College of Science and Technology Annual Awards Ceremony

The College of Science and Technology hosted its annual Awards Ceremony and End-of-Year Celebration on April 29, 2011, 12:00-3:30 pm, at the New Science Building Atrium and Grounds. We were entertained with music provided by DJ Bluetooth, Christopher Edmund. The Texas Southern University orchestra director, Professor Anne Lundy, and student, Chanel Oji, performed orchestral renditions of “Music for the Royal Fireworks” by George Frederic Handel, and a familiar old hymn, “Amazing Grace” by John Newton.

Awards presented to COST students, faculty, and staff included the College Excellence Award, the Dean’s Leadership Award, the Outstanding Student Award, and Student Scholarship Recognitions.

Students were also recognized for serving on the Dean’s Student Advisory Council and as COST Student Ambassadors. Finally, special recognitions were given to all COST faculty and staff who participated in the very successful Annual Campaign Fund drive held by the University. The COST received a special Architectural Floors Book Voucher award for its outstanding participation and contributions.

Following a delectable lunch there were board games, outdoor activities, and line dancing. Yeee Haawww! Students, Faculty, and Staff had a Boot n Scoot good time at the annual Awards Ceremony and End-of-Year Celebration.
Biology Graduation Reception

On the evening of May 6, 2011, the Department of Biology sponsored a reception for the Biology majors who were candidates for the May 2011 commencement. The reception was held in the atrium of the Science Building for the 44 undergraduates and 3 graduate student applicants. Undergraduate students who received summa cum laude, magna cum laude, and cum laude honors were rewarded with Barnes and Noble gift cards. The students graduating with honors were: Ebenezer Addo, and Belaineh A Belay, Summa Cum Laude; Emmanuel Obi, and Jennifer Okanmelu, Magna Cum Laude; Zuri J Dale, and Kimberly A. Gilkes, Cum Laude.

The department also took the opportunity to recognize other Biology students nominated by the faculty. The Most Outstanding Biology Student Award was presented to Emmanuel Obi; the Most Improved Student Award was presented to Nina Alaniz; the Outstanding Leadership Award was presented to Justin Shanks; and the Best Teaching Assistant Award was presented to Anita Lewis. Olusegun Ogunniyi and Brandi Wilson were awarded “Department Chair’s Pick” awards. Several Biology faculty recognized their students with faculty commendations.

TSU Research Week

As part of the College’s activity during TSU Research Week (April 4 - April 8), the College of Science and Technology Research Committee organized a keynote lecture followed by panel discussion at the TSU Science Center on April 7 of 2011. The theme of this year's COST Research Week activity was "Enhance COST/TSU Research Activities and Productivities." The panelists were Dr. Steve Cox (Rice University), Dr. Rakesh Verma (University of Houston), Dr. Adebato Oyekan (Interim Associate Provost/Associate Vice President for Research at TSU) and Dr. Jason Rosenzweig (Department of Biology).

The panel discussed the research environment and current research activities at TSU. The overall emphasis of the Panel was placed on increasing opportunities for researchers to develop relationships amongst themselves; to develop collaborations with other research intensive universities; mentoring of junior faculty members; release time for research; and persistence in the pursuit of grants. Dr. Christopher Tymczak from the Department of Physics moderated the panel discussion.

The questions from the audience covered various challenges including legal and social implications. The program ended with concluding remarks by Dr. Lila Ghemri from the Department of Computer Science.
COST Dean’s Student Advisory Council Hosts Town Hall Meeting

The College of Science and Technology Dean’s Student Advisory Council is a dynamic group of students nominated to represent their major departments on a committee to provide input to the Dean’s office on student issues and to provide input into improving the College. During the academic year, this council met on a monthly basis with Dean, Dr. Lei Yu, and Interim Assistant Dean, Dr. Desirée Jackson, to discuss student concerns in their departments, and to plan for a larger forum for all COST majors to express their concerns and make their suggestions. The council hosted the first ever Town Hall meeting on April 4, 2011. The question and answer session was well attended by students and department Chairs from many departments.

