTIGATOR**

- Water Resources, Water Chemistry, Water Pollution and Water Quality Testing
- Basic and Advanced Methods for Water Purification

**Activities**
Activities for the program included:
- Chemistry and Microbiology Laboratory Experience
- Field Trips
- Interaction with Professors and Fellow Students
- Chemistry, Microbiology, Biology, Math and English Tutorials
- Goal-setting, Speaking and Writing Skills Enhancement
- Methods for Water Purification

The Atlanta University Center Sustainable Campus Community Initiative, housed at Clark Atlanta University, served as host to this year’s High School Energy Summer Institute (HESI). The goal of this DOE funded program is to train and promote energy science and engineering, multi-disciplinary educational and research among high school students.

During the program, the students were introduced and trained in the areas of alternative and renewable energy, recycling, conservation, weatherization, enabling technologies and training. Instructors from the Department of Energy (DOE), the Environmental Protection Agency (EPA), Clark Atlanta University, National Wildlife Federation, Metso Corporation, local government and other respected organizations in industry provided lectures and hands-on experiences to the participants, covering various aspects of the energy field. The students were also given the opportunity to tour Southface, who are industry leaders in sustainable energy and environmental technologies, and Carraustar, one of North America’s largest integrated manufacturers of 100% recycled paperboard and converted paperboard products.

The students ranged in age from 14 to 18 and were provided a 2-week on-campus experience. During this same period, the HESI students had an opportunity to interact with students from several of CAU’s other summer experiences. The HESI students represented the States of Georgia and Mississippi.
**RSP HIGHLIGHT**

* **RSP ACADEMY**

Through the use of technology and with the assistance of OITC, Mr. Rollin Guyden, Research and Sponsored Programs offer online courses via WebCT. To find out more information, please contact RSP at 404-880-6990 or research@cau.edu.

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<table>
<thead>
<tr>
<th>*</th>
<th><strong>Online RSP Courses</strong></th>
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<tbody>
<tr>
<td>* RSP 101</td>
<td>This training course focuses on the vision, overview and guidelines of research at CAU. This is an introductory workshop for all Principal Investigators (PI’s) and researchers</td>
</tr>
<tr>
<td>* RSP 201</td>
<td>This training course provides an overview of the policies and procedures for extramurally funded projects including compliance with University and federal awarding agencies rules and regulations with regard to project startup, grants management, research compliance, budgeting as well as proper completion of salary, travel procurement and other forms.</td>
</tr>
<tr>
<td>* RSP 301</td>
<td>This is a training module that presents questions and problems as well as proposed solutions related to chemical hygiene, safety and hazardous waste.</td>
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**GRANT WRITING WORKSHOP**

**October 19, 2011 – October 21, 2011**

This intensive three-day grant proposal workshop is geared for: 1) those aiming to polish and improve current grant writing skills and 2) those who wish to acquire and master the techniques to research and draft grant proposals from various agencies. This is a comprehensive workshop that covers the diversity of donors, key search engines, and writing one’s individual grant or idea in what ultimately will constitute a winning grant.

Participants Will Learn How To:

- Research and identify potential funding sources
- Create the right fit with the funding agency
- Address the guidelines of proposals
- Identify and effectively write the key elements of a proposal
- Integrate each component of the grant into the final product
- Develop focused and realistic budgets
- Package professional grants submissions
- Write winning grants that can stand out against scores of competing submissions
- Comprehend the diversity of the grant funding community

Georgia Institute of Technology
Atlanta, Georgia

Workshop Fee: $595 (including tuition, materials, certificate of completion, and continental breakfast)

To Register: Please visit the Grant Training Center or call (866)704-7268
Winfred Harris, Ph.D.

Dr. Winfred Harris has an abundant history with the Clark Atlanta University campus. He began as a student at Clark College in the early 1950s earning his Bachelor in Science in Biology and Chemistry from Clark College and his Masters of Science in Zoology from Atlanta University. In the 1970s Harris returned as a professor of biology and chair of the Biology department. He also served as the acting President and Executive Vice President in the late 1980s as the two institutions began two merge. For several years, Dr. Harris’ continued his administrative tenure as Provost. During his tenure Dr. Harris served as chair of several committees and boards including those involved with student financial aid and the faculty assembly. As a principal investigator he received a number of research grants from the National Institutes of Health and Office of Naval Research. He was a distinguished Howard Hughes Professor for over twenty years. A true example of alumni giving, he gave his career to his alma mater.

