COLLEGE OF SCIENCE AND TECHNOLOGY

TEXAS SOUTHERN UNIVERSITY

2010 - 2011

ANNUAL REPORT

College of Science and Technology

ANNUAL REPORT 2010-2011

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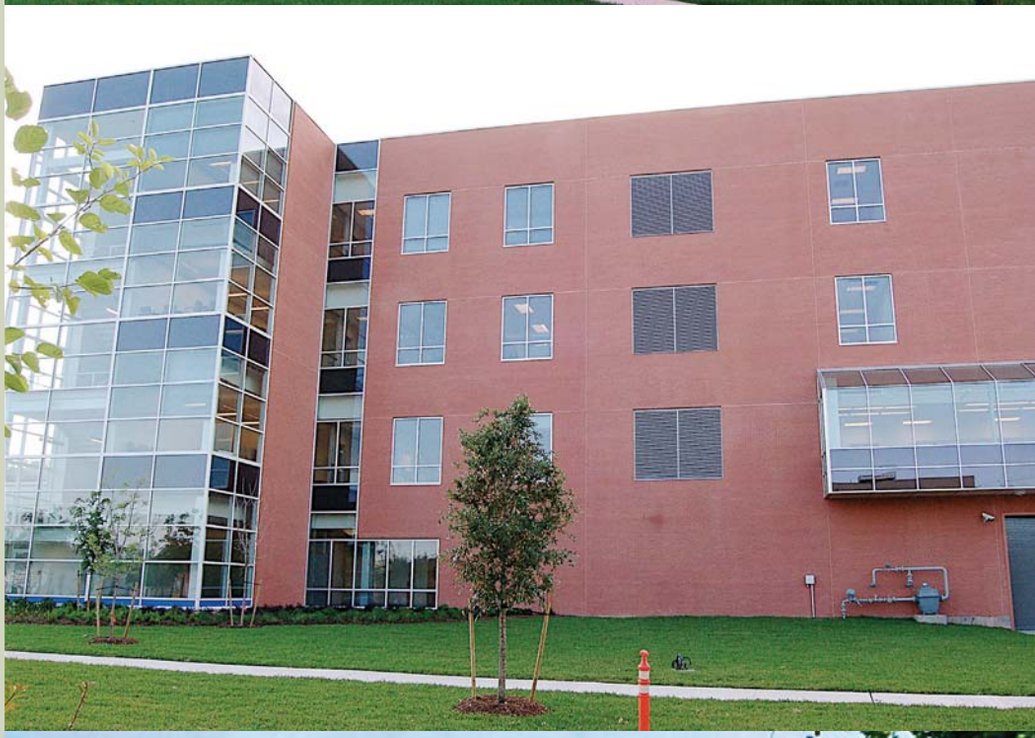

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Vision

The College of Science and Technology will become a leader among urban Universities in educating a diverse population in interdisciplinary sciences and contemporary technologies, preparing them for a competitive global economy.

Mission Statement

The College of Science and Technology at Texas Southern University is dedicated to integrating sciences and contemporary technologies, through education, scholarly activities, and community service; meeting the needs of a diverse graduate and undergraduate student population while addressing critical urban issues within a global economy.

Strategic Goals

Goal 1. Provide High Quality Instruction

1.1. Improve student performance in core education courses.

1.2. Promote and support innovative teaching and learning environment.

1.3. Secure and reaffirm accreditation and certification of all eligible programs.

1.4. Promote collaborative international education programs.

Goal 2. Perform Basic and Applied Research

2.1. Expand the scope of research and teaching, and thereby increase the amount of annual funding.

2.2. Increase the number of high quality scholarly and creative works generated by the faculty and by students.

2.3. Improve the incentive system for faculty teaching, research and service.

2.4. Promote interdisciplinary research.

2.5. Support entrepreneurship in research and technology transfer for commercialization.

Goal 3. Engage in Community Service

3.1. Develop and expand community outreach and public service programs.

3.2. Increase the number of continuing education units generated.

3.3. Promote involvement in and service to professional organizations.

3.4. Integrate service learning into the educational programs of the College.

Goal 4. Optimize enrollment of undergraduate and graduate students

4.1. Increase the number of college-ready incoming freshmen through outreach and recruitment.

4.2. Improve retention and increase 4-year graduation rates.

4.3. Increase graduate student enrollment.

4.4. Increase the number of international students in the College.

Goal 5. Strive for steady increase in external funding

5.1. Increase the funding from government, corporate and philanthropic organizations.

5.2. Increase alumni and friends giving.

5.3. Increase funds to support scholarships and endowments.

Goal 6. Ensure Efficient and Effective Administration

6.1. Ensure transparency in decision making and allocation of resources.

6.2. Enhance the College's aesthetics.

6.3. Integrate information technology into the management of the College.

MESSAGE FROM THE DEAN

Dr. Lei Yu, Dean
College of Science and Technology

It is with renewed excitement that I present the 2010-2011 College of Science and Technology (COST) Annual Report. In the report, you will find our accomplishments, activities and new initiatives which significantly elevated our educational programs, improved our student services, and our image. Single- minded participation and dedication from our faculty, staff, students, alumni, and industrial partners has been the key to achieving multiple benchmarks which substantially advanced the college.

One of our primary activities in 2010-2011 was the completion of our 5-year Strategic Plan, which redefined the mission of the College. The Strategic Plan analyzes unique issues and challenges being faced by the college, particularly those associated with the national crisis in Science, Technology, Engineering, and Mathematics (STEM) education, and suggested specific actions to be implemented in the next five years for the college to achieve its strategic goals.

The college posted a 97% participation rate in the TSU 2011 Faculty and Staff Campaign. This astounding result is demonstrable evidence of the level of passion and commitment of our faculty to our students. Another activity critical to the college was the inauguration of the Dean's Student Advisory Council, intended as a means of direct dialogue between students and COST administration. The council organized a well attended Student Town Hall meeting and has continuously provided input on and helped to address various student concerns.

The college continued to take significant strides towards its academic agenda. A complete implementation of the newly established Maritime Transportation Management and Security program in partnership with the Port of Houston Authority (POHA) attracted a total of 40 high quality freshmen, most of whom were qualified to receive the POHA scholarships. Academic leadership was strengthened by the appointment of new Chairpersons for the Departments of Mathematics and Aviation Science and Technology in January 2011. These additions bring new energy, ideas, and momentum to these respective programs. Furthermore, we have initiated a new Student Learning Center, attempting to substantially improve the learning outcomes of our lower level courses.

The college organized various activities intended to broaden, nurture and reinforce its relationships with its alumni, partners and friends. Highlights of primary activities include the Open House – Alumni and Partnership Luncheon, Open House for Maritime Program: A Sea of Opportunity, the STEM Awareness Forum, and the fulfillment of two Memoranda of Understanding, with the U.S. Coast Guard and Beijing Jiaotong University. The official establishment of the "COST Chapter" of the TSU National Alumni Association (TSUNAA) has ignited a rejuvenated wave of participation from our alumni.

As we enter a new academic year, we are fully aware of many serious challenges, such as continued financial constraints ranging from budgetary reduction, recruitment and retention of well prepared students in STEM fields, and sustainable funding for scholarships and assistantships for students. Nonetheless, we realize that we have also been provided with unique opportunities. Our programs reside in fields with high national priority, which greatly impact both the national economy and national security. The college will be more assiduous than ever before with indomitable commitment towards improving our programs and providing the highest level of service to our students.

I would like to take this opportunity to sincerely thank all of you who have supported us in various ways, with your care and concern for our college, and who have walked with us, side by side, through both good and bad times. You will always be fondly remembered! Please continue to work alongside our faculty and students and partner in our efforts to prepare the very best technologically capable workforce, keeping our nation competitive, and making us proud of COST.

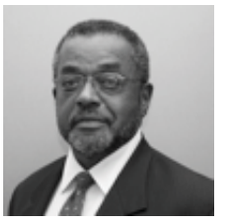
PROFESSOR LEI YU, Dean
College of Science and Technology

Message from the Chairman

During the 2010 -2011 academic year, the COST Advisory Board under the leadership of Chris Hudson, Chair, achieved success in a number of areas. New members from the private, public and non-profit sector were added, and, an organizational structure including committees and sub-committees was formed. Guided by Dean Yu's vision for the college, the Board assisted in the establishment of the COST Alumni Chapter. The chapter will focus on student awareness and development as well as alumni fundraising activities. A process to partner with industry was developed and begun. The Industrial Outreach Program promises to be a valuable source for student scholarships, employment and internships, technology exchange and financial resources for the college. The events subcommittee, under the leadership of Dr. Oscar Criner, hosted a Partnership luncheon at the COST Science Building in February. Students from various departments gave stimulating presentations to industry representatives and potential financial supporters. A luncheon and awards ceremony followed.

When the Board meets next at the beginning of the Fall Semester, we shall welcome two new members: Kimberly J. Williams, J.D., Chief Administrative Officer, METRO Solutions; and Dorothy S. Rasco, Manager, Space Shuttle Business Office, NASA. Major emphasis will be placed on further developing the Industrial Outreach Program and interacting with the newly formed Alumni Chapter. Our primary goal will be to solidify the progress we made last year. More on campus meetings with industrial partners emphasizing COST facilities and students are expected. We shall continue to support the college, the students and the various fundraising activities.

PAUL C. SIMMONS, PE
Chair, COST Board of Advisors


Paul Simmons


Chris Hudson


Joseph Flowers


Rudy Gomez


Ike Allen

COST Board of Advisors

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Dorothy Rasco, Manager, Space Shuttle Program Transition & Retirement Office, NASA JSC

Paul Simmons, President, Paul Simmons & Associates, Chair, COST Board of Advisors

Michael Smith, Corporate Facilities Planning & Real Estate Manager, Marathon Oil Company

Murdock Smith, Consultant, Former Chair, COST Board of Advisors

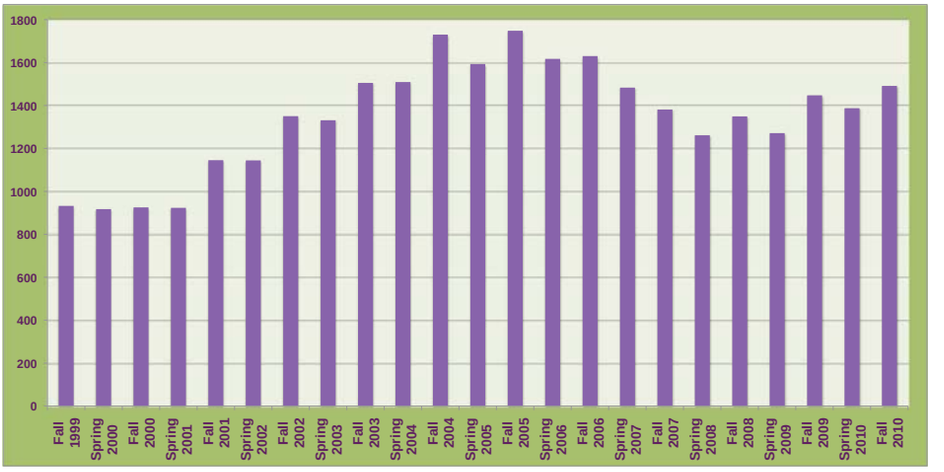
Kimberly Williams, Chief Administrative Officer, Capital Programs, Metropolitan Transit Authority

Frazier Wilson, Ed.D., Vice President and Manager, Social Investment, Shell Oil Co. Foundation

Road to the Future

The faculty of the college is engaged in an intensive process of planning the future direction of the College. Institutions of higher education engage in strategic planning processes just as businesses engage in planning for their success. The increasing demand for higher education combined with concern regarding the cost of higher education from all constituents demands that institutions change in response. What changes are going to be made? How do pervasive technologies affect what and how we teach, learn and conduct research? How are these changes implemented? How will these changes affect the ability of an institution to achieve its stated objectives and exploit its competitive advantage?

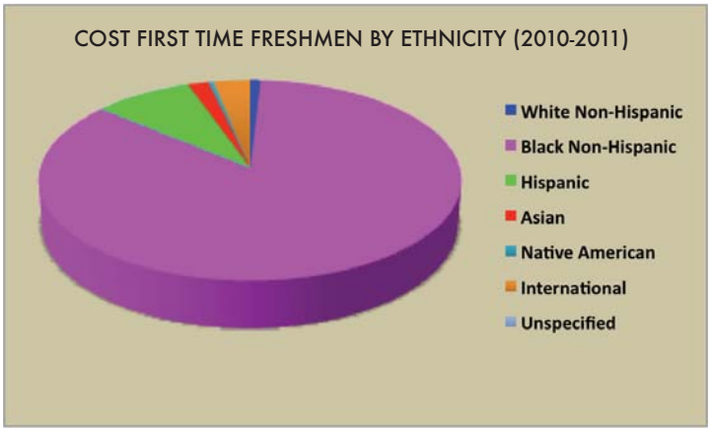
Issues like these are being addressed by the COST faculty beginning with its administrative strategic planning retreat held last summer. The famous business process engineer Michael Hammer wrote in 1990 that "It is time to stop paving the cow paths. Instead of embedding outdated processes in silicon and software, we should obliterate them and start over. We should "re-engineer" our businesses: use the power of modern information technology to radically redesign our business processes in order to achieve dramatic improvements in their performance." (Michael Hammer, Reengineering Work: Don't automate, Obliterate, Harvard Business Review, July-August 1990.) The College seeks to significantly improve its performance by several metrics, with special emphasis on improving the recruitment of students into STEM careers, improving both retention and graduation rates, and ensuring that graduates are successful in the market for their skills.

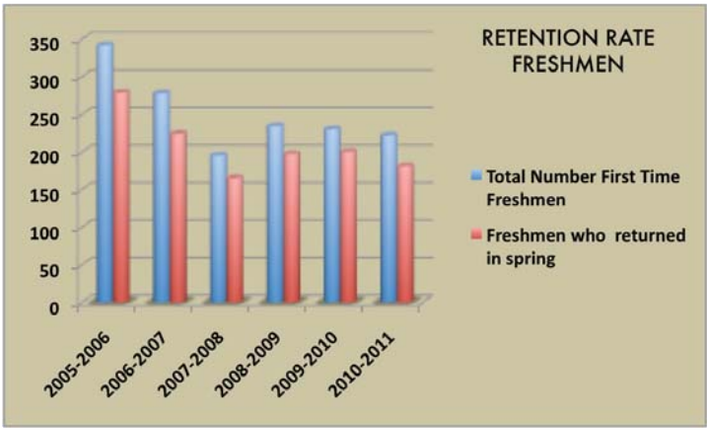


COST Student Body by Long Semester Since Fall 1999

To construct this Strategic Plan, the members of faculty are working in six sub-committees each considering one of the six strategic goals: (1) Provide high quality instruction; (2) Perform basic and applied research; (3) Engage in community service; (4) Optimize enrollment of college-ready undergraduate students and enhance graduate student enrollment; (5) Strive for a steady increase in external funding; and (6) Ensure that the College's administrative units function effectively and efficiently so that they support the missions of the College and the University. The strategic plan will provide the roadmap for the College to achieve greater competitiveness and a higher visibility in the community.

PROFESSOR OSCAR H CRINER
Interim Associate Dean





Making an Impact: COST STEM Awareness Forum Recognized by the US House of Representatives

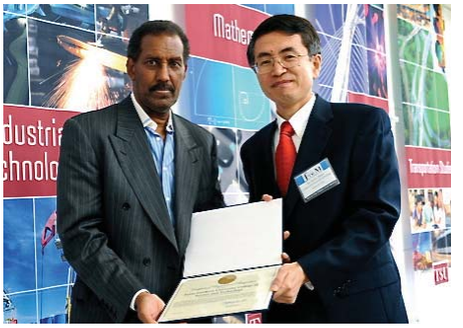
The aggressive efforts of the College of Science and Technology (COST) to improve and advance the participation of students in science, technology, engineering and mathematics (STEM) education were hailed in a proclamation of the U.S. House of Representatives initiated by Congresswoman Sheila Jackson Lee. The COST STEM Awareness Forum was held on Friday, March 25th to bring into focus in the community the seriousness of the STEM workforce shortfall and the attendant issue of the STEM student body shortfall. At present, only 6% of all 24-year-old Americans hold an undergraduate degree in STEM disciplines; for African Americans, Hispanics, and Native Americans, the percentage hovers at 2-3%. Even with the enormous amount of activity and emphasis in STEM education, the University still does not receive a significant number of students whose intent is to study STEM subjects. The objective of the STEM Awareness Forum was to make the community aware of the national STEM crisis, discuss roles that STEM plays in the national economy and national security, and open a dialogue on possible effects and resolutions.

Speakers presented several perspectives on the issues; Professor Oscar H. Criner presented a view based upon research he performed while on faculty development leave with AT&T Bell Laboratories; Mr. Jonathan Hall, Deputy Division Chief, Energy Systems Division, NASA Johnson Space Center, presented the view of a hiring manager; Mr. Marc Mundo, CIO BP Energy, presented an industry perspective discussing the skills needed to work for BP Energy; Mr. Sam Denard, a professional engineer, presented a personal and community reflection on the environment needed to stimulate students into the study of STEM subjects.

Dean Yu provided an overview of STEM programs offered by the COST, and Dr. David Drew gave a summary of the accomplishments of the TSU Houston Louis Stokes Alliance for Minority Participation (HLSAMP) program.

Other presenters at the conference were Dr. Nancy Tervalon, Mr. Joseph Flowers, Dr. Marty Bonsangue, and Dr. Carlos Handy who gave short presentations in a panel. Luncheon keynote addresses were provided by Dr. Kumar Krishen, NASA Senior Scientist, and Mr. Frasier Wilson, Vice President of the Shell Oil Foundation.

The STEM Awareness Forum is the first of a series of conferences to be held by the College to drill-down into the issues of the shortage of STEM students at TSU.



Dean Lei Yu receiving certificate of congressional recognition from Mr. Kenneath R. McCowan, Chief Advisor to Congresswoman Sheila Jackson Lee

U.S. HOUSE OF REPRESENTATIVES

Certificate of Congressional Recognition

Presented to

Texas Southern University College of Science and Technology

On the occasion of S.T.E.M Awareness Forum

NOW, THEREFORE, BE IT RESOLVED that, on behalf of the constituents of the Eighteenth Congressional District of Texas, I take great pride in recognizing Texas Southern University College of Science and Technology and all associated parties on the occasion of the S.T.E.M Awareness Forum. Your absolute commitment, and dedication to Science, Technology, Engineering, and Math living is indeed worthy of the respect, admiration, and commendation of the United States Congress.

March 25, 2011

Sheila Jackson Lee
Member of Congress

TSU Partners with US Coast Guard

Texas Southern University and the United States Coast Guard (USCG) signed a Memorandum of Agreement (MOA) on December 8, 2010. For TSU, the MOA will establish a relationship with the USCG in support of higher education and ensure TSU students are knowledgeable of the USCG and its recruitment efforts. The partnership with TSU will strengthen the USCG's relationship with Historically Black Colleges and Universities and enhance outreach and recruitment of well qualified students in the areas of engineering, operations, logistics, and information services.