Dr. Betty Cox, Interim Associate Vice President for Student Academic Enhancement Services, and Mr. Alus Dove, Director of Safety, were among the invited guests. Council members Chelse Hoover (Engineering Technology), Cedric Kouamou (Chemistry), Andre White (Mathematics), Landra Williams (Physics), and Anthony Victorain (Engineering Technology) served as facilitators. Other council members include: Bennett Abraham (Aviation Science), Emmanuel Obi and Olusegun Ogunniyi (Biology), Alicia Simmons (Computer Science), Bita Iranmadar-Maki (Environmental Toxicology), Jermaine Potts (Industrial Technology), Dexter Khan (Maritime), and Yubian Wang (Transportation Studies).

COST Advisement, Financial Aid and Career Fair

In an effort to increase student retention, the COST has increasingly emphasized to its majors the importance of seeking advisement. Students receiving guidance in choosing their courses will be more likely to take courses in sequence, insuring successful completion of their chosen curriculum. In this vein, the COST Office of Student Services in conjunction with Student Academic Enhancement Services, hosted the inaugural Advisement, Financial Aid and Career Fair on April 13, 2011. All COST majors were encouraged to attend in preparation for the upcoming summer and fall registration period. COST Faculty Advisors were available for advisement at information tables in the Science Building atrium. In addition to support for registration, there were representatives from the Office of Student Financial Assistance, Cooperative Education and Placement Services, and Student Academic Enhancement Services who spoke about the resources available to students through their offices. Advice was given about navigating the financial aid process with some useful information about deadlines. The placement of students in internships and post-graduation positions was discussed. The services available through SAES were also presented. Through this event, COST majors were made more aware of the resources available to them to support their academic success.

COST Learning Center

Pardon our dust, as the College of Science and Technology is expanding its services again! During the spring semester, the College of Science and Technology initiated a plan for the development of a college-based advising and learning center. Space was identified in the front foyer area facing Ennis Street and designs for the re-utilization of this space were developed by Dr. James DuMond, and approved by the Dean’s Office. Construction of four suites began in early May 2011 and will be complete by the end of July 2011. Three of these suites will serve as tutorial centers for the basic sciences in the College, and one will be home to College’s Academic Advisor, Ms. Evangeline Pearson who is affiliated with Student Academic Enhancement Services.
US Air Force Expands Community Relations at COST

A U.S. Air Force Recruiting Service team led by base commandant Brigadier General Balan R. Ayyar visited the College of Science and Technology to show support for science, technology, engineering and mathematics (STEM) education and to share information about career opportunities for COST graduates through the Air Force.

Brig. Gen. Ayyar stated that an objective of the visit was to demonstrate a broad commitment of the US Air force to reaching the best and brightest across America. The Commandant spoke with a COST group including the Dean, Dr. Yu, several department Chairs, and faculty. He mentioned that TSU is one of the schools the Air Force is targeting, for closer cooperation, and increased involvement in their STEM programs.

Brig. Gen. Ayyar was accompanied by representatives from Air Force Headquarters at Randolph Air Force Base, Texas; the 369th Recruiting Group from Lackland AFB, Texas; the 337th RCS from Shaw AFB, South Carolina; the 331st RCS from Maxwell AFB, Alabama; and the 336th RCS from Moody AFB, Georgia.

Lt. Col. Dennis Tucker, the 336th RCS Commander, stated that he and the members of his unit were excited about the experience at TSU; and in return, Dr. David Olowokere on behalf of the College expressed appreciation for the visit, and for the lunch provided by the visiting team.

COST Administrative Professionals’ Staff Appreciation Luncheon

The College of Science and Technology honored administrative support staff for their contributions and dedication to the College at a luncheon held Wednesday, April 27, 2011 in recognition of Administrative Professionals Day. COST staff has worked tirelessly with students and faculty, in addition to serving on standing committees to accomplish the objectives and mission of the College. We salute and appreciate our staff for a job well done … keep blooming with success!