Alexa Benson Henderson, Ph.D.

Shortly after receiving her Masters of Arts in History from Atlanta University, Dr. Henderson returned to the historical Atlanta University Center campus to begin her profession sculpting the minds of the youth. She dedicated her career to improving the experiences of college students, receiving grants that aimed to produce successful apprentices in various degree fields. She also served on committees that sought to enrich the matriculation of the students of Clark Atlanta University including the Academic Council, University Assessment, and Strategic Academic Council. Dr. Henderson also held positions as the Associate Dean for General Education and most recently, the Dean of Undergraduate Studies. An individual with a commitment to student success, she worked diligently to ensure that college students received the tools necessary to achieve their goals.
Dr. Isabella Newton Finkelstein joined Clark College in 1970 where she began her career as Instructor-Associate Professor. She also remained engaged and committed to the Clark Atlanta University family for over four decades. Over the next several years she further enhanced her career through her research & training efforts funded through National Institutes of Health and National Science Foundation. Her devoted service to the institution was apparent and she was later appointed Director of the MARC U*STAR (Minority Access to Research Career/Undergraduate Student Training in Academic Research) Program in 1983, a position which she maintained for over 20 years. In this appointment, Dr. Finkelstein supervised an immense research project that generated over $20,000,000.00 in external funding over the project period. Simultaneously, Dr Finkelstein served as Chairperson and Professor for Biological Sciences.

Throughout her tenure at Clark Atlanta University she received over 35 million dollars in external funding from a number of federal and private sponsors. Dr. Finkelstein is also remembered for her services in the professional community where she has served as chair or contributing member of steering committees to represent the University. Dr. Isabella Newton Finkelstein, we salute you for your endless contributions.

Ms. Maxine Thompson served as Director of the Upward Bound Program (UB) for more than 15 years. The UB Program serves students from the poorest sections of the City of Atlanta. The UB Program provides instruction in the basic academic areas, co-curricular activities, and personal and career advising needed to prepare students for postsecondary education. Income in the UB Program is funded through the U.S. Department of Education. Throughout her tenure, she has brought more than $4,000,000.00 to the University. Ms. Thompson will be greatly missed. We salute Ms. Thompson for her contributions and her dedication.
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<th>Title</th>
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<th>AGENCY</th>
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<td>Spatio-Temporal Modeling of Population Migration in Geographical Information Systems: An Afghanistan Case Study Project 1</td>
<td>George, Roy</td>
<td>CAENS</td>
<td>U.S. Department of Defense</td>
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<td>North Carolina A&amp;T State University / U.S. Department of Defense</td>
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<td>Emory University / National Science Foundation</td>
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<td>Center of Excellence for Prostate Cancer Research, Education and Community Service</td>
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<td>CCRTD</td>
<td>U.S. Department of Health and Human Services</td>
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<td>Lockheed Martin</td>
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<td>Molnár, Peter</td>
<td>Computer Science</td>
<td>U.S. Department of Transportation</td>
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<td>Simulation of Quantum Phenomena in Nanowire Sensors</td>
<td>Msezane, Alfred</td>
<td>CTSPS</td>
<td>U.S. Department of Defense</td>
<td>$ 486,383.00</td>
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<td>Coalition for Research and Education Enhancement in Materials</td>
<td>Wang, Xiao-Qian</td>
<td>Physics</td>
<td>National Science Foundation</td>
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<td>Support for Summer Minority Research Internships</td>
<td>Webb, Melvin</td>
<td>Biology</td>
<td>U.S. Department of Defense</td>
<td>$ 195,000.00</td>
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<td>Biofuel Production from Lignin: Recombinant Lignin-Degrading Enzymes to Digest Wood for Biofuel Production</td>
<td>Williams, Myron</td>
<td>Chemistry</td>
<td>Environmental Protection Agency</td>
<td>$ 15,000.00</td>
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<td>Application for Educational Talent Search FY2011 (Metro Atlanta)</td>
<td>Wyatt, Phyllis</td>
<td>Undergraduate Studies</td>
<td>U.S. Department of Education</td>
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<td>Application for Educational Talent Search FY2011 (Troup County)</td>
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Funding Opportunities