TSU students will have an opportunity to apply for the USCG's coveted College Student Pre-Commissioning Initiative (CSPI) program. CSPI is a fully funded scholarship program, which may pay up to two academic years of college tuition, books, and essential supplies for full-time students. TSU Maritime students Dommonic Nelson and Sharda Sonnier attended the signing of the MOA. Both are interested in the CSPI program and believe that it will enhance their educational experience. Other USCG programs which TSU students may apply include the Military Officer Career Management Mentorship Program, Civilian Summer Internships, and the Government Civilian Career Management Mentorship Program.

Since the inception of the maritime program at TSU, the USCG has been a partner and supporter of the program. Capt. Marcus Woodring, commanding officer of Sector Houston- Galveston and Captain of the Port of Houston serves on the Maritime Industry Advisory Board and was a speaker at the maritime program's "A Sea of Opportunity Luncheon" last fall.

For information about the maritime program at TSU, contact Ursurla Williams at 713.313.4394 or williamsua@tsu.edu. For information about the USCG's CSPI program, contact Rosanna Hegemier at 713.641.3559 or rosanna.hegemier@uscg.mil.

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 the 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.

Dean Lei Yu and Brigadier General Balan R. Ayyar

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.

Maritime at TSU: A Sea of Opportunities

Texas Southern University, in partnership with the Port of Houston Authority celebrated its new maritime degree program in Maritime Transportation Management and Security on Monday, September 27th at a luncheon sponsored by the United States Coast Guard. The luncheon, "Maritime at TSU: A Sea of Opportunity," attracted over 125 attendees from the maritime industry, local and county government, TSU students and faculty. TSU President, Dr. John Rudley, was also in attendance and shared these words with the audience, "This partnership with the Port of Houston Authority and members of the maritime community is tremendous. We couldn't have done this by ourselves. This program will provide numerous opportunities and jobs for our students in the future."

Port of Houston Authority Commissioner Dr. Kase Lawal, a TSU Alumnus and recently appointed member of the White House Advisory Committee for Trade Policy and Negotiations (ACTPN) served as the keynote speaker. Other speakers on the program included Dr. Lei Yu, Dean of the COST. Lt. Col. Dennis Tucker, the 336th RCS Commander, stated that he and the members of his unit were excited about the experience at TSU.

United States Coast Guard Captain Marcus Woodring, along with Harris County Judge, Ed Emmett, and Harris County Commissioner, Sylvia Garcia provided greetings to the attendees. The luncheon Emcee was Channel 39's Ms. Yolanda Green, host of "Going Green" and "Outlook Houston." TSU's maritime program is the first such degree program related to Maritime Transportation Management and Security in the Houston area and the first such at any HBCU in the nation.

Dean Lei Yu, President John Rudley, and PHA Commissioner Kase Lawal

Industry Comes Calling: GM Visits TSU Campus

Representatives of General Motors Corporation came to the College of Science and Technology on October 21, 2010 to discuss career opportunities with students and to familiarize students with the technical operations of the company.

While on campus, GM Chief Design Engineer, Mr. Sean Lo, offered tours of two GM products: two Buick LaCrosse sedans that were brought to campus. Mr. Lo showed off features that have tremendously improved GM vehicles, including the powertrains and the Buick OnStar program. During post-presentation discussion, Mr. Lo spoke with attending faculty and students about engine design and computation in the Internal Combustion Engine and Computational Fluid Dynamics as applied to auto engineering.

General Motors is one of the largest employers of graduating HBCU students nationwide. The company makes annual donations in support of scholarships, diversity, student design activities, faculty recognition, curriculum development and engineering advances. The visit begins the process of inclusion of TSU in the list of GM-affiliated institutions. In his welcoming remarks, Dr. David Olowokere, Chair of Engineering Technology, and facilitator of the visit, expressed delight at the interest that GM is taking in TSU. "The coming of Michigan to TSU is exhilarating. Our president is from Michigan, and it is obvious he will be thrilled that GM is establishing a presence here." Dr. Olowokere also mentioned that almost all major HBCU's in the nation have been beneficiaries of GM; "and it is necessary that TSU joins the GM bandwagon." The visit ended with a pledge by GM representatives to begin the process of active collaboration with TSU through employment of graduates, support of research activities, and scholarship opportunities to students.

Dr. Olowokere with representatives of General Motors Corporation

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 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).

Council member Jermaine Potts poses a question as Dr. Yu and Dr. Cox look on (below left). Other student participants (below right).

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 (SAES), 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.

College Fall Open House

The College honored its partner-sponsored scholarship donors, distinguished alumni, and high achieving students in a sparkling event. The theme of this meeting was "COST–The Currency of the Future."

Dr. Oscar Criner expanded on the idea in his opening remarks pointing out that, "In the 21st century, knowledge is the wealth and information is the currency." Since science and technology are driving the economy, such knowledge generates wealth; and since computers are ubiquitous in our society, information is being used to satisfy obligations in an expanding e-commerce environment and is, therefore, the currency. Dean Lei Yu informed the visitors, partners, and alumni of their importance to the success of the College. Dr. Yu summarized the state-of-the-college and plans for the future. He emphasized that "Our primary business is to educate students to the best of their ability and to help them grow into individuals who will be competitive in the job market and make meaningful contributions to society."

The speakers sought to demonstrate the level of research and scholarship taking place in the College and to inspire the students to greater scholarship. Dr. Daniel Vrinceanu spoke of discoveries in Physics, Ms. Nina M. Alaniz spoke of her research in biology, and featured speaker, Mr. Joseph DeLoach, Olympic Track Star and computing executive, inspired students to believe in their own abilities with examples from his life as an athlete. The Keynote Speaker was Mr. Jackie Freeman, who is the Director of the Harris County Public Infrastructure Department. He encouraged students to seek the "Joy of Scholarship" and not limit themselves to courses that are job preparation only.

COST Founder's Day 2010

The University's 2010 Founder's Day Celebration was a great success. Founder's Day commemorates the university founding date of September 14th, 1927. Colleges and Schools decorated tents and booths. The spirited commemoration program was followed by a "Party on the Plaza" with food, music and a pep rally. The College of Science and Technology won first place for the best-decorated tent. The COST tent was decorated with items representing each department within the College. The COST received a free float entry in the Homecoming Parade for 2010 as a result. We salute the Faculty, Administrative Assistants, Staff members, and Students who helped make this event a success. Thanks especially to our sponsors, Metro, Port of Houston Authority, Butler Business, and Zion Promotional Products for donating promotional items. The College also thanks special guest, Mr. Amin Moore, a local R & B Recording Artist, for singing his songs and for assisting us with the Karaoke activity. The students enjoyed it and had a great time singing their favorite songs.

Homecoming 2010: Forever TSU

The College of Science and Technology had a great time this year celebrating Homecoming 2010-Forever TSU. The 'COST Groovy Lounge' was placed 3rd in the campus lobby decorations contest. In the Parade, the COST Float was displayed as a boat with captain and crew, a crane and cargo/ freight, a space shuttle and astronauts. The COST Float was placed 3rd. The COST Queen, Ms. Destiny Stroud was also on the COST Float. Dean Lei Yu won 2nd place in the Truck Category in a 2010 Ford F250 charcoal grey pick up donated by Freeway Ford. The College Departments prepared office decorations and prizes were given to the top five offices.

COST Holiday Celebration 2010

Christmas in the College of Science and Technology was a magical time of year for the students, faculty and staff. With lights aglow and festivities planned for a grand holiday celebration, COST became the delight of the TSU campus. The theme for the celebration was "COST Candy Land." The atrium of the New Science Center was transformed into a neighborhood of candy, with a Christmas tree nestled in a snowy wintry setting. The Christmas tree was adorned with figurines/toys representative of each department in COST. Guests attending the celebrations enjoyed musical entertainment by DJ 1231. Dr. Carlos Handy, grandson of history-making William C. Handy, performed with the HR Duet rendering a medley of Christmas and Gospel songs during the intermission between the student and faculty/staff celebrations. Host, Dr. Robert Ford, introduced the entertainment with performances from COST faculty and staff; highlighted by comedy from Dr. James DuMond, magic tricks by Dr. Lei Yu, Dean of COST and the baritone voice of Dr. Oscar Criner reading the all-time favorite poem, "Twas the Night before Christmas." Both celebrations climaxed with line dancing.

Gifts, provided by each department and the Dean's office, were presented as door prizes to lucky winners at both celebrations and all COST employees received a gift from the Dean's office. Special thanks to the Holiday Celebration committee members for a job well done.

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.

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!

CASE Honors 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.

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."

Dr. Lei Yu, the Dean of College of Science and Technology, gave a warm welcome greeting to all participants including guests from Rice University, the University of Houston, and the COST faculty members and students. Dr. Wei Li, Chair of the COST Research Committee, presented the program overview and hosted the activities. Dr. Steve Cox, Professor of Computational & Applied Mathematics at Rice University, presented the keynote lecture titled "Navigation with Brain Waves." His talk was followed by a panel discussion titled "How to 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.

SUCDC STEM Foundation Hosts 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 ceremonies. 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).

Robert Ford, Dolly Spencer, Paula McCann Harris, Azime Saydam, and Paula Eakins

COST Administrative Council Retreat

The College of Science and Technology held its First Administrative Council Retreat on Tuesday and Wednesday, August 10th and 11th, 2010. The retreat was held at Columbia Lakes Resort and Conference Center in rural Brazoria County. The Administrative Council considered the mission, goals and objectives of the College and defined the faculty committees that will contribute to the final College of Science and Technology Strategic Plan 2010 – 2015. The Strategic Plan puts forth the processes by which the College will achieve its Mission and Goals. The Goals are to: (1) Provide high quality instruction; (2) Perform basic and applied research, (3) Engage in community service; (4) Optimize enrollment of college-ready undergraduate students and enhance graduate student enrollment; (5) Strive for a steady increase in external funding; and (6) Ensure that the College's administrative units function effectively and efficiently so that they support the missions of the College and the University. The strategic plan will provide the roadmap for the College to achieve greater competitiveness and a higher visibility in the community.

A for Accreditation

Over the last year the College has been involved with multiple accreditation efforts. These include the university's reaffirmation of accreditation from the Southern Association of Schools and Colleges (SACS), the Department of Engineering Technology's efforts for re-accreditation from the Accreditation Board for Engineering and Technology (ABET). Accreditation by The Technology Accreditation Commission (TAC) of ABET serves to evaluate curricula for applied science, computing, engineering and technology programs to ensure the quality of specific programs and graduates. The current evaluation is an outcome-based assessment, emphasizing continuous quality improvement of the program.

The Department of Engineering Technology is proud to announce that its Electronics Engineering Technology program accreditation has been renewed. The program passed the rigorous accreditation review with flying colors and will not need to be reviewed again until September 2014. The University's efforts with SACS are near completion as TSU hosted the SACS site visit team in early February '11. In December of this year, SACS will convene at its annual meeting to determine TSU's accreditation status.

The Departments of Aviation Science & Technology and Industrial Technology hosted a site visit on April 10-12, 2011 from Association of Technology, Management, and Applied Engineering (ATMAE), which reviewed the currently accredited undergraduate programs in Airway Science and Industrial Technology.

National Society of Black Engineers

For the academic year 2010-2011, the student organization of the National Society of Black Engineers (NSBE) was successful in selecting an executive board, making plans to attend the national annual convention in St. Louis, MO, fund raising activities, and co-hosting an outreach program entitled summer of Innovation and Exploration of Science, Technology, Engineering and Mathematics for middle school students. The event was sponsored by NASA. During the academic year members of NSBE also volunteered their time to do peer tutoring and mentoring of their peers in the Department of Engineering Technology.

Mathematics Learning Center

The Department of Mathematics is determined to help students to succeed in their mathematics classes not only through the traditionally-practiced classroom instruction and office hours but also through an additional resource facility.

Beginning this spring semester of 2011, the Department of Mathematics opened a Mathematics Learning Center. The Learning Center is housed in 102D of the Science Center, which is equipped with whiteboards, tables, chairs, and 3 conference rooms for one-on-one tutorial sessions. The goal of the Learning Center is to furnish a supportive atmosphere for any student needing reinforcement of mathematical concepts and problems in an informal and more relaxed setting. The facility is staffed by the mathematics faculty, and will be open each term starting on the Monday of the second week of classes through the last week of the classes. Hours of operation will be from 8 a.m. to 5 p.m. five days per week. The center will be open to all students registered for mathematics courses regardless of level.

COST Student Learning Center

Pardon our dust, as the College of Science and Technology is expanding its services again! During the spring semester of 2011, 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 was completed 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.

New College Building

The Leonard Spearman Technology building was severely damaged during tropical storm Ike in 2008. As the building was beyond repair, the University decided to bring down the building and replace it with a new technology building. In January of this year, chairs from all departments to be housed in the new building had the opportunity to meet with the building architect, Mr. William J. Stanley, III from Stanley, Love-Stanley, P.C. During these meetings the final design touches were made to plans for a new college building.

More recently, President Rudley announced that Construction Bonds had been sold and funding for the building would be on campus shortly. Construction is scheduled to begin in 2011 and should last 18 months. The two-winged building with 4 stories has an eye-catching design and will be the new home for the Departments of Aviation Science and Technology, Computer Science, Engineering Technology, Industrial Technology, Physics, Transportation Studies, and the Dean's Office.

New Technology Building coming in 2012

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, 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.

College Excellence Awards

Distinguished Undergraduate Advising Award:
Dr. Xuemin Chen

Distinguished Research Award:
Dr. Daniel Bessis

Distinguished Service Award:
Dr. Aladdin Sleem

Distinguished Staff Award:
Mr. Baqui Abdullah

Distinguished Student Award:
Mr. Sovandara Chea

Dean's Leadership Awards

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), Fawzia 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

COST Annual Awards Recipients

Outstanding Student Award

Aviation Science and Technology:
Kadijah Hall –UG

Biology:
Emmanuel Obi – UG
Anita Lewis – GR

Chemistry:
Kiara Taylor – UG
Jun Wen – GR

Computer Science:
Narada Walker – UG
Isidro Cervantes – GR

Engineering Technology:
Anthony Victorain – UG

Environmental Science and Technology:
Shaunté H. Abdin – GR

Industrial Technology:
Jermaine Potts - UG
Devaughn Robinson – GR

Mathematics:
Andre White –UG
George Kwakuyi – GR

Physics:
Samantha Everett - UG

Transportation Studies:
Dexter Khan – UG
Sara Land - GR

GR, Graduate
UG, Undergraduate

Student Scholarship Recipients

Joseph Flowers' Scholarship:

Tierra Johnson, Chemistry

Jude Ugiomoh, Computer Science

Kimberly Gilkes, Biology

COST Faculty and Staff Scholarship:

Biology:
Kim Smith, Victoria Kogambi

Chemistry:
Pamela Mbonu

Electronics Engineering Technology:
Elo Chukwuma, Durodola Aisha

Environmental Toxicology:
Gloria Okome, Shaunté Hulett-Abdin, Nagaq Naidu

Mathematics:
Aqeeb Sabree

Dean's Student Advisory Council

Aviation Science and Technology:
Bennett Abraham

Biology:
Emmanuel Obi
Olusegun Ogunniyi

Chemistry:
Cedric Kouamou

Computer Science:
Alicia Simmons

Engineering Technology:
Chelse 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:
De'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, Abjilash Kuman, Yasamin Salehi

Donald Perkins Day

COST is pleased to announce that City of Houston District G Council Member, Oliver Pennington, recognized Donald Perkins before Houston City Council on July 12, 2011 with a proclamation signed by Mayor Annise Parker designating July 12, 2011 as Donald R. Perkins Day within the City of Houston. Perkins is a Planning Leader with the City of Houston Planning & Development Department, Community Sustainability Division. He has 16 years of public service with the City of Houston.

Perkins is a 1997 graduate of Texas Southern University with a M.S. in Transportation Planning and Management. According to Council Member Pennington's

remarks, "Donald Perkins has provided exemplary service to super neighborhoods, homeowner and property owner associations, civic clubs, businesses, institutions, and residents of District G, and of the City of Houston as a whole." Perkins was the Planning Leader and City's liaison with many District G super neighborhood councils. By assisting super neighborhood councils to develop greater organizational self-sufficiency, Donald Perkins has had a profound effect on the lives and well being of residents across the City of Houston.

Mrs. Paula Eakins Receives Meritorious Service Award from President John Rudley

Mrs. Paula Eakins was nominated among several other clerical/ secretarial recipients from the Texas Southern University Staff to receive the Staff Meritorious Award (Clerical/Secretarial) from the University Staff Council on December 10th, 2010. The criteria for this award was as follows: One whose performance of assigned tasks deserves recognition; a positive attitude that inspires fellow co-workers and the general public; dependability, responsibility, stability and exercises extraordinary courage. Congratulations!

COST Partner Sponsored Awards

Joseph and Lori Flowers and the H. Fort Flowers Foundation Scholarship Recipients

Capriese Lawton, Biology
Kimberly Gilkes, Biology
Nicolette Manning, Biology
Nissi Abraham, Biology
Sarah Munyu, Biology

KBR Student Scholarship Recipients

Abidat Lawal, Env. Toxicology
Elvino Taylor, Engineering Tech.
Grace Ndegwa, Biology
Haruna Kibirige, Computer Sc.
Jennifer Okanmelu, Biology
John Shoboiki, Electronics Engg.
Olusegun Ogunniyi, Biology
Samuel Somuah, Computer Sc.

Linbeck Construction Company Student Scholarship Recipients

Alicia Simmons, Computer Sc.
Ebenezer Addo, Biology
Ediguenure Abu, Computer Sc.
Marcia Robin, Engineering Tech.
Sharon Kwende, Biology

Honors College Scholars Recognized in College of Science and Technology

The Thomas F. Freeman Honors College reported and applauded the achievements of Honors scholars in disciplines of the College of Science and Technology in 2010-2011.

The Thomas F. Freeman Honors College is named after the legendary TSU philosophy and psychology professor and debate team coach. The Honors program augments the education of those TSU students who have great potential for academic excellence and a record of high achievement. The College is in the lower level of the Robert J. Terry Library, and serves as a second academic home for students in all academic units at the university. Of the 54 Honors scholars within COST, 46 made the Honor Roll by achieving a grade point average of 3.0 or above. Twenty-nine were on the Dean's List with grade point averages at or above 3.5, while 19 were on the President's List (with grade point averages at or above 3.75).

Three scholars in the College of Science and Technology boasted a grade point average of 4.0 during 2010-2011. Three scholars earned degrees in May of 2011: Zuri J. Dale (Cum Laude), Chelse Loren Hoover (Cum Laude), and Kadijah Hall (Magna Cum Laude).