SUCDC STEM Foundation Host Student Awards Banquet

TSU COST was a sponsor for the April 30, 2011 First Annual South Union Community Development Corporation (SUCDC) STEM Foundation Student Awards Banquet held at the Power Center, Houston. The event was organized to recognize and reward thirty local K-12 students who participated in the weekly Saturday STEM Academy programs held at the SUCDC facility in southeast Houston from November 2010 to April 2011. Marcus Davis, owner of the Breakfast Klub, and TSU National Alumni Association President, served as the master of ceremony. Paula Harris, HISD Board President and Trustee, was the keynote speaker. Trustee Harris emphasized the Community Village of K-12 and university institutions, families, churches, and businesses as necessary supporters to ensure student success. Among the 220 guests attending the event were COST representatives Dolly Spencer (Environmental Science and Technology), Azime Saydam (Mathematics), Paula Eakins (Transportation), and Robert Ford (Chemistry/C-SEO).

STEM Education

As a member of the Thurgood Marshall College Fund STEM Education Delegation, Dr. Robert Ford represented TSU during a U.S. Department of Defense sponsored mission to Malaysia and Singapore (March 26 – April 4, 2011). The delegation collected intelligence on distinguishing factors that drive success in the production of human capital in STEM in Singapore and Malaysia.

CASEHonors Partners

The Cooperative for After-School Enrichment (CASE) honors partners that have supported after-school programs in the Houston community. On May 11, 2011, at the CASE End of Year Celebration held at the Harris County Department of Education, Texas Southern University College of Science and Technology was recognized for support of the CASE Kids’ Day project-Space Science.
Dr. Xuemin Chen joined the Department of Engineering Technology as an Assistant Professor in the fall of 2006. He received his academic degrees (BS, MS, and PhD) from the Nanjing University of Science and Technology (NUST), China, in 1985, 1988, and 1991 respectively. His field of specialization was Electrical and Computer Engineering, with emphasis on Stochastic Control Theory. He began his academic career in 1991 at NUST where he conducted teaching and research for over six years.

Before joining the faculty of TSU, Dr. Chen spent nine years with the University of Houston (UH). At UH, he was a Visiting Scholar, Post Doctoral Fellow and later on a Research Assistant Professor. He performed research in Subsurface Sensing. He was actively involved in more than ten Texas Department of Transportation (TxDOT) research projects on advanced sensor design, sensor network, and signal processing, all as Co-PI. The research project, Thickness Measurement of Reinforced Concrete Pavement by Using Ground Penetrating Radar, claimed the Top Research Innovations and Findings award from the TxDOT in 2004.

To provide competitive leverage for his students, he initiated an NSF-funded HBCU-UP project on which he serves as Co-PI. The project involved the setup of a virtual and remote laboratory (VR-Lab) framework at TSU. Dr. Chen expanded this VR-Lab as an inter-institutional infrastructure to include TSU and Prairie View A&M University and led a proposal to win an NSF Course, Curriculum, and Laboratory Improvement type 1 award. Currently, the VR-Lab website (http://vr-lab.engineeringtech.tsu.edu/) serves as a portal for students to conduct virtual and remote experiments.

Dr. Chen’s research interests are in the related areas of virtual and remote lab, network control, advanced sensor and wireless sensor networks. Developing a next generation unified framework for an engineering and technology remote laboratory reflects his vision to balance teaching and research at TSU. To solve the platform, operating system and plug-in incompatible problems in current remote laboratory development, Dr. Chen and his collaborator at UH proposed a novel unified framework. With this unified framework, faculty members can easily load offline laboratory experiments online even with limited knowledge of networking, data transmission, or Internet protocols. The unified framework will also enable laboratory experiments to be accessed at times most convenient to the user without compatibility issues. This innovative idea was funded by American Recovery Act funds via NSF. Dr. Chen was also an NSF Research Opportunity Award recipient for Cooperative Active Sensing in Wireless Structure Health Monitoring hosted at the University of Houston during the summer 2009.
STAFF SPOTLIGHT TIOKA FREEMAN

Tioka Freeman has been the Administrative Assistant for the College of Science and Technology Deans’ Office since December 2001. Along with Dr. Desirée Jackson, Interim Assistant Dean, her role is essential for the success of our new Student Services and Instructional Support Office. Ms. Freeman is tremendously organized, friendly, and a very responsive member of the COST administrative team.