United States Institute of Peace - Annual Grant Competition
The United States Institute of Peace (USIP) accepts applications for the Annual Grant Competition on the basis of a single application deadline per year. The Annual Grant Competition supports peace building projects involving research, the identification of promising models and effective practices, the development of practitioner resources and tools, the development and delivery of education and training programs, and the production of films, radio programs and other media. Areas of interest to USIP include, but are not limited to these topics.

- **FUNDING OPPORTUNITY NUMBER:** N/A
- **AWARD CEILING:** $120,000
- **AWARD FLOOR:** $50,000
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: October 3, 2011

National Endowment for the Humanities - Enduring Questions: Pilot Course Grants
The National Endowment for the Humanities (NEH) accepts applications for the Enduring Questions Grants. The NEH Enduring Questions grant program supports the development of a new course that will foster intellectual community through the study of an enduring question. This course will encourage undergraduates and teachers to grapple with a fundamental question addressed by the humanities, and to join together in a deep and sustained program of reading in order to encounter influential thinkers over the centuries and into the present day.

- **FUNDING OPPORTUNITY NUMBER:** 20110915-AQ
- **AWARD CEILING:** $25,000
- **AWARD FLOOR:** $0
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: September 15, 2011

Grammy Foundation - Research Grants (Impact of Music on Human Development)
The GRAMMY Foundation Grant Program awards grants to organizations and individuals to support research on the impact of music on the human condition. Examples might include the study of the effects of music on mood, cognition and healing, as well as the medical and occupational well-being of music professionals and the creative process underlying music. Priority is given to projects with strong methodological design as well those addressing an important research question.

- **FUNDING OPPORTUNITY NUMBER:** N/A
- **AWARD CEILING:** $20,000
- **AWARD FLOOR:** $0
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: October 3, 2011
FUNDING OPPORTUNITIES CONT...

National Science Foundation (NSF) — Environmental Sustainability

The Environmental Sustainability program supports engineering research with the goal of promoting sustainable engineered systems that support human well-being and that are also compatible with sustaining natural (environmental) systems. These systems provide ecological services vital for human survival. The long-term viability of natural capital is critical for many areas of human endeavor. Research in Environmental Sustainability typically considers long time horizons and may incorporate contributions from the social sciences and ethics.

This program supports engineering research that seeks to balance society's need to provide ecological protection and maintain stable economic conditions. There are four principal general research areas which are supported: Industrial Ecology, Green Engineering, Ecological Engineering and Earth Systems Engineering.

- **FUNDING OPPORTUNITY NUMBER:** PD 12-7643
- **AWARD CEILING:** $0
- **AWARD FLOOR:** $300,000
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: February 17, 2012

National Endowment for the Humanities Digital Humanities Start-Up Grants

The National Endowment for the Humanities (NEH) invites applications to the Digital Humanities Start-Up Grants program. This program is designed to encourage innovations in the digital humanities. By awarding relatively small grants to support the planning stages, NEH aims to encourage the development of innovative projects that promise to benefit the humanities.

Proposals should be for the planning or initial stages of digital initiatives in any area of the humanities. Digital Humanities Start-Up Grants may involve:

- research that brings new approaches or documents best practices in the study of the digital humanities;
- planning and developing prototypes of new digital tools for preserving, analyzing, and making accessible digital resources, including libraries’ and museums’ digital assets;
- scholarship or studies that examine the philosophical or practical implications and impact of the use of emerging technologies in specific fields or disciplines of the humanities, or in interdisciplinary collaborations involving several fields or disciplines;
- innovative uses of technology for public programming and education utilizing both traditional and new media; and new digital modes of publication that facilitate the dissemination of humanities scholarship in advanced academic as well as informal or formal educational settings at all academic levels.