In addition, four College scholars received special awards or opportunities to play special roles: Kadijah Hall (majoring in the Department of Aviation Science and Technology), COST Outstanding Student Award, Elo Chukwuma (majoring in the Department of Engineering Technology), COST Faculty and Staff Scholarship, Chelsea Hoover (majoring in the Department of Engineering Technology), Dean's Student Advisory Council, and De'Carla Greaves (majoring in the Department of Aviation Science and Technology), College Student Ambassadors.

ENO Transportation Fellowship Recipient: Shain Eversley

Shain Eversley, received the prestigious ENO Transportation Foundation Fellowship. He was one in twenty fellows selected from across the country. The Foundation focuses on all modes of transportation with the mission of cultivating creative and visionary leadership for the sector. ENO allows recipients to gain further knowledge of transportation and infrastructure as well as an understanding of the U.S. policymaking process through research under the guidance of ENO's President and CEO; collaborating with transportation experts on publications; and assisting in the execution of programs conducted by ENO's Center for Transportation Leadership.

Shain is a planned December 2011 graduate in Transportation Planning and Management whose research focus is An Optimization of On-Street Parking and Promotion of Alternate Forms of Transportation for Washington, DC.

After one week of intensive exposure to higher level transportation officials in Washington DC, Shain had this to say to his CTTR mentors, Dr. Carol Lewis and Gwendolyn Goodwin: "Last week gave me several perspectives on transportation issues. I got to understand what's important to the transportation industry from the public, private, and industry association perspectives. The opportunity to interact with the other ENO Fellows and the networking was priceless. This session only solidified the fact that the education we are receiving at TSU is world class!"

Shain Eversley displaying his ENO Transportation Fellowship Certificate

COST Faculty Donate $ 21000 to TSU Faculty and Staff Campaign

The 2011 TSU Faculty and Staff Campaign was kicked off on March 2, 2011 at noon. The faculty and staff of the College of Science and Technology achieved an impressive 97% participation by donating a total of $21,737.36 to the COST Student Scholarship Fund. The college recognized the participation of its faculty and staff at four contribution levels: Platinum ($1,000 and above), Gold ($500 - $999), Silver ($250 - $499), and Bronze ($5 - $249). The following is the list of participants:

Platinum Level ($1,000 and above):

Oscar Criner
James DuMond
Marian Hillar
Olufisayo Jejelowo
Khaled Kamel
Lei Yu

Gold Level ($500 - $999)

Carlos Handy
Desiree Jackson
David Olowokere
Audrey Player
John Sapp
Bobby Wilson

Silver Level ($250 - $499)

Della Bell
Obot Ekwere
Sunday Fadulu
Robert Ford
Carol Lewis
A. Serpil Saydam
Dolly Spencer
Carrington Stewart
Alamelu Sundaresan
Momoh Yakubu

Bronze Level ($5 - $249)

Fawzia Abdel-Rahman
Baqui Abdullah
Boma Afiesimama
Raymond Agbanoci
Daniel Bessis
Brandi Butler
Xuemin Chen
Kiran Chilakamarri
Jade Q. Clement
Tisha Daniels
Shahryar Darayan
Betty Davis
Yuanjian Deng
Ronald Dilly
Ulysses Dotson
Nia Eakins
Paula Eakins
Maurice Ekwo
Joan Evans
Tioka Freeman
Linda M. Gardiner
Lila Ghemri
James Ginn
Charles Glass
Nancy Glenn
Khosro Godazi
Gwen Goodwin
Michael Gozalez
Shyamal Guha
Maribel Handy
Shirley Harris
Mark Harvey
Roderick Holmes
Jesse Horner
Sharon Hudson
Nadereh Jahed
John Javadi
Mohsen Javadian
Eman Kamel
Farrukh Khan
Denita Lashore
Jonathan Lewis
Sharon Lewis
Wei Li
Carl Lott
Li Ma
Crystal Mason
Anthony Maye
Michael Miller
Hector Miranda
Rachel Mizzell
Lulueua Nasser
Robert M. Nehs
Kingston Nyamafene
Victor Obot
Christopher Odetunde
Edward Osakue
Helen Pittman-Cockrell
Yi Qi
Fengxiang Qiao
Mary Rollins
Jason Rosenzweig
Mahmoud Saleh
Rasoul Saneifard
Nathaniel Shelton
Mark Sherman
Shishir Shishodia
Tarsem Singh
Aladdin Sleem
Delois Smith-Johnson
Ayodotun Sodipe
Hosein Tahvilian
Willie Taylor
Cherita Thomas
Graham Thomas
Michelle Tolbert
C. J. Tymczak
Bertha C. Valle
Daniel Vrinceanu
Xin Wei
Charlotte Whaley
Ursurla Williams
Warren E. Williams
Tong Wu
Yuhong Zhang

Congratulations

Summer Maritime Academy

This year, the College of Science and Technology hosted two sessions of the Summer Maritime Academy (SMA). The purpose of the SMA was to introduce rising high school juniors, seniors, and recent high school graduates to the maritime industry in the areas of logistics, security, and the environment. The SMA consisted of two weeks of field trips, guest speakers, and sessions on visioning and goal setting; public speaking; SAT prep and test taking strategies; and web design. Field trips included transportation related destinations in the area: Houston Maritime Museum, Houston TranStar, Port of Houston Authority (and Sam Houston Boat Tour), U.S. Coast Guard Facility, and Battleship Texas. Students learned about the maritime industry and security in the maritime industry from seasoned maritime professionals.

The highlight of each SMA was the Closing Ceremony Luncheon. At each luncheon, students delivered presentations on the various subjects they studied during the two week SMA. At each luncheon, students also heard from two maritime professionals who were awarded the Paul Cuffee Maritime Leadership Award (PCMLA). The PCMLA was created by the TSU Maritime Industry Advisory Board to recognize the contributions of minorities in the maritime industry in the Texas Gulf Coast region.

TSU received over 80 applications for the SMA, however only 42 students were selected based on their completed application, personal essay, and letters of recommendation from two professionals. Applications for next SMA will be available February 1, 2012.

SMA Students at Battleship Texas


SMA Students at the U.S. Coast Guard Facility


SMA Students at the Closing Ceremony Luncheon

Houston National Summer Transportation Institute

Houston National Summer Transportation Institute (HNSTI) at TSU celebrated its 10th graduation ceremony in the Student Center. The goal of the institute is to create an education and training delivery system that will attract secondary students and enhance their interest in careers in transportation; improve science, mathematics, communication and technology skills; and through creative partnerships, strengthen the links between the transportation sector and public/private institutions. The course is augmented with hands-on technical activities, lecture by transportation professionals, and field trips to NASA, Houston Galveston Area Council (HGAC), Port of Houston, and Houston METRO. Twenty students were selected to participate in the program this year. The closing ceremony was attended by over 100 people who were impressed by student's presentations and accomplishments.

This year's guest speakers were Mr. Mark Arrington, FHWA; Ms. Shundreka Givan, FHWA, Austin Division, and Mr. Henry C. Murdaugh, FHWA, Washington D.C., who spoke about the Dwight Eisenhower Scholarship and how each student could benefit from the program. Each student was presented with a certificate and check for $250.00. Drs. Carol Lewis, Mark Sherman, Charles Glass, and Mr. Vernon Baker were instrumental in the success of this program.

Institute of Transportation Engineers Student Chapter

The Institute of Transportation Engineers (ITE) Student Chapter at Texas Southern University recorded another successful and rewarding year. The chapter continues to grow, and it offers the TSU students a series of professional development opportunities throughout the year. Through ITE TSU Chapter, the TSU students have expended their knowledge and net-working with professionals in the industry. The 25 member strong chapter elected Ms. Da Li, a graduate student in the Transportation Studies Department, as the president in April 2011.

The organization at TSU is advised by Dr. Carol Lewis, and Dr. Yi Qi and Dr. Fengxiang Qiao serve as co-advisors. The ITE TSU Chapter hosted several major events including seminars on Connecting, Sharing, and Communicating by Dr. Lei Yu, Professor of Transportation at TSU; and Preparation for Job Hunting by Roland Manzano, Acting Vice President of Human Resources, Houston METRO. The ITE also organized a membership drive game night event on September 28, 2010 and recruited 6 new members.

Intelligent Transportation Society Student Chapter

The Intelligent Transportation Society (ITS) TSU Student Chapter was formally established on September 23, 2010. This Chapter is a student chapter under ITS Texas, providing TSU students opportunities in the study, research and applications of advanced technologies in Intelligent Transportation Systems. Miss Huimin Xing, a graduate student of Department of Transportation Studies is the president, while Dr. Fengxiang Qiao (Department of Transportation Studies) and Dr. Xuemin Chen (Engineering Technology) are the advisors. Dr. Fengxiang Qiao made a speech on the "Applications of Artificial Intelligence in Modern Transportation System" in its September meeting, while Dr. Xuemin Chen presented the "Wireless Applications in Intelligent Transportation System" in its October meeting. On November 18, part of the membership visited the world-class transportation management center at the Houston TranStar.

COST Student Ambassadors

The College of Science and Technology initiated a "COST Student Ambassador" program during the 2010 spring semester. The premise behind the program allowed students nominated by their major department to stand in representation of the college and the departments within it. When the COST hosted events, it could call on its Ambassadors for assistance. They also assisted with recruitment for COST. The COST Ambassadors are comprised of twenty undergraduates and graduate students that serve as the student representatives for the ten departments and their programs.

In addition to having the honor of representing the College of Science and Technology, this special group of students receive special recognitions. These students will be acknowledged by the Dean and COST for their leadership and service upon graduation in the form of a medallion. In addition, a formal letter from the dean stating the College's appreciation for their service is provided. Lastly, a framed certificate of service is provided to the student. Through these responsibilities and rewards, these students find pride and devotion to their College fostering a spirit of commitment to COST and Texas Southern University.

Phi Eta Sigma Honor Society

The Installation and Induction Ceremony for Phi Eta Sigma National Honor Society was held on November 19, 2010 at 5:00 P.M. in the Barbara Jordan/ Mickey Leland Building. TSU is the second HBCU in the nation to have a Phi Eta Sigma Chapter. Phi Eta Sigma was founded in 1923 at The University of Illinois and is the oldest and largest honor society for university students in all disciplines. The TSU Chapter is the 368th chapter of Phi Eta Sigma to be established. Dr. Della Bell (Senior Advisor), Ms. Virginia Day (Co- Advisor)and Dr. James Hefner worked together to establish this chapter. In addition to the students inducted, Dr. Bell, Ms. Virginia Day, and several other administrators and faculty were inducted as Honorary Charter members. Dr. John W. Sagabiel, General Secretary and Treasurer of Phi Eta Sigma conducted the ceremony.

Dean's Student Advisory Council

On October 14, 2010, the first meeting of the COST Dean's Student Advisory Council was held. The council is comprised of twelve students representing the ten departments of the college. The charge given to Council by Dean Lei Yu stressed the members' role as a direct communication line between the student constituents they represent and the college's administration. The members were encouraged to take ownership of this council; to take the initiative to talk with students about issues; and to bring to the council suggestions to improve the college. Dr. Yu further emphasized that the value of the student's COST degree increases as college improves.

Dr. Desirée Jackson serves as Co-Chair of the council alongside Co-Chair Andre White, a Mathematics major. Other members of the Council include Jerry Garcia and Bennett Abraham (Aviation Science and Technology), Emmanuel Obi and Olusegun Ogunniyi (Biology), Bobby Scott (Chemistry), Alicia Simmons (Computer Science), Chelse Hoover and Anthony Victorain (Engineering Technologies), Bita Iranmadar-Maki (Environmental Science and Technology), Jermaine Potts (Industrial Technology), Landra Williams (Physics), and Yubian Wang (Transportation Studies).

Beta Beta Beta Biological Honor Society

The National Biological Honor Society, Beta Beta Beta, Delta Upsilon chapter at TSU (more commonly known as Tri-Beta) is a student run and organized group that is dedicated to the understanding and appreciation of biological study and expanding the boundaries of human knowledge through scientific research. Currently Tri-Beta, Delta Upsilon chapter, is involved with community service, biology tutoring, and offering research opportunities to those that are interested. Tri-Beta offers a great opportunity to undergraduate students in that students will be exposed to scientific research and leadership opportunities within the organization.

In the past, Tri-Beta has participated in AIDS walk and Breast Cancer Awareness and Fundraising for a Cure. Additionally, the organization has visited local schools in order to promote biological science and college education in general. Tri-Beta participates in biology tutoring that is currently offered free of charge to students of TSU.

The 2011 officers include Kristine Elliott, Sergeant at Arms; Nina Alaniz, Historian; Marian Fagbemi, Treasurer; Rachel Guthrie, Secretary; Olusegun Ogunniyi, Vice President; and Justin D. Shanks, President. The primary faculty advisor for Tri-Beta is Dr. Jason Rosenzweig with Dr. Shishir Shishodia also playing an advising role to the organization.

Confucius Institute at TSU

Dean Lei Yu facilitated the signing of a Memorandum of Understanding between Texas Southern University and Beijing Jiaotong University (BJTU), Beijing, on December 10, 2010, for the two institutions to jointly establish a Confucius Institute at TSU. The institute will provide an opportunity for TSU to offer Chinese language curriculum and to increase the international experiences of its students. The institute will be housed in the College of Liberal Art and Behavior Science, and include certain elements of Science Technology Engineering, and Mathematics (STEM) in its curriculum.

TSU has a history of collaboration with BJTU. The delegation from BJTU that visited TSU on December 10, 2010 was led by the Chairman of BJTU's University Council, Mr. Guoyong Cao. The delegation discussed many potential exchange programs between the two institutions with President Rudley.

TMCF China STEM Exploration Team

TMCF China STEM Exploration

Dr. Robert Ford visited China as a member of the Thurgood Marshall College Fund (TMCF) China STEM Exploration delegation, led by TMCF CEO, Attorney Johnny Taylor, and Founder, Dr. N. Joyce Payne. Texas Southern University, Prairie View A&M University, and North Carolina A&T University were member institutions selected to dialog with colleagues in Chinese universities, K-12 schools, government agencies, and Non Governmental Organizations.

The travel mission was two-fold: (1) to promote scholarly work being done at HBCUs in the STEM disciplines; and (2) to establish cooperative agreements with Chinese Universities on student and faculty exchanges and collaborative research opportunities. The delegation visited four universities, one high school, and the China Ministry of Education. Major outcomes from the visit include: (1) introduction of HBCUs to the China education community (2) a signed TMCF/ Nanjing Normal University Memorandum of Understanding; (3) an agreement to have one faculty member and four students from each of the delegation institutions spend 6-8 weeks at Nanjing Normal University during the summer of 2011.

The trip also included two days at the 2010 American Association of State Colleges and Universities Conference/China Education Expo, where member institutions joined representatives from many countries.

Exploring Development and Leadership in STEM: TMCF Delegation Visit to Singapore/Malaysia

As a member of the Thurgood Marshall College Fund STEM Education Delegation, Dr. Robert Ford represented COST during a U.S. Department of Defense sponsored mission to Malaysia (March 26 - 30, 2011) and Singapore (March 31 – April 4, 2011). The delegation collected information that would promote new thinking with regard to distinguishing factors that drive success in STEM education in Singapore and Malaysia. The delegation met with an array of higher education institutional representatives, educational professionals, government officials, and ministries, including Ministries of Education; National University of Singapore; Technological University of Malaysia; Biotech Park (Singapore); University of Malaysia; Nanyang Technological University (Singapore); Putra University of Malaysia; and the Singapore Management University. The aim is to convert the information gathered into programs designed to achieve measurable change in the quality and quantity of students completing degree programs in STEM at public HBCUs. Observations to be modeled include: (1) there is a persistent ethnic-based achievement gap in Singapore and Malaysia, much as the one documented in America; (2) educational achievement in Singapore is driven by a strong national desire to thrive in the absence of natural resources and a yearning for economic independence; (3) student tracking as early as 3rd grade; (4) relatively high levels of investment in education; (5) highly centralized precollege and higher education management; (6) relatively high proportion of international students and faculty in higher education institutions; (7) seemingly high level of interest on the part of Singapore institutions in exploring collaborations; (8) strong parental investment and influence on student education; (9) strong focus on building a world-class institution; (10) teachers are revered as nation-builders; and (11) unified teacher preparation approach unlike the U.S. fragmented model. Ultimately the information gathered will be used to create a major national initiative to "Engage, Innovate & Invest" in STEM at TMCF's 47 member universities. Agreements were signed with several institutions in the two countries visited and follow up collaboration is underway.

From left to right: Johnny Taylor, TMCF CEO; Jerry Drew, International Consultant; Joyce Payne, TMCF Founder and Consultant; William Harris, President of Alabama State University; Nina Adlan Disney, Education Consultant; Robert Ford, TSU Chemistry; Joseph Graves, NCA&T Biology; and Rosalind Reddick, TMCF Staff.

Ms. Jing Wang

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 worked with Dr. Qiao and others to study the impact analyses of urban planning and management to regional and global environments.

COST Alumni Chapter Established

COST was formally recognized as an official chapter of the Texas Southern University National Alumni Association (TSUNAA) on March 2, 2011, by Marcus Davis, President of TSUNAA. Prior to the TSUNAA business meeting held that evening, a reception was held in honor of COST and the College of Pharmacy and Health Sciences (COPHS). The certification process for COST started on May 9, 2010, with an email from Dr. Lei Yu inviting representatives recommended by COST department chairs to participate in a steering committee formed to establish a COST Chapter of the TSUNAA. The first committee meeting was held on June 9, 2010 in the Science Center. Great enthusiasm was displayed at this meeting, and commitments to complete the task were fashioned. Leading the committee was Mr. Perry Miller , Steering Committee Chair, Co-Chairs, Ms. Roben Armstrong and Ms. LaKeisha Melton, and a host of COST professors and graduates. Professor Paul Simmons (COST Advisory Board) and Ms. Connie Cochran, Director of Alumni Relations deserve special mention for their efforts in providing leadership and guidance toward the establishment of the COST Alumni Chapter.

COST membership requirements are: graduation with a degree from one of the COST departments, satisfy requirements for TSUNAA membership, completion of a COST membership application and $50 annual membership fees. The COST Steering Committee will continue meeting until chapter officers and by-laws consistent with TSUNAA requirements have been established.

University Distinguished Alumnus: Vincent Sanders

Vincent L. Sanders is the lead planner of the Travel Demand Forecasting and Analysis Division of the Metropolitan Transit Authority of Harris County, Texas (METRO). Prior to joining METRO, Mr. Sanders worked as a transportation consultant with RSM Services. He earned a Bachelor of Science degree in Business Administration from Wayne State University in Detroit, Michigan and a Master of Science degree in Transportation Planning and Management from Texas Southern University.