She goes out of her way to help with any situation, whether it’s guiding students during registration, designing flyers and Power Point presentations for COST events, decorating for special events, correspondence with departments, recruitment of students to the College, or facilitating the College’s day-to-day tasks.

“I’ve learned a lot about flexibility, organizational change, and building relationships here at TSU. When I first started at COST, I was afraid of change. Many things change here because we are constantly improving and developing strategies for growth. I found that I have been resilient in these times of change. It's definitely easier when looking at change to see it not just as change, but as an opportunity for personal and professional growth.” Ms. Freeman is a very hard worker, taking the extra time to make sure it’s correct before it goes out the door, and always pleasant. It is for all of these reasons and more that Tioka Freeman is a light within the COST.

STUDENT SPOTLIGHT KIMBERLY GILKES

I have always had a keen interest in science and many times I dreamt of being a doctor. However since there were not many opportunities in my small island of St. Maarten, I decided to pursue a career in business because industry there is solely based on tourism. Luckily, I was able to relocate to America where the possibilities are endless. Upon enrolling at Texas Southern University, I quickly traded my accounting skills to start afresh with a major in Biology with a minor in Chemistry. Though it was a challenge I have managed to graduate in this field with a GPA of over 3.5. Texas Southern University has been a real blessing to me. I have received so much support, and so many opportunities that I may not have received at other universities. The scholarships and employment opportunities I received have brought me ever so closer to reaching my dream. I am especially grateful to the COST faculty and staff; their efforts have truly made an impact on my college experience. I feel that the faculty have a genuine interest in our success, both at the university, and beyond, and this truly makes a difference. Now as I pursue a career in medicine, I know that the foundation I received here will play a big part in my success. Thank you TSU. I love you.

ALUMNI RAVES ROBEN ARMSTRONG

Ms. Roben L. Armstrong is an Associate and Transit Planner with HDR Engineering Inc. and is responsible for a myriad of transit projects throughout the nation. Ms. Armstrong has nearly ten years of experience in the Transit Planning arena, with Environmental Planning being her major discipline. Prior to joining HDR, Ms. Armstrong received a Bachelor of Science in Airway Science Management, and a Master of Science in Transportation Planning and Management; both degrees were obtained from Texas Southern University. Ms. Armstrong began her career as an intern with the Metropolitan Transit Authority of Harris County (METRO) and progressively came to hold the Senior Environmental Planner position. In this role, she was responsible for ensuring environmental compliance on several of METRO’s projects, including rail extensions and park & rides. Ms. Armstrong’s commitment to excellence is standard in every aspect of her life. She is very active in her church and engaged in various community activities. Ms. Armstrong is a founding member of the Houston Chapter of Women’s Transportation Seminar and is very pleased to have served as Co-Chair of the Executive Steering Committee for the newly established College of Science and Technology Alumni Chapter of Texas Southern University. Ms. Armstrong is also an active member of TSU National Alumni Association.
STUDENT ACCOMPLISHMENTS

The University Aviation Association (UAA) Meeting Planning Committee has accepted an Education Session proposal for Aviation Science and Technology’s Graduate Assistant, Sharon Hudson, a doctoral student at Texas Southern University, in the College of Education. The upcoming 2011 Fall Education Conference will be held in Indianapolis, Indiana. The presentation topic for the Education Session, "Aviation and Environmental Sustainability: Viability of Alternative Fuels" is a joint session with Mary Johnson (moderator), of Purdue University, Assistant Department Head for Graduate Education and Research; Aviation Technology, Associate Professor, Aviation Technology Department/Industrial Technology Department. The Education Session will be 1.5 hours on Friday, September 30th, 2011, and will be published in the forthcoming edition of the UAA Newsletter. UAA education sessions always benefit from collaborative exchanges; and these team members will work closely with each other and other UAA professional or corporate members who are involved with this subject.