- **FUNDING OPPORTUNITY NUMBER:** 20110927-HD
- **AWARD CEILING:** $50,000
- **AWARD FLOOR:** $0
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Letter of Inquiry: September 27, 2011
NSF ADVANCE: INCREASING THE PARTICIPATION AND ADVANCEMENT OF WOMEN IN ACADEMIC SCIENCE AND ENGINEERING CAREERS (ADVANCE)

The goal of the ADVANCE program is to develop systemic approaches to increase the representation and advancement of women in academic science, technology, engineering and mathematics (STEM) careers, thereby contributing to the development of a more diverse science and engineering workforce. ADVANCE focuses on ensuring that women faculty with earned STEM degrees consider academia as a viable and attractive career option. This program does not support projects to increase or retain the number of women entering into or persisting in STEM doctoral degree programs. Thus efforts to impact the STEM pipeline are not considered appropriate for the ADVANCE Program.

Creative strategies to realize the ADVANCE program goal are sought from women and men. Members of underrepresented minority groups and individuals with disabilities are especially encouraged to apply. Proposals that address the participation and advancement of academic STEM women from underrepresented minority groups and women with disabilities are particularly encouraged. Further, given the increasing emphasis on international collaborations in many STEM disciplines, and the importance of international recognition to career advancement, proposal components that systemically enhance and provide access to international collaborations are encouraged.

- **FUNDING OPPORTUNITY NUMBER:** NSF 10-593
- **AWARD CEILING:** $3,750,000
- **AWARD FLOOR:** $400,000
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: November 7, 2011

NATIONAL SCIENCE FOUNDATION - FOUNDATIONS (MATHEMATICS)

The Wabash Center provides grants for activities that enhance teaching and learning in the fields of religion and theology. Proposals need to demonstrate that the project improves practical application of teaching and learning methods, creates a supportive environment for teachers, promotes a sustained conversation about pedagogy, or supports research and study of pedagogical issues.

- **FUNDING OPPORTUNITY NUMBER:** N/A
- **AWARD CEILING:** $20,000
- **AWARD FLOOR:** $0
- **APPLICATION CHECKLIST:** Guidelines
- **DEADLINES:**
  - Proposal Submission: October 4, 2011

To receive solicitations specific to your research expertise please visit [GRANTS.GOV](http://www.grants.gov)
SAVE THE DATE

Annual Biomedical Research Conference for Minority Students (ABRCMS)
November 9 – 12, 2011
St. Louis, Missouri
Click the following link for more important dates, deadlines and more information.
ABRCMS.ORG

SAVE THE DATE

National Council of University Research Administrators (NCURA)
53rd Annual Meeting
November 6-9, 2011
Washington, D.C.
Click the following link for more information
NCURA 53rd ANNUAL MEETING

New features and new updates on the RSP website include: CITI/IRB Certification Listing, CAU IACUC Guidelines and Procedures, Federal Wide Assurance, research centers, core facilities, proposal alert notification form, research compliance committees, SRC space allocation/request guidelines and forms, student research highlights, publications, funding opportunities, online training, and MORE!!

RSP is once again… Requesting Student Volunteers! We have updated the website with short video clips and will begin using social networks to highlight faculty and students’ experiences and research expertise. If you are interested in having your students, projects and/or programs highlighted on the research website, please email research@cau.edu and someone will contact you!

Remember it is very important that you submit your completed proposal, budget, and signed routing sheet 5 days prior to the agency deadline!

PROPOSAL ROUTING FORM AND INFORMATION

If you were unable to attend any Brown Bag Sessions during the Spring Semester, don’t worry. RSP will present several Brown Bag Sessions during the FY 2011-2012 school year. RSP will canvas you for best dates and times to present the next sessions!

If you would like to be highlighted in the next RSP Radar Newsletter, send an email to research@cau.edu

ANNOUNCEMENTS & REMINDERS

Embrace and provide leadership in community development and environmental sustainability

WELCOMES

our newest Staff member,
Ms. Hope Grant,
to the CAU Community!

Hope C. Grant
Research Administrator