With fourteen years of experience in transportation project development, transportation demand analysis, and modeling software, Mr. Sanders is responsible for a wide range of services that METRO provides. Some of these responsibilities include: management of the Travel Demand Forecasting section, maintenance of METRO's travel demand models and methods of travel forecasting, and coordination of the travel forecasts and inputs required for Clean Air Act conformity. Mr. Sanders also works with the educational committees of the Community Outreach Department, METRO's Diversity Council Task force, and more recently, the Census 2010 Outreach committee.

Mr. Vincent Sanders

Donna M. Aurich, BS, MS (Computer Science)
Chief Program Manager, nMomentum
Washington, D. C.

Donna M. Aurich is a graduate of the Department of Computer Science. She was the valedictorian of her class and widely sought after by industry. She has become an expert in Intelligent Transportation Systems (ITS) working to develop several applications in the field. She now manages multiple ITS projects for various transit authorities across the nation while frequently returning to Houston to visit family and friends.

Calvin R. Brown, BS, MBA (Airway Science and Technology)
Air Traffic Control Specialist
Houston Route Traffic Control Center

Calvin R. Brown is a graduate of the Department of Airway Science and Technology, Airway Science Management program and the School of Business MBA graduate program. Since July, 1999, he has worked as a full performance level air traffic control specialist at the Houston Route Traffic Control Center. Mr. Brown is a Member of the National Black Coalition of Federal Aviation Employees (NBCFAE). Mr. Brown and his wife Kim have been married for 15 years and they are the proud parents of twins, Baileigh and Barron.

Jenna Brown-Ford, BS, M Architecture (Industrial Technology)
Architectural Designer & Project Manager
PGAL

Jenna Brown–Ford is a graduate of the Department of Industrial Technology Construction Management program. She also holds a Master of Architecture degree from the University of Houston in 1997. While in graduate school, she had internships in TSU's Construction and Planning Department and with Heights Venture Architects. Jenna Ford has spent her professional career in architecture, working with architecture firms in Houston over the course of a decade. During this time she has served on Texas Southern University's College of Science and Technology Construction Advisory Committee, she has also been a critic on several architectural student review committees for both the University of Houston and Prairie View A&M University. Jenna is married to Lloyd Ford and they have two children, Amaia and Lloyd.

Llayron L. Clarkson, BS, MS, PhD (Mathematics)
L.L. Clarkson Mathematical Research Experience
Founder and CEO, Clarkson Aerospace

Llayron L. Clarkson is a graduate of the Department of Mathematics, receiving both Bachelors and Masters Degrees. He served in the Armed Forces, where his tour of duty took him to parts of Africa, Italy, France, Germany, and England. He was honorably discharged in 1945. Dr. Clarkson taught mathematics at Yates Senior High School and began teaching in the Department of Mathematics at Texas Southern University in 1954. In spring, 1973, he was a Visiting Professor in Mathematics at Massachusetts Institute of Technology.
During his tenure at Texas Southern University, he held several academic administrative positions, including Head of the Department of Mathematics, Dean of the College of Arts and Sciences, Vice President of Academic Affairs, Executive Vice President, Director of Campus-Wide Academic and Information Systems, and Director of Institutional Research. He was also named Pierce Professor of Mathematics and Education at Texas Southern University. During the past several years, he has provided funds to the Texas Southern University Mathematics Department for the L.L. Clarkson Mathematical Research Experience: a Summer Program for Undergraduate Students.

COLLEGE DISTINGUISHED ALUMNI AWARDS 2010

Robert Morgan, BS, MS, MBA (Transportation Studies)
Maritime Academy Manager
Port of Houston Authority

Robert Morgan is a graduate of the Department of Transportation Studies having received a Master of Science in Transportation. Mr. Morgan is the Maritime Academy Manager at the Port of Houston Authority. He serves as the principal contact person responsible for coordination of the Port of Houston Partners in Maritime Education which includes but is not limited to TSU, Texas A&M at Galveston, Houston, Galena Park, Deer Park, La Porte, Pasadena and other area Independent School District's, Houston Community College and San Jacinto College.

Edward Patten, BS, MD (Biology)
Physician & General Surgeon
Riverside General Hospital

Dr. Edward Patten was born and raised in Houston, Texas and attended Jack Yates High School. Dr. Patten then went on to graduate from Texas Southern University where he excelled in his studies. From there he studied medicine at Baylor College of Medicine and Affiliates. Dr. Patten's residency was completed in General Surgery at St. Joseph Hospital. He is a member in good standing of the Harris County Medical Society, the Texas Medical Association, the American Medical Association and Michael Debakey Internal Cardiovascular Society.

Derrick Wilson, BS, MS (Electronics Engineering Technology)
Employment Specialist
Texas Southern University

Mr. Wilson graduated with a B.S. in Electronics Engineering Technology and M.S. in Management Information Systems. Derrick is an employee of Texas Southern University, and a member of Phi Beta Sigma Fraternity, Inc.

Carla Wyatt, BS, MS, PhD (Biology)
Special Projects Executive
Harris County Public Infrastructure Department

Carla Wyatt received a BS and MS in Biology from TSU. In 2007, Carla received her Ph.D. in the Environmental Toxicology also from TSU. Carla serves on the Houston Area Urban Forestry Council Board, Scenic Houston Board, Houston Spark Park Program Board, Clean Houston Commission (Keep Houston Beautiful), and many others. Some of her non-professional affiliations are Zeta Phi Beta Sorority Inc. and TSU Alumni Association.

Sam Wyllie, BS, MS, PhD (Chemistry)
Forensic Chemist
Harris County Institute of Forensic Sciences

Dr. Sam Wyllie is a graduate of the Department of Chemistry receiving both the B.S. and M.S. degrees. He received the Ph.D. Degree from the University of Texas Medical Branch at Galveston. Dr. Wyllie did postdoctoral work at Baylor College of Medicine and served as an Assistant Professor at Baylor College of Medicine from 2001 to 2006 where he successfully competed for grants from the National Institutes of Health (NIH) and The Methodist Hospital Foundation. Dr. Wyllie also served as an Editorial Board Member of the World Journal of Gastroenterology and is also the recipient of several awards and scholarships. Dr. Wyllie served as Adjunct Professor in the Chemistry Department at TSU and currently serves as a Forensic Chemist at the Harris County Institute of Forensic Sciences (HCIFS).

DEPARTMENT OF AVIATION SCIENCE AND TECHNOLOGY

The Aviation Science Management degree program combines laboratory simulation training and rigorous academic curriculum in a unique manner that provides a strong foundation for a career as a leader in the field of aviation. This approach to aviation education gives the student added value over traditional flight training programs by focusing on the skills and knowledge required by today's industry. The curriculum provides skills in management, communications, flight operations, and research to prepare students for their chosen aviation specialty. The last two years of matriculation include extensive professional-level Aviation Science, Technology, and Management courses deemed appropriate by the aviation education community. Critical thinking and problem-solving skills are developed via computer simulations, aircraft systems operation and research analysis. Effective resource management, human factor, and safety awareness are constantly emphasized throughout the curriculum.

Research in the Department of Airway Science focuses on transonic flow over airfoils as a tool to student understanding critical areas of aviation, studying the improvement of hydrocarbon fuel conversion efficiency and reduction regulated toxic and greenhouse gas emissions from advanced internal and external combustion engines, effectiveness of homeland security potential as a national security tool, and analysis of GM's new SUV to reduce the coefficient of drag (pro gratis in order to establish infrastructural relationship).

Students at the Aviation STEM Enrichment Academy

Test Section Wind Tunnel


Teaching Lab

DEPARTMENT OF BIOLOGY

The Department of Biology at Texas Southern University is the largest academic unit within the College of Science and Technology. The department serves to advance the understanding and appreciation of the subject of Biology, while encouraging critical thinking and experiential learning. Biology faculty engage students in quality education through comprehensive teaching and research at the undergraduate and graduate levels.

The curricula of the two degree tracks aim to expose students to a wide variety of classroom, laboratory, and field experiences fundamental to the life sciences. Through programs supported by institutions such as the NASA University Research Center, the department provides opportunities to graduate and undergraduate students to conduct hands-on scientific research on a broad field of expertise from cell signaling to phylogenetics in laboratories equipped with state-of-the-art equipment. Graduates are prepared to pursue employment in biological laboratories, and to pursue graduate studies or studies in the health professions.

The Department of Biology is home to the Joint Admission Medical Program (JAMP) and the Early Medical School Acceptance Program under the direction of Dr. Shishir Shishodia. During the September 2010 – August 2011 year, three students were accepted into the JAMP Program. The EMSAP Program has grown to four cohorts with seventeen students. The department graduated two students this year who have been accepted to medical school: Emmanuel Obi (Ross Medical School) and Chelsea McCoy (UTMB).


Lion Fish (Pterois genus)

The Masters Program also produced several graduates whose thesis work spanned several disciplines in Biology: Ayodeji Jejelowo and Anita Lewis, (Advisor: Shishir Shishodia); Shaunte Abdin, Stephen Hayes, and Tierra Spencer, (Advisor: Hector Miranda); Tram Cao, (Advisor: Alamelu Sundaresan). The department admitted 20 graduate students (14-Fall; 6-Spring) with another 25 applications currently being considered for the Fall Semester.

The Department of Biology had 28 graduates for the Fall 2010 Commencement, 33 undergraduates and 3 graduates for Spring 2011, and has 21 prospective undergraduates and 3 prospective graduates for Summer 2011. Of the undergraduates, the department had two summa cum laude graduates (Ebenezer Addo and Belaineh Belay), two magna cum laude graduates (Emmanuel Obi and Jennifer Okanmelu) and two cum laude graduates (Zuri Dale and Kimberly Gilkes).

Faculty have been actively producing peer-reviewed publications: Dr. Fawzia Abdel-Rahman (2), Dr. Marian Hillar (2 books, and 7 papers), Dr. Hector Miranda (1), Dr. Jason Rosenzweig (5), Dr. Alamelu Sundaresan (3), and supporting student presentations at meetings. Biology students presented at the 38th Annual Meeting of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCCHE) where undergraduate student Brandi Wilson won the Third Place Award in Poster Presentations. Students presented at the Texas Southern University Research Week where Nina Alaniz won the First Place Award in Oral Presentations.

The Biology distinguished alumnus for 2010-2011 was Edward Patten, B.S., M.D., Physician & General Surgeon, Riverside General Hospital. Dr. Patten studied medicine at Baylor College of Medicine. Dr. Marian Hillar was the recipient of the prestigious TSU Presidential Achievement Award.


Dr. Fawzia Abdel-Rahman


Cell Signaling Lab

The Department of Chemistry is continually enhanced by the activities of its faculty and students in research, internships and faculty development. These processes have served to attract students to major in Chemistry here at Texas Southern University.

The Department of Chemistry provided critical technical support for The Discovery Channel's new program. Taking advantage of TSU Chemistry Department's state-of-the-art Hitachi S-4800-II ultra-high resolution scanning and transmission electron microscope system with an energy dispersive X-ray spectrophotometer, Dr. Xin Wei worked with the Discovery crew closely to study an important artifact specimen, a musket ball that was found in the Battlefield of San Jacinto. What is more interesting is that there might be a tiny bone fragment remainder embedded in the musket ball. The program is expected to be broadcast next spring.

Dr. Robert Ford was a member of the Thurgood Marshall College Fund (TMCF) China STEM Exploration delegation, during the period of October 10-19, 2010. Drs. Bobby Wilson, Yuanjian Deng, Xin Wei and others have continued in their quest to bring research dollars and student support programs into the folds of the university in the area of research. Texas Southern intends to establish a National Oceanic and Atmospheric Administration (NOAA) Center for Atmospheric Processes in the Coastal and Urban Environment (NC-APCUE). The NC-APCUE center is designed to strengthen and enhance the research and training capabilities at TSU by developing a new atmospheric science program that directly relates to and supports the NOAA mission. Drs. Wei and Deng have submitted proposals to the National Science Foundation and the American Chemical Society.

Students majoring in Chemistry and in programs that are housed in the department have been instrumental in obtaining competitive internships from various agencies across the country.

Faculty and student development has been increased evidenced by presentations and attendance at several national conferences. Faculty and students attended the 2010 Minority Access Role Models Conference in Las Vegas, Nevada, the 2010 Society for the Advancement of Chicanos and Native Americans in Anaheim, California, and the TMCF Leadership Institute Conference in New York.

Department of Chemistry Research Lab

Environmental Research and Technology Transfer Research Lab

DEPARTMENT OF COMPUTER SCIENCE

The Department of Computer Science (CS) has a long tradition of commitment to excellence in teaching, research, and student services. We have an active service plan for students offering a BS degree in Computer Science (with Minor), BS degree in Computer Science with Computer Networks Concentration, the MS degree in Computer Science, and the Ph.D. degree in Environmental Toxicology affiliated with the Department of Environment Science and Technology. Our graduates are very well placed and recognized within the Computer Science professions, at both national and international levels.

During the last academic year, our faculty and staff have made great efforts towards excellence in teaching, research, and professional activities. Departmental research has been funded by the Homeland Security Center on Command Control and Interoperability for Advanced Data Analysis (June 2010 - June 2012, PI: Prof. Ghemri); the Air Force Office of Scientific Research on Architecture and Performance Analysis of General Bio-Molecular Networks (April 2010 – October 2011, PI: Prof. Li); Industry JX Association on Designing the Information Service Center for Disabled Persons through Modern Wireless Communication Technology (Sept. 2009 - Aug. 2011, PI: Prof. Li); and a TSU seed grant on Computational Efficacy of Classical and Quantum Information Securities Methodologies (2010-2011, PI: Dr. Khan). A number of research and education proposals have also been submitted to funding agencies for continued and innovative activities.

The CS faculty members have been actively participating in many professional activities such as serving on the editorial board of the International Journal of Sensor Networks; EURASIP Journal on Wireless Communications and Networking; and the International Journal of High Performance Computing and Networking. Prof. Singh has been working hard on his next academic book related to Conquering the SAT and expects publication soon by McGraw-Hill.

To increase CS enrollment and provide our students more course options during their student career at TSU, a bachelor of science degree in Computer Science with Computer Networks concentration was developed, which has been officially adopted by University beginning Fall 2010.

CS faculty members have also paid special attention to the development of TSU through their involvement in a number of University and College level activities. Prof. Javadian, Prof. Ghemri and Prof. Li, are actively involved with the TSU senate; Prof. Criner, Prof. Kamel and Prof. Li have been serving as the Chairs of College Strategic Plan Sub-Committees, College Recognition and Scholarship Committee, and College Research Committee, respectively. Based on their excellent performance during the last academic year, several faculty members and staff received awards and recognitions. Prof. Sleem received the Dean's Leadership Award and the COST Distinguished Service Award for his selfless contribution in developing the COST Annual Report. Mr. Abdullah received the COST Distinguished Staff Award.

The Department is proud of its students who achieved various accomplishments. Eight students received Assistantships from Computer Science Department; Four students were awarded LSAMP scholarships; thirteen students received Saudi Arabian Government Scholarships; two students received American Opportunity Scholarship; two students received Graduate Research Enrichment Scholarship; and four Students received COST Distinguished Student Awards. In addition, one of the undergraduate students went on to the UH graduate program, and another joined the TSU CS Masters program for their continued education.

Alicia Simmons, Student Ambassador


Saqui Abdullah, Distinguished Staff


Student engagement in Seminar

A major accomplishment in the Engineering Technology Department is the steady improvement in enrollment which has nearly doubled within the last five years. The Electronics Engineering Technology program of the department has been re-accredited for another six years. This is the maximum accreditation period possible, and it is a testimony to the consistently high quality of our instructional standard in the department. Due to the effect of the recent relocation from the former technology building, the Civil Engineering program has suffered drawbacks which have delayed the visit of the accreditation body. However, resources are being directed to this program to ensure the commencement of the accreditation process in due course. The Computer Engineering Technology program is still considered to be in its infancy with lack of sufficient data to prompt visitation by the accrediting body.

The department currently enjoys miscellaneous research grants and contracts which have enhanced the scholarly activities in the department. Currently residing in the department are three NSF grants, one UNCFSP-NASA grant, and one DoD grant. Pending proposals include two to NSF (one that is a joint effort with UH) and one to Gulf States Ecological Research Network. On-going research activities are focused on the development of a virtual and remote laboratory in collaboration with a similar effort being developed at the i-lab of the Massachusetts Institute of Technology. Moreover, the department has alerted the National Science Foundation, of the intent to continue the research extending it to additional classes in both the electronics and computer engineering technology labs as well as civil engineering technology. Departmental activities in renewable energy are demonstrated by our reactivated solar and photovoltaic laboratory. Newer solar panels include the traditional polycrystalline panels, as well as the newer thin film panels. Trailer 16 of of the temporary buildings is being partly powered via the solar farm. This facility has been most useful for laboratory demonstration in the Alternative Energy Technology class. In conjunction with Savannah State University, the department has embarked upon activities related to production of biofuel from algae. There is immense progress resulting from efforts in this respect. The UNCFSP-NASA has recently granted funds to begin more active work in this important area of study.

The department has collaborated with the Civil Engineering department of the University of Houston in writing a proposal to the NSF for funding through the IGERT program. Essentially, a selected number of students from the department will be funded to continue on with their graduate degree utilizing interdepartmental research at TSU and UH. The department has also led the TSU team in the preparation and submission of a proposal for $20m in funding from BP for collaborative research on an integrated approach for informed decision making regarding the impact of deepwater oil spills on coastal and marine ecosystems of

the Gulf of Mexico. Other participating institutions are Jackson State University, Tuskegee University, Dillard University, and Southern University.

The department has two main annual summer programs. These are the STEP program, funded by the NSF, and the Pre-College Engineering program funded by the DoD. Both programs have provided an invaluable pipeline for the conduit of graduating high school students to the department. A significant proportion of our incoming freshman classes are students who participated in one of our high school programs.

DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY

The Department of Environmental Science and Technology had its first full academic year since becoming the academic home to the existing environmental toxicology doctoral and master's degree programs. During the academic year, the department initiated its web presence which revitalized its recruitment efforts. In doing so, the department received a total of 27 applications for the Ph.D. program and 11 for the M.S. program. These programs are definitely being seen worldwide as applications came from as far as Nigeria to Saudi Arabia to Nepal and more locally from Louisiana and Texas. Of these applications, acceptance letters were sent to 18 of the Ph.D. and 5 M.S. applicants, making this year a banner year for enrollment. In addition, to the traditional admits, the department accepted one re-admit and 2 students as special conditional students.

In the area of production, the program graduated one doctoral student: Dr. Christina L. Clemens, Dissertation: The Role of Nicotine, Estrogen, and Ethanol in the Induction of Genomic Instability in Breast Cells, Advisor: Dr. James W DuMond Jr.