Ms. Anita Lewis, graduate student in the Department of Biology, has been invited to present a scientific paper at the upcoming International Astronautical Congress (IAC) to be held in Cape Town, South Africa. Her research paper entitled “Role of Curcumin Against Modeled Microgravity-Induced Inflammatory Pathways” competed for NASA sponsorship and has been selected for the 2011 IAC, October 3-7, 2011. The NASA Education Directorate will support Ms. Lewis’ attendance of the congress.

Ms. Lewis recently completed her thesis research under the mentorship of Drs. Shishir Shishodia and Olufisayo Jejelowo.

Aviation student, Ms. Bliss Mayo, has been selected to participate as a Custodial Cast Member in the Disney College Program in the Fall 2011 Season. This internship is a resume-enhancing experience for Bliss. The program will allow Ms. Mayo to gain academically-oriented work experience – the kind that provides participants in any major with the tools they need to compete effectively in today’s job market. We are excited for Bliss’ selection as she serves as a representative of the College of Science and Technology.

Congratulations are in order for the Department of Aviation Science and Technology, Spring 2011 graduates: Ms. Kadijah Hall, Ms. Tracy Sibbaluca, Ms. Vera Griffin, Mr. Rickey Willingham, and Mr. Gilberto Williams. We are especially proud of each of you and our wishes are for your continued success.

International Scholar Visit

Dr. Fengxiang Qiao, Department of Transportation Studies, invited Jing Wang, faculty in the Department of Environment and Tourism, Xi’an University of Arts and Science in China to visit TSU. Ms. Wang arrived at TSU for a short-term stay from June 1 - August 31, 2011. Ms. Wang’s research interests include Urban Planning and Environmental Protection, as well as Geographical Information Systems. During her visit, she will work with Dr. Qiao and others on studying the impact analyses of urban planning and management to regional and global environments.

Dean’s Student Advisory Council

Aviation Science and Technology: Bennett Abraham
Biology: Emmanuel Obi, Olusegun Ogumiyi
Chemistry: Cedric Kouamou
Computer Science: Alicia Simmons
Engineering Technology: Chelsea Hoover, Anthony Victorain
Environmental Science and Technology: Bita Iranmadar-Maki
Industrial Technology: Jermaine Potts
Mathematics: Andre White
Physics: Landra Williams
Transportation Studies: Dexter Khan, Yubian Wang

College Student Ambassadors

Aviation Science and Technology: Dr’ Carla Greaves, Juby Kuruvilla
Biology: Kimberly Gilkes, Onyi Denzel Duruji, Tram Cao
Chemistry: Nathaniel Carter, Cedric Kouamou
Computer Science: Alicia Simmons, James Leslie
Engineering Technology: Marcia Robin, Anthony Victorain
Environmental Science and Technology: Shaunté Hulett-Abdin
Industrial Technology: Kedrick Lyons
Mathematics: Andre White, Aqeeb Sabree
Physics: Samantha Everett, John Metyko
Transportation Studies: Damien Leday, Abijlish Kuman, Yasamin Salehi
SCHOLARLY AND CREATIVE ACTIVITIES

COST Annual Awards Recipients

**College Excellence Awards**
- **Distinguished Undergraduate Advising Award:** Dr. Xuemin Chen
- **Distinguished Research Award:** Dr. Daniel Bessis
- **Distinguished Service Award:** Dr. Aladdin Sleem