While times have been lean at TSU, resulting in reduced funding in many areas, the university's administration still believes that we must foster new initiatives to enhance growth. As a result the department was approved to fill 3 new tenure-track faculty positions. The first of these positions will be filled by an individual with a strong geology education and research background. This skill set will offer the best possible instruction for our Geology 141 non-majors course and bring an additional area of expertise to the graduate program. The two additional positions will be filled by individuals with strong environmental education and research. Upon filling these positions by the fall of 2011 the department will be well suited to continue its mission of providing students with the appropriate background in Environmental Toxicology allowing them to pursue careers in industry or governmental agencies in the areas of environmental impact, risk assessment, and hazard mitigation.

Given, that many have stated that we are now entering the Environmental Age, the need to prepare a workforce at all levels of environmental education has never been more important. Over the next year, the department will develop its plans for an undergraduate program, which is currently untitled but will be in the field of environmental sciences. We believe this will be an advantage to the students, as in pursuing their main course of study they will become qualified in a number of allied areas given the interdisciplinary nature of the field. This will produce thoroughly prepared professionals and extremely marketable alumni as they will be capable of entering a wide range of industries.

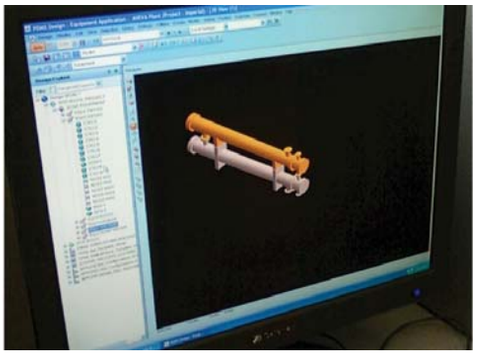
The primary mission of the Department of Industrial Technologies is to offer programs of study designed to prepare students as "management-oriented technical professionals" who have practical knowledge, competencies, skills, and training to serve and function in the Industrial/Manufacturing Enterprise System. In pursuing this mission, the Department seeks to prepare Industrial Technologists and Technical Managers for career opportunities in the Manufacturing, Construction, and Communications Industries.

All programs within the Department of Industrial Technologies are accredited by the National Association of Industrial Technology (NAIT). In order to maintain accreditation, all programs are continually assessed and go through re-accreditation every six years. The Association of Technology, Management, and Applied Engineering (ATMAE) held its annual conference in Panama City Beach, FL in October, 2010. Dr. Horner and Dr. DuMond attended the conference and participated in several open sessions concerning reaccreditation and program assessment.

During April, 2011, the Department of Industrial Technologies received an ATMAE reaccreditation site-visit from Dr. Marvin Sarapin, Professor of Computer Graphics at Purdue University. Dr. Sarapin served as the chairperson of the visiting team and returned to assess the status of programs in Construction and Design in addition to programs in Aviation Science and Technology. Both programs received favorable reviews.

On April 29, 2011, the College of Science and Technology held its annual student awards program. During the program, Ms. Jenna Brown-Ford received the Distinguished Alumni Award and the Outstanding Professional Achievement Award in Industrial Technology. Mr. Devaughn Robinson was awarded the Outstanding Graduate Student Award (MSIT). Mr. Jermaine Potts received the Outstanding Undergraduate Student Award and a recognition for serving on the COST Dean's Student Advisory Council.

During the summer of 2011, Mr. Joe Breedlove, Senior VP of Operations at Con-Real requested interviews with the following students for possible internships during the construction of the new Technology facility. Construction Major students Darrell Glasper and Dare Kadiri and Design Major Student, Jermaine Potts received the internships.



DEPARTMENT OF MATHEMATICS

The Department of Mathematics services the university with all core curriculum mathematics courses as well as courses for majors in mathematics and mathematics education. The Department of Mathematics is determined to help our students to succeed in their mathematics classes not only through the traditionally-practiced instructions in classrooms and office hours, but also through an additional resource facility.

Graduate Faculty of the Department of Mathematics have worked in the fields of Abstract Algebra, Analysis, Applied Mathematics, Bioinformatics, Differential and Difference Equations, Discrete Dynamical Systems, Graph Theory, Information Theory, Mathematics Education, Probability and Statistics, Telecommunications and Computer Network Theory, and Topology.

The Department currently has 13 full-time faculty members and 12 adjunct faculty members. The Mathematics Department faculty members are involved in a wide range of activities related to teaching and mentoring, research and grantsmanship, writing publications, making presentations, and attending conferences. The faculty members are also involved in service to the university, local, state and national organizations.

In the spring semester of 2011, the Department of Mathematics opened a Mathematics Learning Center as an additional resource facility for our students. The facility is staffed solely by the mathematics faculty.

Nine mathematics majors were graduated this year, five in December 2010 and four in May 2011. Andre' White has been accepted to the PhD. Program at the University of Houston. Andre' White and George Kwakuyi received the Outstanding Undergraduate and Graduate Student awards respectively. Aqeeb Sabree received the COST Faculty and Staff Scholarship. Aqeeb Sabree and Ruqiah Muhammad gave a joint presentation during Research Week at Texas Southern University. Aqeeb Sabree and Ruqiah Muhammad are spending their summer in a REU program at the University of Iowa.

Ruqiah Muhammad, Aqeeb Sabree and Andre' White attended the NAM Math Fest Conference in November 2010 under Dr. Roderick Holmes' supervision. Aqeeb Sabree and Andre' White also attended the Fourth Annual Iowa Mathematical Field of Dreams Conference in October 2010 also under Dr. Roderick Holmes' supervision.

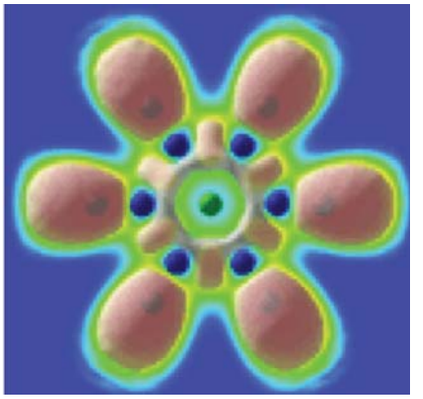
One on one tutoring at the Mathematics Learning Center

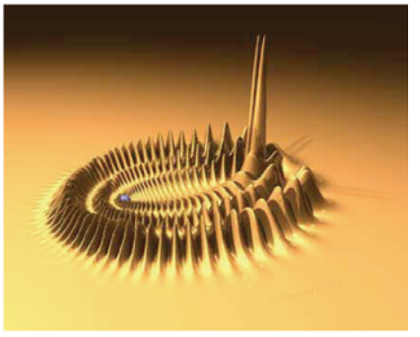
The Department of Physics continued to grow in 2010-2011 through the appointment of new faculty (Dr. Daniel Vrinceanu, Assistant Professor, and Dr. Luca Perotti, Research Professor), and the recruitment of outstanding students, including several dual majors. We also anticipate the appointment of a new Assistant Professor to lead our Health Physics program.

The Physics program graduated one more B.S. recipient in May 2011, Ms. Samantha Everett, 2011 "Best Physics Undergraduate student". Mr. Brandon Georgetown, who graduated in May 2010, was accepted into the Environmental Engineering Ph.D. Program at the University of Houston, starting June 2011, receiving full financial support. We believe that more students will see that a solid training in physics can prepare them for acceptance into graduate programs in engineering.

The physics program has revised the General Physics B.S. track in physics to accommodate more dual majors particularly with mathematics, engineering, and chemistry. We see this as a major emphasis for the department in the future. Presently, George Mutua (dual major with finance), Mahoganye Galentine (mathematics), and Hanh Pham (chemistry), are three such students. We are also expanding our Post Baccalaureate (PB) program. Mr. Biruk Desta was our first PB student. He graduated in May 2010, and has started pursuing his Ph.D. in Physics at the University of Houston. Since then, we have attracted two more students: Mr. John Metyko (to graduate in May 2012), currently an intern at the UT-Health Science Center; and Ms. Landra Williams, who already has a AA in Radiation Technology, and should graduate with a B.S. in physics in 2012. Additional physics majors who will graduate in 2012 are Micheal Smith (presently pursuing a summer internship at JILA-NIST/ University of Colorado); Jerald Watley (Summer 2011 internship at NOAA-U, Hawaii); Huie Nguyen (Summer 2011 internship at U. of Minnesota), Cassandra Odeola (Summer 2011 internship at Texas A&M University). At least seven students are scheduled to graduate in 2012. This will be a significant milestone for the physics program. All of these students will pursue Ph.D. studies after leaving TSU.

The physics program continues to be successful in publishing quality research and grantsmanship. Approximately eight papers have been produced, half in publication, and the other half in review. An important $60K contract with the Naval Air Warfare Center (NAVAIR) was achieved by Drs. Daniel Bessis (PI) and Daniel Vrinceanu (Co-PI). This contract examines novel noise filtering methods for detecting rotor-blade failure. The same methods have relevance to detecting oil-drilling bit failure. They, together with Dr. Perotti, continue to be supported through





two sub-awards, totaling $125K, from UT-Brownsville/NSF & NASA in the area of gravitational l wave detection. Dr. Carlos Handy (PI) and Dr. Mark Harvey (Co-PI) received $162K funding from the Nuclear Regulatory Commission in support of Faculty Development efforts.

Students receiving LSAMP scholarship support: Samantha Everett, Micheal Smith, and Jerald Watley. Students receiving UT-Austin/TSU/ONR nuclear scholarships are: John Metyko, Jerald Watley, Micheal Smith, Samantha Everett, Landra Williams, Hanh Pham, Hiue Nguyen.

DEPARTMENT OF TRANSPORTATION STUDIES

The Department of Transportation Studies offers a graduate program in Transportation Planning and Management, and a new bachelor's program in Maritime Transportation Management and Security begun in Fall 2010. The Department has a mission to provide comprehensive transportation education that builds on the latest data, systems and technologies.

During the year 2010-2011, the department had 53 graduate students and 25 undergraduate students. In total, the department received $1,221,832 in research grants from Texas Department of Transportation, and various other public and private organizations.

During last year, the faculty, staff, and students in these programs published 13 referred journal papers and presented 11 research papers at prestigious Transportation Conferences, such as the 2011 Transportation Research Broad (TRB) annual meeting.

Twenty-four students in these programs have received scholarships or fellowships and 15 students received research assistantships amounting to $437,400. The students also attended various transportation conferences, including the Transportation Research Board (TRB) annual meeting, Breakbulk America, and the Harris County International Trade and Logistics Conference.

In the first year of the new Maritime Transportation Management and Security program, 1 student won the President's Leadership Scholarship, 4 students with 4.0 Grade Point Average are President's Honor List Honorees, and 6 students with 3.5-4.0 Grade Point Averages were Dean's Honor List Honorees. On December 8 2010, TSU President Dr. John Rudley signed a Memorandum of Agreement (MOA) with the U.S. Coast Guard. The MOA provides TSU students with scholarship and internship opportunities with the U.S. Coast Guard.

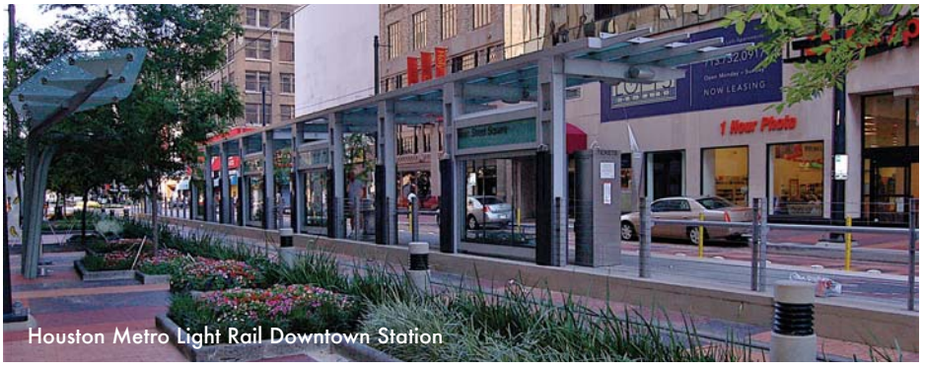
The Department also organized various events, including workshops, seminars and summer programs. During the summer 2010, TSU hosted the inaugural Summer Maritime Academy (SMA). The purpose of the SMA was to introduce rising high school juniors and seniors to the maritime industry. The SMA consisted of 4 weeks of activities designed to give a firsthand view of the maritime industry.


Full Motion Driving Simulation Laboratory

Mobile Traffic Laboratory


Mini TranStar Laboratory


Portable Emission Measurement Laboratory



Houston Metro Light Rail Downtown Station

COST Solar Energy Laboratory

The Texas Southern University, College of Science and Technology Photovoltaic Laboratory has been recognized nationally and internationally for accomplishments in practical applications for solar energy. The goal of the laboratory is to educate students through research experiences in solar and conventional energy utilization and to remain on the competitive edge of new developments. TSU's solar array presently includes more than 100 panels yielding a 6.4-kilowatt solar electric system. Efforts are ongoing for a rapid increase in capacity; the goal being a system that will generate over 100 kilowatt hours of electricity each year. Through a partnership with the firm Evolution Solar, students are working on a grid-tied system to offset the cost of TSU's utility bill for the trailer currently housing the Maritime program. Additionally, direct current is being produced and converted to AC current via inverters. Moreover, the laboratory has recently acquired a set of thin-film solar panels. Students will be conducting comparative studies on the efficiency of the thin film system and traditional polycrystalline panels. The facility provides opportunities for research projects for undergraduate and graduate students, as well as high school students participating in the University's annual summer pre-college engineering program funded by the Department of Defense. It should also be mentioned that TSU students have participated in solar energy installations in South Africa as members of the National Renewable Energy Laboratory's Historically Black Colleges and Universities (HBCU) Photo Voltaic Research Associates Program.

Virtual and Remote Accessible Laboratory

The NSF sponsored Virtual and Remote Laboratory (VR-Lab) of the Department of Engineering Technology has been established by utilizing the latest information technology and setting up an internet-based laboratory for interactive learning. In general, the online laboratories can be categorized as either virtual laboratories or remote laboratories. Virtual laboratories allow students to log on to a simulated environment residing on a remote server. Remote laboratories allow students to remotely control real components or instruments from any place with internet access.

High Performance Computing Center

Texas Southern University's High Performance Computing Center (TSU-HPCC) was established in 2008 to promote research and teaching on campus by integrating leading-edge high performance computing and visualization for the faculty, staff and students of TSU. The HPCC provides consulting and assistance to campus researchers with experimental software and/or hardware needs. Training is provided in parallel and grid computing. HPCC serves as a liaison between various teams that are engaged in research. We work to support, configure and port applications to HPCC resources. HPCC has computational resources which include two Linux clusters. Ares, installed in December 2008, has sixteen dual-slot quad-core nodes with Intel Xeon 5350 2.0 GHz processors with 8 GB of memory connected via dual Gigabit ethernets. The full parallel cluster has a total of 128 cores and a total memory of 128 GB, with a peak speed of 0.672 Teraflops. Hades, installed on January 2010, has eight dual slot hyperthreaded quad core nodes with the Intel E5520 2.33 GHz Xeon Processor with 12 GB of Memory connected via a 10 Gigabit ethernet using an utra low latency Arista 7124S switch. The full parallel cluster has a total of 128 virtual cores and a total memory of 96 GB, with a peak speed of 0.783 Teraflops.

Advanced Computer Network Laboratory

The Advanced Computer Network Laboratory utilizes the latest technologies in data networking to support teaching and research. The lab has network devices that simulate three Local Area Networks (LAN) connected together by a simple Wide Area Network (WAN). It has software tools and hardware probes that continuously monitor the traffic in this network. This configuration provides the environment required to study and investigate protocols, techniques, traffic patterns, and applications within local area networks and wide area networks. The lab also includes all the devices required to simulate Internet Protocol Television (IPTV) as well as Voice over IP environments. The laboratory is involved in investigating the protocols and techniques of IPTV and VoIP on different design parameters and the quality of services.

Full Motion Driving Simulation Laboratory

The Driving Simulation Lab is engaged in the assessment of Intelligent Transportation System (ITS) concepts, driver preference and acceptance research, accident analysis and development of crash avoidance counter-measures, and design and evaluation of automotive products and technologies. This lab is equipped with a DriveSafety DS-600c simulator, a simulation system that can effectively approximate driving in the real world, is a fully integrated, high performance, high fidelity driving simulation system designed for use in ground vehicle research, training and assessment applications. It provides multi-channel audio/visual systems, 180°, 240°, 300°, 360° wraparound display options, full-width automobile cab including windshield, driver and passenger seats, center console and dash, full instrumentation, control loaded steering, braking and acceleration, mini-LCD rear-view mirrors, plus real-time motion simulation through DriveSafety's Q-Motion platform.

Mobile Traffic Laboratory

The Mobile Traffic Lab (Autoscope Van) is a state-of-the-art mobile ITS data collecting system. It is equipped with two Autoscope Solo Pro cameras that are mounted on a 42' telescoping mast. By connecting with the computer and video recording equipment in the van, these two cameras can simultaneously process, record and store traffic data. The Autoscope van is an effective tool for collecting on-site, real time traffic data at any location - heavily traveled freeways, busy signalized intersections, work zones, or remote rural locations. In addition, it is a non-intrusive data collection device - it does not require placing or installing any equipment in travel lanes. The Autoscope van will serve as a platform for a wider range of transportation studies.

Portable Emission Monitoring System

Equipped with a Portable Emission Monitoring System - OEM 2100, the department of Transportation Studies at TSU is now capable of conducting projects to measure and evaluate vehicle impacts to air quality including vehicle emissions and fuel consumption and projects to investigate the significance of the change of emissions and fuel consumption by using stop signs and by left-turn and right-turn movements on local streets.

Mini TranStar Laboratory

The Mini Transtar lab in the Department of Transportation Studies was established in 2006 according to an agreement between TSU and TxDOT at Houston TranStar, which allows TSU to access all the real time CCTV traffic videos and speed data that are currently available through Houston TranStar. This lab requires an exclusive internet connection between Houston Transtar and the TSU lab. In the lab, there are 5 big LCD monitors and 10 computers for displaying, selecting, recording and analyzing traffic video images. The main role of this lab is to provide surveillance of real-time traffic at any location on Houston freeways to support research in transportation operation, safety and security areas. This lab combines use of the research lab and real-world Traffic Management Center. Thus, the lab will maximize the efficiency and productivity of the research being done in the Department of Transportation Studies.

Full Motion Flight Simulation Laboratory

The department of Aviation Science and Technology is equipped with three types of flight simulation devices. Air Traffic control simulation consists of tower, approach, and center simulation experiences for the students. Flight Simulation consists of three Frasca 142 Flight Training devices. Two devices have recently been upgraded to glass cockpit configuration and one Frasca training device remains in the analog cockpit configuration. The department also possesses one full motion flight training device, and 8 tabletop flight training devices utilized for basic flight familiarization. Both Flight Simulation and Air Traffic Control Simulation can be tied together providing seamless instruction. Air Traffic Control students can provide flight instruction to pilots in the flight simulation room. Air Traffic Control students are responsible for issuing all takeoff, landing and conflict resolution instructions in accordance with current federal aviation administration separation standards.

Environmental Research Technology Transfer Center

The Environmental Research and Technology Transfer Center (ERT^2C) addresses training, research problems, and technology transfer issues as they relate to the environment by increasing the number of under-represented minority graduates in science, mathematics, engineering, and technology. ERT^2C projects focus on analysis of toxic elements and compounds in a closed environment, trace metals in soil, soil sediments, air and wastewater processes, wastewater contaminants, and environmental policy and law. The Core Analytical Facility is an important component of the center. The Core's mission is to achieve regional, community, and national recognition as a quality environmental analytical laboratory and environmental research program. The facility is equipped with state-of-the-art chromatographic and Sample Processing Equipment. The projects currently under investigation are Identification and Quantification of Volatile Organic Compounds in the Urban Atmosphere of Houston, Texas; Public Drinking Water Study in the Greater Houston Area; Assessment of Aquatic Environmental Estrogens in the Lower Galveston Bay Watershed; and Study of Oxidative Stress Biomarkers caused by Space Travel.

NASA URC Center for Bionanotechnology and Environmental Research

CBER is a multi-institutional program actively engaging a talented team of faculty from the departments of Biology, Chemistry, Mathematics, Education, Law, and Public Affairs to support the outcomes of NASA's education strategic framework. Historically, synergism between science and technology has thrived at TSU. CBER research successes will improve existing technologies and generate new inventions that increase speed and accuracy while decreasing cost. The advanced technologies developed will enable novel solutions to the great health challenges facing humans during long-term space missions. In addition the program will help develop a future workshop in STEM fields; improve TSU's research infrastructure and innovative partnerships; enhance technology transfer and commercialization; and improve quality of life on earth.

Center for Transportation Training and Research

The Center for Transportation Training and Research (CTTR) is a transportation research component of the Department of Transportation Studies. CTTR is dedicated to conducting research on current Transportation issues. CTTR conducts research and training in conjunction with the Southwestern Region University Transportation Center. The consortium consists of Texas A&M University, Texas Southern University, and the University of Texas at Austin. CTTR is guided by an Advisory Board representing public and private sectors, university scholars, and transportation officials. Grants have been received from the US Department of Transportation, the state of Texas, and other public and private sources. CTTR supports the academic curriculum by offering employment and training opportunities in research and demonstration projects. The cornerstone of CTTR's future agenda is the theme Preparing Professionals to Move This Millennium. This theme focuses on conducting applied research to solve and identify options for the improvement of mobility and the quality of life. By applying state-of-the-art techniques and research methodologies, CTTR research associates identify problems and solutions to a variety of issues facing our society. These issues include the following: Intelligent Transportation Systems (ITS), operation of intermodal systems, alternative fuel comparison studies, suburban employment growth/transit accessibility issues, policy and planning, and human resource management.

National Transportation Security Center of Excellence for Petrochemical Transportation

The National Transportation Security Center of Excellence (NTSCOE), a collaboration of 7 institutions: University of Connecticut, University of Arkansas, Long Island University, Rutgers University, San Jose State University, Texas Southern University and Tougaloo College, addresses all aspects of transportation security including identification of existing and emerging threats, development of new technologies for resilient infrastructure, the establishment of national transportation security policies, the training of transportation professionals and the development of undergraduate and graduate education to build and maintain a quality transportation security workforce for the future. The Department of Transportation Studies at TSU focuses in the area of petrochemical security. Active technology transfer is in progress to the Department of Homeland Security and several private companies. The Center also worked with the Houston Emergency Management Center to establish a code for Hazardous Material incidents reported to the City of Houston.

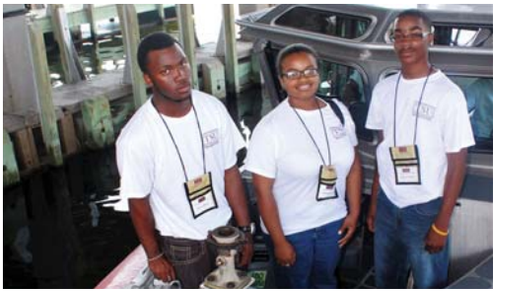
Innovative Transportation Research Institute

The Innovative Transportation Research Institute (ITRI) at Texas Southern University was developed in the fall of 2006 by expanding the former Urban Traffic and Air Quality Lab, first established in 2000. The ITRI has already achieved extensive accomplishments. By utilizing advanced technologies, large scale computer simulation methods, complex modeling systems, and state-of-the-art lab equipment, ITRI attempts to develop, evaluate, optimize, and recommend comprehensive strategies for traffic congestion mitigation, urban transportation planning, ITS development, mobile source emission reduction, and fuel consumption savings.

Houston National Summer Transportation Institute

Houston National Summer Transportation Institute (HNSTI) is hosted at Texas Southern University every year during the summer. This educational experience first began in 2001 and it exposes students to a series of lectures, technical tours, guest speakers, and academic exercises in the transportation industry. The HNSTI offers a four-week introduction to all modes and careers in transportation as well as academic enhancement activities.

Summer Maritime Academy



The Summer Maritime Academy in the Department of Transportation Studies at TSU is held to introduce high school juniors, seniors, and recent high school graduates to the maritime industry in the areas of logistics, security, and the environment. The SMA consists of two weeks of field trips, guest speakers, and sessions on visioning and goal setting; public speaking; SAT prep and test taking strategies; and web design. Applications for the SMA are accepted during February each year and participants are selected on the basis of their completed application, personal essay, and letters of recommendation from two professionals.

Greater Houston Energy Collaborative

Greater Houston Energy Collaborative (GHEC) at Texas Southern University is an online repository to create a central place where institutions can input information about energy training opportunities that are currently being offered. The courses are categorized according to the energy industry they belong to. The information submitted to/retrieved from this repository has the minimal requirement of being on a frequent/ permanent basis. The purpose of the repository is to collect information on all available energy training/education opportunities (activities, workshops, meetings, etc.), in the greater Houston area. This repository will assist the Houston area and its industrial/educational institutions with regards to ongoing energy studies/projects.

Houston Louis Stokes Alliance for Minority Participation

Houston Louis Stokes Alliance for Minority Participation (H-LSAMP) is an academic excellence program designed for outstanding high school students who are interested in pursuing degrees in the sciences, technology, engineering, and mathematics (STEM) fields. This scholarship is funded by the National Science Foundation and awarded by the LSAMP scholarship office. Applicants must be U.S. citizens or permanent residents. The four majors supported are chemistry, computer science, mathematics, and physics. The program scholars receive a President's Award, a Provost's Award or Dean's awards based on their high school GPA and SAT/ACT scores.

Science and Engineering Summer Program

The Science and Engineering Summer Program is designed to attract 9th -12th grade students to the engineering profession and to provide pre-college education in mathematics and science. The summer students get an opportunity to learn about alternative energy, build vehicles powered by solar energy, participate in other engineering laboratory activities, and interact with undergraduate students

Science and Technology Enhancement Program

The College of Science and Technology STEP program is working to increase the COST graduation rate from 9% to 25% over a five year period. Its primary objective is to increase undergraduate student participation in research projects and presentations and to contribute to increasing diversity in the STEM workforce.

Center for STEM Education and Outreach

The primary objective of the Center for STEM Education and Outreach (C-SEO) is to prepare the next generation of STEM professionals through comprehensive engagement of educators and community stakeholders. The C-SEO) is an arm of the TSU Office of Academic Affairs, established to provide campus-based STEM program coordination and community training and public outreach. C-SEO's mission is to conduct its work with the end in sight, i.e., to envision an educational system with appropriate supports from the full complement of stakeholders, working strategically and synergistically to prepare the nation's technical workforce of the future. C-SEO activities include collaborative service delivery to enhance undergraduate STEM student performance; enhancing K-12 teacher skills, content knowledge, and student learning strategies, leading to improved student outcomes; and effectively engaging parents, communities, the public and private sectors to help schools and school districts to achieve educational objectives.

Joint Medical Admissions Program

The Joint Admissions Medical Program (JAMP) is a unique partnership between all eight medical schools in Texas and sixty-five public and private four-year undergraduate institutions. The JAMP program at TSU provides services to support and encourage highly qualified, economically disadvantaged students to pursue a medical education. The JAMP program awards undergraduate medical school scholarships and provides for the admission of those students who satisfy both academic and nonacademic requirements to at least one participating medical school. The students are required to maintain a minimum cumulative and science GPA of 3.25 with all medical school prerequisite science courses taken at Texas Southern University.

Early Medical School Acceptance Program

Texas Southern University is a partner school of the Early Medical School Acceptance Program (EMSAP). The EMSAP is designed to provide a rigorous undergraduate educational experience to assure that students receive the academic preparation required to pursue a medical education. Upon acceptance to EMSAP, students also receive conditional acceptance to the University of Texas Medical Branch (UTMB). Final matriculation into UTMB is dependent upon successful completion of all EMSAP requirements and graduation from one of the six partnership schools. The UTMB School of Medicine has partnership agreements with TSU for the purpose of identifying 5 high school students who will matriculate into TSU. Students are required to maintain a minimum grade point average of 3.25 and are also required to earn a total MCAT score of at least 24. The students will participate in a summer enrichment program on the UTMB campus for the purpose of providing academic and pre-professional enrichment activities, as well as clinical exposure to the medical profession.

TSU - UTGSBS Collaborative on Prostate Cancer Research

Texas Southern University and the University of Texas Graduate School of Biomedical Sciences (UTGSBS) Collaborative Program in Prostate Cancer Research, a US Department of Defense sponsored program, started in 2005. The primary focus of this program is to motivate, mentor, and support sophomore and junior year students at TSU to pursue a career in medicine and/or biomedical research. This collaborative program organizes three to four lectures every year on TSU's campus by eminent scientists in the field of prostate cancer research. Students are motivated to participate in a competitive summer internship program at the University of Texas MD Anderson Cancer Center. Four students from the Department of Biology are selected every year for this 10 week paid summer internship. During the 10 week period, the interns learn laboratory research, attend lectures by medical school representatives, and present their research at the end of ten weeks. The students who participate in this program are monitored for their progress untill they achieve their goals. More than 20 students have been trained through this collaborative program. The students in this program hosted Dr. Rick Kittles on October 25, 2010, in the TSU Science Center. Dr. Kittles is an Associate Professor in the Section of Hematology/Oncology, Department of Medicine at University of Illinois at Chicago. Dr. Kittles presented his work on how genetic variation is structured across human populations and how that variation contributes to inter-individual variation in disease susceptibility.

RESEARCH FUNDING

Name	Award Amount	Title	Agency	Funding Period
Daniel Bessis	$60,000.00	Agreement between the Naval Air Warfare Center and TSU	Naval Air Warfare Center	10/1/10 - 9/30/11
Daniel Bessis	$33,194.00	Center for Gravitational Wave Astronomy	University of Texas at Brownsville and Texas Southmost College/ National Aeronautics and Space Administration	9/1/10 - 8/31/11
Daniel Bessis	$101,228.00	New Methods in Spectral Analysis for Noisy Time-Series Data (Amendment No. 3 Cost-Reimbursable Sub-Award UTB08-01	University of Texas at Brownsville and Texas Southmost College/ National Science Foundation	11/1/10 - 10/31/11
Xuemin Chen	$100,000.00	Collaborative Research: Developing Virtual and Remote Undergraduate	National Science Foundation	1/1/10 - 12/31/11
Jade Clement	$10,000.00	Molecular Toxicology of Bisphenol A	TSU Seed Grant	1/1/11 - 12/31/11
Lila Ghemri	$22,000.00	Center of Excellence for Command, Control and Interoperability	Rutgers, The State University of New Jersey/U.S. Department of Homeland Security	7/1/10 - 6/30/11
Khosro Godazi	$5,000.00	Eisenhower HBCU Fellowship to Ms. Sascha Saborache	U.S. Department of Transportation/Federal Highway Administration	9/1/10 - 9/1/11
Khosro Godazi	$1,500.00	Eisenhower HBCU Fellowship to Mr. Garlin Wynn	U.S. Department of Transportation/Federal Highway Administration	9/1/10 - 9/1/11
Khosro Godazi	$7,500.00	Eisenhower HBCU Fellowship to Ms. Gwen Goodwin	U.S. Department of Transportation/Federal Highway Administration	9/1/10 - 9/1/11

Name	Award Amount	Title	Agency	Funding Period
Khosro Godazi	$5,000.00	Eisenhower HBCU Fellowship to Mr. Qing Shi	U.S. Department of Transportation/Federal Highway Administration	9/1/10 - 9/1/11
Khosro Godazi	$1,500.00	Eisenhower HBCU Fellowship to Ms. Sara Land	U.S. Department of Transportation/Federal Highway Administration	9/1/10 - 9/1/11
Carlos Handy	$162,342.00	Nuclear Engineering Faculty Development Project	U.S. Nuclear Regulatory Commission	5/1/10 - 4/30/13
Carlos Handy	$47,500.00	Scholarship Support for Nuclear/Health Physics Majors	UT-Austin/ONR Sub-award	1/1/09 - 8/14/11
Olufisayo Jejelowo	$1,000,000.00	NASA Group 4 University Research Center - 2008.	National Aeronautics and Space Administration	10/1/10 - 9/30/11
Olufisayo Jejelowo	$30,000.00	Systematic Identification of Genes and Transduction Pathways Involved in Roadioadaptive Response	National Aeronautics and Space Administration	1/1/11 - 6/30/11
Demetrios Kazakos	$427,000.00	National Science Foundation IPA Award	National Science Foundation	9/14/09 - 9/13/11
Carol Lewis	$43,491.00	Mega-Region Freight Issues in Texas: A Synopsis	Texas Department of Transportation	9/1/10 - 8/31/11
Carol Lewis	$165,000.00	Interagency Cooperation Contract between the Texas Transportation Institute and TSU	Texas Transportation Institute	9/1/10 - 8/31/11
Carol Lewis	$343,662.00	Southwest Region University Transportation Center	Texas A&M Research Foundation	9/1/10 - 8/31/11

RESEARCH FUNDING

Name	Award Amount	Title	Agency	Funding Period
Carol Lewis	$350,000.00	Petrochemical Transportation Security	U.S. Department of Homeland Security	7/1/10 - 6/30/11
Carol Lewis	$20,000.00	Feasibility Study of Converting HOV Lanes on Central Expressway or LBJ West to HOT Lane Operations	University of Texas at Arlington/Dallas Rapid Transit	7/1/10 - 6/30/11
Carol Lewis	$160,000.00	Texas Department of Transportation Public Involvement Implementation	Texas Department of Transportation	4/1/11 - 3/31/13
Wayne Li	$100,000.00	Architecture and Performance Analysis of General Bio-Molecular Networks	Air Force Office of Scientific Research	4/1/10 - 10/31/11
Wayne Li	$50,100.00	Designing the Information Service Center for Disabled Persons through Modern Wireless Communication Technology	JX Association for the Handicapped Entrepreneur	9/1/09 - 8/31/11
David Olowokere	$27,400.00	JETS-UNITE 2011 Summer Program	Junior Engineering Technology Society (JETS)/U.S. ARO	5/1/11 - 8/31/11
David Olowokere	$42,500.00	The Production of High Fidelity Lunar Stimulants for Exploration Risk Reduction and Systems Analysis of Power Systems for Lunar Oxygen Production	United Negro College Fund Special Programs	5/1/11 - 7/31/12
Yi Qi	$115,521.00	Use of Flashing Yellow Operations to Improve Safety at Signals with Protected-Permissive Left Turn Operations	Texas Department of Transportation	9/1/10 - 8/31/11

Name	Award Amount	Title	Agency	Funding Period
Yi Qi	$202,804.00	Development of Guidelines for Operationally Effective Raised Medians and the Use of Alternative Movements on Urban Roadways	Texas Department of Transportation	9/1/10 - 8/31/12
Yi Qi	$60,000.00	Development of Warrants for Installation of Dual Right-Turn Lanes at Signalized Intersections	Southwest Region University Transportation Center	9/1/10 - 8/31/11
Fengxiang Qiao	$30,000.00	Assessment of Drivers' Workload for Freeway Sign Design	Southwest Region Transportation Research Center	9/1/10 - 8/31/11
Jason Rosenzweig	$12,756.00	Salary Reimbursement Agreement between The UT Health Center at Houston and Texas Southern University	University of Texas Health Science Center - Houston	6/1/11 - 7/31/11
Shishir Shishodia	$22,050.00	TSU and UT Graduate School of Biomedical Sciences Undergraduate Training Program in Prostate Cancer Research	Department of Defense CDMRP Prostate Cancer Research Program	5/1/10 - 4/30/11
Alamelu Sundaresan	$46,000.00	Preliminary Plan for Toxicology Studies with Lunar Dust Using 3-D Tissue Models	Universities Space Research Association/ NASA Johnson Space Center	4/1/10 - 9/30/10
Christopher Tymczak	$100,000.00	Many Body Density Matrix Theory	Welch Foundation	6/1/10 - 5/31/12
Bobby Wilson	$192,500.00	Houston Alliance for Minority Participation - Senior Alliance	University of Houston/ National Science Foundation	9/1/10 - 8/31/11

RESEARCH FUNDING

Name	Award Amount	Title	Agency	Funding Period
Bobby Wilson	$135,000.00	Materials and Manufacturing Exploration in Support of Air Force Systems and Applications	Clarkson Aerospace Corporation	10/1/10 - 10/31/11
Bobby Wilson and Victor Obot	$500,000.00	Science and Technology Enhancement Program	National Science Foundation	9/1/09 - 8/31/11
Lei Yu	$14,000.00	Characterization of Exhaust Emissions from Heavy Duty Diesel Vehicles in the HGB Area	Texas Department of Transportation	9/1/10 - 8/31/11
Lei Yu	$115,000.00	An Evaluation of Mobile Source Greenhouse Gas Modeling Approaches for Traffic Management Assessment	Southwest Region University Transportation Center	9/1/09 - 8/31/11
Yuhong Zhang	$80,000.00	EAGER: A Study of Security Counter-measures for Cyber-Physical Systems	National Science Foundation/Temple University	9/15/10 - 8/31/12

COST Received $4.8M NSF CREST Award

The National Science Foundation (NSF) announced an award of $4,887,004 over five years beginning 2011 to Texas Southern University to support its proposed "Center for Research on Complex Networks," a new NSF Center of Research Excellence in Science and Technology (CREST) .

The new Center's multiple disciplinary team, led by Drs. Wei Wayne Li (PI), Lei Yu (Co-PI) and C. J. Tymczak (Co-PI), as well as Drs. Oscar Criner (Director of Education) and David Olowokere (Director of Technology Transfer), comprises a total of 14 world-class faculty scholars representing 6 different departments in the College of Science and Technology, including Departments of Computer Science, Transportation Studies, Physics, Engineering Technology, Mathematics, and Chemistry. The funded Center will have a great impact on students at TSU by financially supporting a minimum of 15 undergraduate and graduate students each year in the next five years, providing them the opportunity to work with faculty on the cutting-edge research and development.