**Graduate**
- Undergraduate: Jun Wen – Distinguished Research Award: Dr. Xuemin Chen

**Undergraduate**
- Biology: Kadijah Hall
- Aviation Science and Technology: Tymczak, Xin Wei, Shishodia, Christopher J., Jason Rosenzweig, Shishir Osakue, Tuan Phan, Yi Qi, Farrukh Khan, Edward Ghemri, Nancy Glenn, M. Kiran Chilakamarri, Lila Wei Li (Chair), Fawzia Abdel-Dolly Spencer

**Dean’s Leadership Award**
- **Annual Report:** Aladdin Sleem
- **Alamelu Sundaresan Technology Development:** Christopher J. Tymczak
- **Student Engagement:** Desirée Jackson
- **LSAMP:** Bobby Wilson
- **Department Development:** David Olowokere
- **Website Development:** Hector Miranda
- **Newsletter Development:** Shishir Shishodia
- **Homecoming:** Dolly Spencer
- **Paula Eakins**

**Research Committee:**
- Wei Li (Chair), Fawsia Abdel-Rahman, Xuemin Chen, Kiran Chilakamarri, Lila Ghemri, Nancy Glenn, M. Farrukh Khan, Edward Osakue, Tuan Phan, Yi Qi, Jason Rosenzweig, Shishir Shishodia, Christopher J. Tymczak, Xin Wei

**Outstanding Student Award**
- **Aviation Science and Technology:** Kadijah Hall – Undergraduate; Isidro Cervantes – Graduate
- **Biology:** Emmanuel Obi – Undergraduate; Anita Lewis – Graduate
- **Chemistry:** Kiara Taylor – Undergraduate; Jun Wen – Graduate

**Student Scholarship Recipients**
- **Joseph Flowers’ Scholarship:** Tierra Johnson, Chemistry; Jude Ugjomoh, Computer Science; Kimberly Gilkes, Biology
- **COST Faculty and Staff Scholarship:** Gloria Okome, Environmental Toxicology; Elo Chukwuma, Electronics Engineering Technology; Pamela Mbonu, Chemistry; Victoria Kogambi, Biology; Aqeeb Sabree, Mathematics; Shaunté Hulett-Abdin, Environmental Toxicology; Durodola Aisha, Electronics Engineering Technology; Nagaq Naidu, Environmental Toxicology; Kim Smith, Biology
- **Advocacy Award:** Dr. Mark Sherman and Dr. Christopher Odetunde from the Department of Aviation Science and Technology attended the Aviation Accreditation Board International (AABI) conference in Daytona Beach, Florida in February 2011 for AABI accreditation requirements. During the visit, the AABI conference group was taken to Embry Riddle Aeronautical University to observe the launching of the space shuttle.

**Publications**

**ITS TSU Seminar**
- **Dr. Frank Yu**, former Chief Engineer of the Houston-Galveston Area Council (HGAC), made a speech in the April meeting of the Intelligent Transportation Society (ITS) TSU Student Chapter on April 20, 2011. Dr. Yu has over 35 years of experience in planning, design, construction, operations, and maintenance functions related to ground transportation and airfield facilities. More than 20 graduate and undergraduate students from TSU Departments of Transportation Studies, Computer Science, and Engineering Technology enjoyed his witty and knowledgeable presentation entitled “Runway Orientation and System” with practical examples from Houston Hobby Airport.

**Meetings**
- **Dr. Mark Sherman and Dr. Christopher Odetunde** submitted papers that were accepted and presented at the Oklahoma Aerospace Education Symposium at Oklahoma State University held on April 21st & 22nd. The theme for the symposium was "Aerospace Education Alliances: Meeting the needs of Industry, Government, and Work Force Development." Dr. Sherman’s presentation was titled “Converting a Non-certificated Quasi Flight Collegiate Aviation Program into an Aviation Management Program.” Dr. Odetunde’s research focused on “Modeling Turbulent Flow Past A NACA4412 Airfoil.”

**Presentations**
- **Dr. Mark Sherman with George G. King during AABI Symposium**