Journal Publications and Book Chapters

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Baluchamy, S., P. Ravichandran, A. Periyakaruppan, V. Ramesh, J. C. Hall, Y. Zhang, O. Jejelowo, D. S. Gridley, H. Wu and G. T. Ramesh "Induction of cell death through alteration of oxidants and antioxidants in lung epithelial cells exposed to high energy protons." J Biol Chem 285(32): 24769-74.

Baluchamy, S., Y. Zhang, P. Ravichandran, V. Ramesh, A. Sodipe, J. C. Hall, O. Jejelowo, D. S. Gridley, H. Wu and G. T. Ramesh "Differential oxidative stress gene expression profile in mouse brain after proton exposure." In Vitro Cell Dev Biol Anim 46(8): 718-25.

Baluchamy, S., Y. Zhang, P. Ravichandran, V. Ramesh, A. Sodipe, J. C. Hall, O. Jejelowo, D. S. Gridley, H. Wu and G. T. Ramesh "Expression profile of DNA damage signaling genes in 2 Gy proton exposed mouse brain." Mol Cell Biochem 341(1-2): 207-15.

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Lawal, A., O. A. Jejelowo and J. A. Rosenzweig "The effects of low-shear mechanical stress on Yersinia pestis virulence." Astrobiology 10(9): 881-8.

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Journal Publications and Book Chapters

Rosenzweig, J. A. and O. A. Jejelowo (2011). "What Microbes are Lurking in Your House? A Guide to Developing a Meaningful and Current Microbiology Lab Experiment." The American Biology Teacher 73(6): 330-334.

Rosenzweig, J. A., O. Abogunde, K. Thomas, A. Lawal, Y. U. Nguyen, A. Sodipe and O. Jejelowo "Spaceflight and modeled microgravity effects on microbial growth and virulence." Appl Microbiol Biotechnol 85(4): 885-91.

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Saleh, M. A., Clark, S., Woodard, B., Deolu-Sobogun, S. A. (2010). Antioxidant and free radical scavenging activities of essential oils. Ethnicity & Disease, 20(1), Suppl. 1, 78 -82.

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Singh, K. P., R. Kumari and J. W. Dumond "Simulated microgravity-induced epigenetic changes in human lymphocytes." J Cell Biochem 111(1): 123-9.

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Akbarzadeh, A. and C.J. Tymczak, "High density H2 associative absorption on Titanium alpha-borozene (Ti2B6H6): An ab-initio case study", March meeting of the American Physical Society, Dallas, TX, March 22, 2011.

Bell, D. "Raising the Bar Math" Implementation Plan (3C), at the College and Career Readiness Seminar, TSU, September 11, 2010.

Chen, J., P. Li, X. Chen and G. Song, "Force Tracking Control of a Testing Device I: System Modeling and Identification," Proceedings of Earth and Space 2010, pp. 3753-3763, Honolulu, HI, March, 2010.

Chen, J., P. Li, X. Chen and G. Song, "Force Tracking Control of a Testing Device II: Controller Implementation," Proceedings of Earth and Space 2010, pp. 3764 -3774, Honolulu, HI, March, 2010.

Chen, X. Improve Undergraduate Engineering Teaching Using Emerging Technology, NSF workshop, Honolulu, March 14, 2010.

Chen, X. International Symposium on Life-Cycle Performance of Bridges and Structures, Changsha, China, June 2010.

Chen, X., C. Olmi, and G. Song, "A Remote Bridge Experiment with Vibration Control," in Proceedings of International Symposium on Life-Cycle Performance of Bridges and Structures, pp. 844-849, Changsha, China, June, 2010.

Chen, X., G. Song and Y. Zhang, "Virtual and Remote Laboratory Development: A Review," Proceedings of Earth and Space 2010, pp. 3843-3852, Honolulu, HI, March, 2010.

Chen, X., L. Yu, L. Zhu, Y. Z ITS, and Z. Lin. Calibrating and Validating a Micro-simulation Model of Bus Rapid Transit Corridor with Heuristic Optimization Methods. Presented at 90th Transportation Research Board Annual Meeting CD-ROM, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Chen, X., Y. Zhang, L. Kehinde, and D. Olowokere, "Developing Virtual and Remote Undergraduate Laboratory for Engineering Technology," in Proceedings of ASEE Annual Conference & Exposition, Louisville, KY, June, 2010.

Chilakamarri, K. "COMBINATEXAS: Combinatorics in the South Central U.S.," Joint Mathematics Conference, New Orleans, LA, January 3-5, 2011.

Cooner, S., S. Ranft, Y. Rathod, Y. Qi, L. Yu, Y. Wang and S. Chen (2010). "Development of guidelines for triple left and dual right turn lanes." S. R. U. T. C. (SWUTC) Report No. TxDOT 0-6112-1:58.

Darayan, S., D. Olowokere, and X. Chen, "Utilizing Program Outcomes in the Modification of Engineering Technology Curriculum," Earth and Space 2010, pp. 3833-3842, Honolulu, HI, March, 2010.

DuMond, J. "Bridging the Gulf," ATMAE Conference Panama City, FL, October 27-29, 2010.

DuMond, J. AABI Annual Meeting. July 11-15, 2011.

Ghemri, L. "Identifying Relevant Literature on Chemical Terrorism Using Machine Learning," CCICADA Research Retreats, Los Angeles, October 2010.

Ghemri, L. "Protecting Your CyberPrivacy", Invited Talk at the Arab American Engineers and Architects Association Meeting. February 2011.

Ghemri, L., R. Kannah. "Lexical Entailment for Privacy Protection in Medical Records", The Workshop on Semantic Computing for Security and Privacy (in conjunction with The 5th IEEE International Conference on Semantic Computing, Stanford University, Palo Alto, CA, USA, September 19-21, 2011.

Glenn, N. L. "Effects of Spatial Dependence on Empirical Likelihood," Joint Statistical Meetings, Vancouver, BC in August 2010.

Glenn, N. L. "Spatial Correlation and Empirical Likelihood", World Statistics Day, Rice University, October 2010.

Handy, C. R. "SPIN-UP Workshop for HBCU," Physics Department, Hampton University, May 13-15, 2011.

Harvey, M. Geant4 (Monte Carlo) Tutorial, Texas A&M University, College Station, Texas, January 10 -14, 2011.

He, Y. and L. Yu. "A Comparative Overview of MOVES2010 and MOBILE6.2 for Smoothing the Model Conversion Process." Presented in the annual Research Week Poster session at TSU, Houston, April 2011.

He, Y., and L. Yu. "A Comparative Overview of MOVES2010 and MOBILE6.2 for Smoothing the Model Conversion Process." Presented at 90th Annual Meeting of the Transportation Research Board, Washington, D.C, Jan 2011.

Hillar, M. "Michael Servetus: Intellectual Giant, Humanist, and Martyr," Thoreau Woods Unitarian Universalist Church, Huntsville, Texas, September 19, 2010.

Hillar, M. "Moral Philosophy And Religion Facing Science. Humanistic Synthesis." Essays in the Philosophy of Humanism Symposium, 69th Annual Conference of the American Humanist Association, San José, CA, June 4-6, 2010.

Hillar, M. "Natural Foundation of Moral Philosophy," 9th Annual Hawaii International Conference on Arts and Humanities, Honolulu, Hawaii, January 9–12, 2011.

Hillar, M. "Natural Moral law and Modern Evolutionary Science. Reinterpretation of the Natural Law," Essays in the Philosophy of Humanism Symposium, American Humanist Association, Cambridge, MA, April 7-10, 2011.

Hillar, M. "Regulation and Control in Biological Systems and Beyond," TSU Interdisciplinary Research Conference, TSU, Nov 4, 2010.

CONFERENCES AND MEETINGS

Hillar, M. "What Does Modern Science Say about the Origin of Cooperation?" Christ the King Lutheran Church, Houston Texas, October 15, 2010.

Jejelowo A. O. Sodipe A. O. Wu H. Zhang Y. Jejelowo O. Shishodia S. "High Energy Particle Radiation Activates Inflammatory Pathways". The International Academy of Astronautics 18th Humans in Space Symposium, Houston, Texas, April 11-15, 2011.

Kuo, P-H, "Fuzzy Logic Based Identification of Potential Conflicts for Pedestrian Crossing," Presented in the annual Research Week Poster session at Texas Southern University, Houston, April 2011.

Lastrape, K. and C. A. Lewis (2010). "An evaluation of the effects of transit oriented development in a suburban environment." 476660-00048-1.

Lewis, A., Munyu, S., Jejelowo, O. A., Sodipe, A., Shishodia, S. "Activation of pro-inflammatory transcription factor by modeled microgravity and high-energy particle radiation". 114th Annual Meeting Texas Academy of Science, Austin, TX, March 3-5, 2011.

Lewis, C. "Findings from Public Involvement Study," Texas Transportation Commission, December 15, 2010.

Lewis, C. "Priorities for Upcoming Reauthorization of the Surface Transportation Bill," USDOT Open House, May 5, 2010.

Lewis, C. "The National Transportation Center of Excellence PILS," Texas Senate Committee on Transportation and Security, May 3, 2010.

Lewis, C. "Variations in Evacuation between Hurricanes Rita and Ike," Rice University SSPEED Conference, Houston, Texas, September 13, 2010.

Lewis, C. A. and G. Goodwin (2010). A statistical analysis of the relationship between land values land freestanding bus facilities. SWUTC 10/167372.

Lewis, C. A., B. Mosley and G. Wynn (2010). "Thinking critically about models used to predict emergency evacuation in gulf coast states." 476660-00041-1.

Lewis, C. and Eversley, S. "Gap Analysis for Unauthorized Petrochemical Release Reporting," Transportation Research Forum, Longbeach, CA, March 10-12, 2011.

Lewis, C. and Land, S. "Evaluating the Texas Triangle Megaregion and Its Effect on Airport and Airspace Capacity," Transportation Research Forum, Longbeach, CA, March 10-12, 2011.

Lewis, C. Joint Conference of Harbor Safety Committees and Area Maritime Security Committees, June 7 – 9, 2011.

Lewis, C. The 21st Annual Breakbulk Transportation Conference & Exhibition, Houston, Texas, October 12-14, 2010.

Lewis, C. The 25th Annual National Conference on Higher Education, Philadelphia, PA, February 18-20, 2011.

Lewis, C. The 3rd Annual Harris County International Trade and Transportation Conference, Houston, TX, January 31-February 1, 2011.

Lewis, C., Clark, L. "Analysis of Hazardous Material Incident in the Gulf coast Region: A Case Study on Houston, Texas," Department of Homeland Security University Summit, Washington, DC, March 29, 2011 – April 1, 2011.

Li, D. "Function of Dual Right-Turn Lanes to Mitigate Weaving Traffic Conflicts at Frontage Roads in Proximity to Exit Ramps." Presented in the annual Research Week Poster session at TSU, Houston, April 2011.

Li, W. "Several Characteristics of Active/Sleep Model in Wireless Sensor Networks," Proceedings of the 3rd International workshop on Wireless Sensor Networks: theory and practice, in conjunction with the 4th IFIP International Conference on New Technologies, Mobility and Security, Paris, France, February 7 - February 10, 2011.

Li, W. NSF HBCU Workshop, New Orleans, January 23 – 24, 2011.

Munyu, S., A. Lewis, E. Obi, T. Phan, O. A. Jejelowo, and S. Shishodia. Structure, mechanism and anticancer potential of the isothiocyanate diruthenium complex (3,1)Ru2(F3ap)4(NCS)1. 114th Annual Meeting Texas Academy of Science, Austin, TX, March 3-5, 2011.

Obi, E., S. Munyu, A. Lewis, and S. Shishodia. "Transcription factor NF-kB mediates high energy radiation induced activation of Cox-2, MMP-9, and IkBa". 114th Annual Meeting Texas Academy of Science, Austin, TX, March 3-5, 2011.

Odetunde, C. "Modeling Turbulent Flow Past ANACA4412 Airfoil," Oklahoma Aerospace Education Symposium, Oklahoma State University, April 21 – 22, 2011.

Perotti, L. "Signal Induced Breaking of Universal Noise Statistical Properties," UT Brownsville (LIGO collaboration), February 2011.

Perotti, L. and D. Vrinceanu. "Microwave De-excitation schemes for Rydberg Hydrogen Atoms," poster at DAMOP, Atlanta, June 2011.

Qi, Y., Williams, U. Joint Harbor Security Conference at Houston June 7-9, 2011. Qi. Y and A. Guo (2010) "Development of pedestrian safety based warrants for permissive left-turn control", Research Report for the Southwest Region University Transportation Center (SWUTC), Report number: SWUTC/10/169302-1.

Qiao, F. The 11th International Conference of Chinese Transportation Professionals sponsored by ASCE, ICCTP 2011, Nanjing, China, August 14-17, 2011.

Qiao, F., L. Yu, H. Wang, L. Ma, R. Zhang and Y. Zeng (2010). "Symbols and warrants for major traffic generator guide signing." T. D. o. Transportation Report Number: FHWA/TX-10/0-5800-1:162.

Qiao, F., Qing, Z., and Yu, L. "Social Media Applications to Publish Dynamic Transportation Information on Campus." Accepted to present at and publish in the proceedings of The 11th International Conference of Chinese Transportation Professionals sponsored by ASCE, ICCTP 2011, Nanjing China, Aug. 14-17, 2011.

Qiao, F., Zhang, R., and Yu, L. "Using NASA-Task Load Index to Assess Drivers' Workload on Freeway Guide Sign Structures." Accepted to present at and publish in the proceedings of The 11th International Conference of Chinese Transportation Professionals sponsored by ASCE, ICCTP 2011,Nanjing China, Aug. 14-17, 2011.

Rosenzweig, J. A. "Aeromonas hydrophila, a possible model organism for low shear modeled microgravity (LSMMG) studies: Unexpected modulation of other enteric pathogens and Yersinia pestis virulence following exposure to LSMMG." 10th International Symposium on Aeromonas and Plesiomonas, Gaveston, Texas, May 19-21, 2011.

Rosenzweig, J. A. "History of microbiology," Laurentian University Partnership Center at Georgian College, Orillia, Ontario, Canada, July 2010.

Rosenzweig, J. A. "Yersina Pestis Pathogenesis: a Pathogen's Perpective," Department of Molecular Biology and Immunology, University of North Texas Health Science Center, December 13, 2010.

Rosenzweig, J. A. "Yersina Pestis Pathogenesis" University of Houston, February 16, 2011.

Rosenzweig, J. A., Lawal, A. "Unexpected Modulation of Yersinia Pestis Virulence Following Exposure To Low Shear Modeled Microgravity," 114 th Annual Meeting, Texas Academy of Science, Austin, Texas, March 3-5, 2011.

Rosenzweig, J. A., Lawal, A. "Yersinia pestis Virulence and Space-Like Stress," IAA Humans in Space Symposium, Houston, Texas April 11-15, 2011.

Salehi, Y. "Investigate Existing Non-Intrusive Inspection (NII) Technology for Port Cargo Inspection." Presented in the annual Research Week Poster session at TSU, Houston, April 2011.

Sherman, M. "Converting a Non-Certificated Quasi Flight Collegiate Aviation Program into an Aviation Management Program," Oklahoma Aerospace Education Symposium, Oklahoma State University, April 21 – 22, 2011.

Song, G and L. Yu. Characteristics of Low-Speed VSP Distributions on Urban Restricted Access Roadways in Beijing. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Sundaresan, A. "Placental Growth Factor (PlGF) as a Biosignature of Inflammation in Microgravity-In Coronary Artery Disease and Stress," Oral presentation at the International Academy of Aerospace Medicine Congress, Singapore, October 2010.

Tao, F., Q. Shi, and L. Yu. Evaluation of Effectiveness of Coordinated Signal Control on Reducing Vehicle Emissions during Peak Hours vs. Non-peak Hours. Presented at 90th Transportation Research Board Annual Meeting CD-ROM, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Tymczak, C. J. "Many Body Density Matrix Theory", Session Q40: Theoretical Methods and Algorithms for Chemical Physics, March meeting of the American Physical Society, Dallas, Texas, March 23, 2011.

Vrinceanu, D. "Antimatter - it matters!" Society of Mexican American Engineers and Scientists (SMAES)' Science and Engineering Fair, Austin, October 2010.

Vrinceanu, D. "Detection of transient signals deeply buried in noise using Z-domain analysis complex plane" UT Brownsville (LIGO collaboration), February 2011.

Vrinceanu, D. "Ion acoustic waves in Ultracold Plasmas," poster at DAMOP, Atlanta, June 2011.

Vrinceanu, D. "Ion Acoustic Waves in Ultracold Plasmas," Workshop on Ultracold Rydberg Physics, Recife, Brasil, November 2010.

Vrinceanu, D. "Stark Mixing Rates in ion-Rydberg atom collisions," Hydrogen Recombination Workshop, ITAMP, Center for Astrophysics, May 2011.

Vrinceanu, D. and D. Bessis. "Detection of Transient Signals deeply buried in Noise using Z-domain Analysis," Army Research Laboratory, Washington DC, May 2011.

Wang, Yubian. "Safety of Dual Right-turn Lanes." Presented in the annual Research Week Poster session at Texas Southern University, Houston, April 2011. (Awarded as the 3rd place staff poster presentation).

Xu, Y., L. Yu, and G. Song. Modeling of Vehicle Specific Power and Instantaneous Speed Distribution for Expressways in Beijing. Presented at 90th Transportation Research Board Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Yang, H. and L. Yu. A Comparative Overview of MOVES2010 and MOBILE6.2 for Smoothing the Model Conversion Process. Presented at 90th Transportation Research Board Annual Meeting CD-ROM, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Yuan, P. "Safety Performance of Flashing Yellow Arrow (FYA) Signal Indication." Research Week Poster session at TSU, Houston, April 2011.

Zhang, M. "Safety Analysis for Implementation of Flashing Yellow Arrow Signal Indication with Protected/ Permissive Left-turn Operation." Research Week Poster session at TSU, Houston, April 2011.

Zhang, Y and W. Li, "A Spectrum Sharing Scheme in Two Cellular Wireless Networks," First International Workshop on Mobile Multimedia Networking Workshop, 2010, Chicago, June 29 - July 2, 2010.

Zhang, Y. "A Spectrum Sharing Scheme in Two Cellular Wireless Networks" First International Workshop on Mobile Multimedia Networking Workshop 2010, Chicago, USA, June 29 – July 2, 2010.

Zhang, Y., X. Chen, L. Kehinde, "Develop Digital/Analog Communication Laboratory," Proceedings of ASEE Annual Conference and Exposition, Vancouver, Canada, June 24-26, 2011.

Zhao, N. and L. Yu. Statistical Distribution of Capacities on Ring-Road Expressways of Beijing Based on Bound-Line Analysis. 90th TRB Annual Meeting, Transportation Research Board of the National Academies, Washington, DC, Jan 2011.

Workshops and Seminars Organized

Fold of the Un-foldable, presented by Dr. B. Montgomery Pettitt, Professor, University of Houston, organized by COST Research Committee, September 30, 2010.

Is Race Relevant in the Era of Personalized Medicine, presented by Dr. Rick Kittles, Associate Professor, University of Illinois at Chicago, organized by TSU – UTGSBS Collaborative on Prostate Cancer Research, October 25, 2010.

Field Trip to U.S. Customs Facility at Barbours Cut Terminal (Port of Houston), TSU Maritime students and graduate students, Speaker: Roger Baranski, U.S. Customs and Border Protection Supervisor, organized by Ms. Ursurla Williams, Department of Transportation Studies, November 24, 2010.

U.S. Coast Guard Opportunity Meeting, Sterling Student Life Center, Speaker: LCDR Will Watson, U.S. Coast Guard, organized by Ms. Ursurla Williams. December 1, 2010.

International Workshop on Emission Testing and Modeling, Xiamen, China, Dr. Lei Yu, Chair of the Organizing Committee, December 17-19, 2010.

TSU Research Week Panel Discussion, How to Enhance COST/TSU Research Activities and Productivities, organized by College of Science and Technology Research Committee, April 7, 2011.

Semidefinite Programming and Applications to the Generalized Moment Problem, A Program of Three Lectures by Dr. J. B. Lasserre (CNRS-France) Physics Department Sponsored Special Seminar, April 12-14, 2011.

Texas Department of Transportation Research Program, Talks presented by Mr. Wade Odell and Mr. Duncan Stewart from Texas DOT, organized by Dr. Yi Qi, Department of Transportation Studies, June 14, 2011.

Dissertations and Thesis

Dissertations

Christina L. Clemens, "The Role of Nicotine, Estrogen, and Ethanol in the Induction of Genomic Instability in Breast Cells," Ph. D. Dissertation, Fall 2010, Supervisor: Dr. James W. DuMond

Thesis

Latissha Clark, "Analysis of Hazardous Material Incidents in the Gulf Coast Region: A Case Study of Houston, TX," M.S. Research Thesis, Completed in October 2010. Supervisor: Dr. Lei Yu

Ayo Jejelowo, "The Effects of High Energy Particles on Protein Expression in Mice Intestinal Tissue," M.S. Research Thesis, March 2011. Supervisor: Dr. Shishir Shishodia

Sara Land, "The Texas Triangle Megaregion and Its Effects on Airport and Airspace Capacity," M.S. Research Thesis, Completed in June 2011, Supervisor: Dr. Carol Lewis

Anita Lewis, "The Modulation of Transcription Factors In Space Related Stress," M.S. Research Thesis, March 23, 2011. Supervisor: Dr. Shishir Shishodia

Brandon Mosley, "Evacuation of the Galveston Gulf Coast: Arterial Options," M.S. Research Thesis, Supervisor: Dr. Carol Lewis

Sascha Sabaroche, "Traffic Modeling Applications to Reduce Congestion in Nairobi, Kenya", M.S. Research Thesis, Supervisor: Dr. Carol Lewis
Garlyn Winn, "Evacuation of the Gulf Coast: Congestion Mitigation Strategies" , M.S. Research Thesis, Supervisor: Dr. Carol Lewis

Yasamin Salehi, "Investigate Existing Non-Intrusive Inspection (NII) Technologies for Port Cargo Inspections," M.S. Research Thesis, Completed in June 2011, Supervisor: Dr. Yi Qi

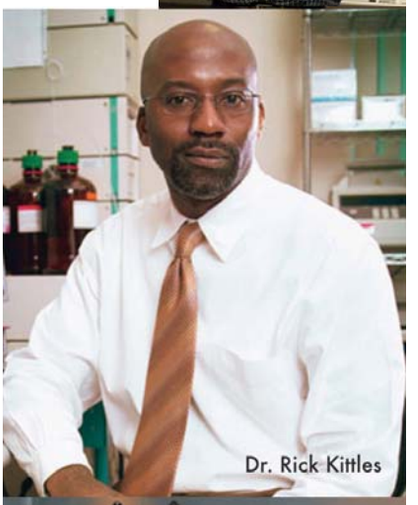
Qinyi Shi, "evaluation of mobile source greenhouse gas emissions for assessment of traffic management strategies," M.S. Research Thesis, Completed in Dec 2010, Supervisor: Dr. Lei Yu

Tiarra Spencer, "Molecular Phylogeny Of Aspergillus Species Based On The Internal Transcribed Spacer (ITS) Region." M.S. Research Thesis, Completed March 25, 2011, Supervisor: Dr. Hector Miranda

Yubian Wang, "Safety of dual right-turn lanes," M.S. Research Thesis, Completed in June 2011, Supervisor: Dr. Yi Qi


Dr. Silberg


Dr. Pettitt


Dr. Rick Kittles

Maria Williams, a junior with a Chemistry major from Baton Rouge, LA, made a technical presentation at the 2010 Regional Undergraduate Chemistry Symposium (RUCS), hosted at Rice University on Saturday, October 23rd. Her presentation on reactions of cytochrome c and cytochrome oxidase using site-directed mutagenesis and steady-state kinetics summarized her 2010 summer REU research at the University of Arkansas.

Kiara Taylor, a senior Chemistry major from Tulsa, OK, represented COST and the Chemistry Department at two student professional development conferences in 2010. She attended the Minority Access Conference in Las Vegas, NV in October, 2010. While in Las Vegas, she was awarded the Wal-Mart First Generation College Student Scholarship in conjunction with the Thurgood Marshall College Fund (TMCF). By winning this competitive scholarship she was invited to attend the TMCF Leadership Institute Conference in New York City. TSU's participation increased six-fold over the previous year's participation, with 18 TSU students, most of them COST students, spending a week networking and learning in New York.

Ms. Huimin Xing (advisor: Dr. Fengxiang Qiao), a graduate student of the Department of Transportation Studies, received a scholarship of $1,000 in early November of 2010 from the Intelligent Transportation Society (ITS), Texas Chapter.

Krystal Lastrape, a Center for Transportation Training and Research (CTTR) student in the Department of Transportation Studies was placed with Booz Allen Hamilton, Washington, DC.

Anthony Price, a CTTR Student in the Department of Transportation Studies was placed with Sysco Logistics, Houston, Texas.

Gwen Goodwin, Research Associate, attended the 2010 TRANED Conference in Hong Kong, China on June 2-4, 2010. Goodwin presented a paper titled, "Driving Cessation: Who Gives You the Right to Decide?"

Mathematics major students Andre White, Ruqiah Muhammad and Aqeeb Sabree attended the The National Association of Mathematicians (NAM) Undergraduate Math Fest XX held at Miami Dade College in Miami, Florida, November 18-20, 2010. All three students presented research papers at MATH fest. In addition, Andre White won a prize of $100.00 for solving one of two problems posed by mathematicians at MATH fest. Aqeeb Sabree and Ruqiah Muhammad won honorable mention for their presentations.

The Gulf Coast Chapter of the National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) and members of the Environmental Toxicology Graduate Student Association (ETGSA) partnered with the Department of Chemistry to host their Annual Science Quiz Bowl. Pearland High School was the 1st place winner, Energized for Science, Technology, Engineering & Mathematics (ESTEM) Academy, Central Campus placed 2nd, and the 3rd place winner was Lee High School.

During January 23-27, 2011, graduate students in the Department of Transportation Studies attended the 90th Transportation Research Board (TRB) Annual Meeting in Washington D.C. The TRB meeting is the largest and most influential transportation event each year in the world. This year, students in the Department of Transportation Studies submitted 10 research papers to the TRB meeting and of those, 4 papers were presented and published at the TRB meeting.

Department of Transportation Studies student, Meijun Liu, won $5000 in funding support from the Thurgood Marshall College Fund to complete research on short-term traffic flow prediction using bio-inspired computational intelligence. Meijun is a graduate student advised by Dr. Yi Qi in the Transportation Studies Department. Short-term traffic flow prediction is pivotal for proactive control in transportation management.

Mr. Daniel Osakue and Mr. Osman Ahmed, students of the Computer Engineering Technology and Computer Science programs in the Department of Engineering Technology and Department of Computer Science respectively, presented their research on virtual and remote laboratory at Texas Undergraduate Research Day at the Capitol on February 14, 2011. The TSU team used NI LabVIEW to develop virtual and remote experiments for DC, Digital Signal Processing and Data Communication courses.

The University Aviation Association Meeting Planning Committee has accepted an Education Session proposal from Aviation Science and Technology's Graduate Assistant, Sharon Hudson, a doctoral student at TSU, in the College of Education. The upcoming 2011 Fall Education Conference will be held in Indianapolis, Indiana. Her presentation topic is, "Aviation and Environmental Sustainability: Viability of Alternative Fuels."

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 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.

Aviation student, Ms. Bliss Mayo, has been selected to participate as a Custodial Cast Member in the Disney College Program during the Fall 2011 Season.

COST GRADUATES

SUMMER 2010

BACHELOR OF SCIENCE

Biology
Felix I Anozie
Olutayo Awotesu
Shareka R. Brown
Jennifer M. Dasher
Talbert L. Davis
Hermela K. Demesse
Nila T. Ellison[3]
Christopher Felan
Erica M. Guillory
Lashaunda S. Hill
Yohance H. Hunter
Latasha A. McGowan
Kimberly L. Miller
Linda C. Noukeu-Njiki
Hardik S. Patel
Bo Sun[2]
Markita N. Tillman
Adam Vongsouvanh
Samrawit A. Yeshitla

Chemistry
LaQuanta C. Perry
Kareema L. Scott
Bo Sun[2]
Trang Minh Vo[2]
Lauren A. Walker

Civil Engineering Technology
Pedro J. Salomon

Computer Engineering Technology
Willie J. Hampton[3]

Computer Science
Aaron Miller

Construction Technology
Troy Gooden

Design Technology
Kenneth N. Fitzgerald
Devaughn W. Robinson

Mathematics
Rayya D. Carrington

[1] Summa Cum Laude
[2] Magna Cum Laude
[3] Cum Laude

FALL 2010

BACHELOR OF SCIENCE

Aviation Science Management
Mark K. Benton, II
Eric P. Ecung
Jerry G. Garcia[3]
Juby L. Kuruvilla
Rondean S. Scarlett

Biology
Festus A. Adom
Harriet Agyapong
Emeliene B. Ashu[3]
Jacolbe D. Barefield
Shareka R. Brown
Ursula C. Chilaka
La'Tasha R. Coleman
Lola N. Cooper
Shelice D. Cox
Brandon R. Cregler
Chuma C. Duru
Jamie Fowler
William L. Garcia
Tammy Griffin
Zinnijah P. Guadalupe
Erica M. Guillory[2]
Khai Q. Nguyen
Anita A. Perez
Lehang T. Pham

Chemistry
Eboni N. Bowden
Marion W. Maina
Thanh C. Nguyen[3]
Rajesh P. Patel
Mitchell R. Schnyder
Cara J. Woodham

Civil Engineering Technology
Chukwunonso H. Ifezue[3]
Sandra C. Onyejekwe
Marcia S. Robin-Stoute[2]

Computer Science
James E. Adams
Matthew R. Roberts

Computer Engineering Technology
Shawnderick L. Brooks
Angel M. Jackson
André R. Seals[3]

Construction Technology
Quoc V. Nguyen
Matthew I. Opamen
William C. Osborne

Design Technology
Ayodeji Muritala
Animashaun
Kenneth N. Fitzgerald
Nicholas C. Walker-Baldwin

Electronics Engineering Technology
Abosede L. Olubiyi
Ikemefule C. Onyearugha

Mathematics
Laquisha L. Hines
Mia J. Lander[3]
Joseph A. McElroy
Joshua D. Wiley

MASTER OF SCIENCE

Biology
Robbyn C. Barnett
Stephen W. Hayes

Computer Science
Irnessa M. Campbell

Industrial Technology
Kedrick Lyons

Transportation Planning and Management
Latissha V Clark
Mamadou Djimde
Ramya S. Gampala
Qinyi Shi

DOCTOR OF PHILOSOPHY

Environmental Toxicology
Christina L. Clemens

SPRING 2011

BACHELOR OF SCIENCE

Aviation Science Management
Vera L. Griffin
Tracy S. Sibbaluca
Kadijah Hall[2]
Gilberto A. Williams
Rickey J. Willingham

Biology
Ebenezer Addo[1]
Uchenna J. Aganekwu
Olivia U. Anakani
Patrick I. Ashiru
Jasmine N. Bailey
Belaineh A. Belay[1]
Nekeitha S. Craft
Kristy E. Craig
Brandon R. Cregler
Zuri J. Dale[3]
Nicole M. Dawson
Robin C. Dike
Mai H. Duong
Kera N. Galloway
William L. Garcia
Shanel J. Geathers
Kimberly A. Gilkes[3]
Cherrelle M. Gobar
Kara D. Hernandez
Brittany J. Hudson
Abdramane Kaba
Darrell T. Levy
Erica L. Lewis
Chelsea J. McCoy[3]
Farah M. Mohamoud
Victoria C. Ndimele
Emmanuel U. Obi
Kristain E. Odibo[2]
Jennifer U. Okanmelu[2]
Elvis N. Okoro
Jennifer N. Oriji
Tung T. Phan
Lauren N. Revis
Katherine V. Roberts
Jeshawn S. Robinson
Latoria Scott
Sabrina D. Skoug
Elizabeth K. Tran
Lady U. Ukomadu
Brandi A. Wilson
Brittany C. Woodard

Chemistry
Kristin N. Anderson
RaiAnna P. Arscott

SPRING 2011 cont..

BACHELOR OF SCIENCE cont..

Chemistry cont..
Thierry C. Kouamou Tantchou[2]
Marion W. Maina[3]
LaTashia N. McNeal-Smith
Eric A. Mintah
Anh L. Pham[1]
Jessica L. Robertson
Kiara A. Taylor[3]

Civil Engineering Technology
Hakeem O. Ahmed
Chelse L. Hoover
Mona D. McDaniel

Computer Engineering Technology
Omari K. Martin
Cory R. Smith
Anthony J. Victorain

Computer Science
Antarr T. Byrd
Nelson F. Guerro
Denita R. Jones
Kristian J. Miles

Construction Technology
Ty N. Hatcherson
Marlon L. Johnson

Design Technology
Frederick L. Whitley

Electronics Engineering Technology
Marwa A. Al-Ajeeb
Ali A. Alhaddad
Mohammed M. A. Ali
Jabari O. Britt
Alan A. Kiel
Baina T. Mukullasi
John Shoboiki

Mathematics
Bresean A. Cockrell
Branson R. Mikell
Andre R. White[3]
Weston G. Williams

Physics
Samantha J. Everett

MASTER OF SCIENCE

Biology
Tram N. Cao
Anita Lewis
Tiarra N. Spencer

Chemistry
Mindy H. Nguyen

Computer Science
Raji Kannah

Environmental Toxicology
Edidiong Obot
Shandalyn W. Washington

Industrial Technology
James T. Mwangi
Ogochukwu M. Uzowulu
Felicia Wright

Mathematics
Jamel A. Ferchichi

Transportation Planning and Management
Grace Arthur
DeAnthany D. Hall
Polina S. Korzhova
Abhilash Kumar
Swannie R. Wilson
Quing Zhu
Tracy Williams

[1] Summa Cum Laude
[2] Magna Cum Laude
[3] Cum Laude

FACULTY AND STAFF

Airway Science and Technology
Bailey, John, Adjunct Professor
Brown, Calvin, Adjunct Professor
Glass, Charles, Assistant Professor
Hall, Tasjah, Instructor
Harris, Shirley, Administrative Assistant
Odetunde, Christopher, Assistant Professor
Sherman, Mark, Associate Professor and Chair

Biology
Abdel-Rahman, Fawzia, Professor
Butler, Brandi, Program Coordinator
Dike, Cyprian, Adjunct Professor
Fadulu, Sunday O., Professor
Gardiner, Linda, Assistant Professor
Hillar, Marian, Professor
Jackson, Desirée, Associate Professor and Acting Chair
Jejelowo, Olufisayo, Professor
Miranda, Hector C., Assistant Professor
Mohammed, Jamal, Adjunct Professor
Pittman-Cockrell, Helen, Admin Assistant
Player, Audrey, Visiting Professor
Prasad, Sarvamangala, Adjunct Professor
Rosenzweig, Jason, Assistant Professor
Shelton, Nathaniel, Visiting Professor
Shishodia, Shishir, Assistant Professor
Sodipe, Ayodotun, Visiting Professor
Sundaresan, Alamelu, Assistant Professor
Thomas, Cherita, Visiting Instructor
Williams, Warren E., Associate Professor

Chemistry
Clement, Jade Q., Associate Professor
Deng, Yuanjian, Professor
Deolu-Sobogun, Suziat, Research Associate
Ekwere, Obot, Adjunct Professor
Fennell, Pearlie M., Professor
Ford, Robert L., Professor
Johnson, Delois, Administrative Assistant
McDaniels, Vera, Program Coordinator
Mizzell, Rachel, Administrative Assistant
Ojo, Jonathan, Adjunct Professor
Phan, Tuan D., Assistant Professor
Saleh, Mahmoud, Professor
Sapp, John B., Professor And Chair
Valle, Bertha C., Visiting Professor
Wei, Xin, Associate Professor
Wilkerson, Daryl, Instructor
Wilson, Bobby L., Professor
Zhang, Wenluo, Research Associate

Computer Science
Abdullah, Baqui, Network Administrator
Criner, Oscar H., Professor
Daniels, Tisha, Technical Services Specialist
Dotson, Ulysses, Visiting Instructor
Ghemri, Lila, Associate Professor
Gonzales, Michael, Visiting Instructor
Handy, Maribel, Instructor
Jahed, Nadareh, Administrative Assistant
Javadi, John, Visiting Instructor
Javadian, Moshen, Associate Professor
Kamel, Khaled, Professor And Chair
Khan, M. Farrukh, Assistant Professor
Li, Wei Wayne, Professor
Lin, Cheng Feng, Assistant Professor
Ma, Li, Visiting Instructor
Singh, Tarsem, Professor
Sleem, Aladdin, Assistant Professor

Engineering Technology
Afiesimama, Boma T., Associate Professor
Agbonobi, Raymond, Professor
Chen, Xuemin, Assistant Professor
Darayan, Shahryar, Professor
Darayan, Darvish, Adjunct Professor
Dilly, Ronald, Visiting Professor
Graham, Thomas, Assistant Professor
Kamel, Eman, Visiting Professor
Kehinde, Lawrence, Visiting Professor
Mason, Cristal, Administrative Assistant
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Saneifard, Rasoul, Professor
Stewart, Carrington, Visiting Professor
Tahvilian, Hosein, Instructor
Talusani, Praptap, Adjunct Professor
Zhang, Yuhong, Assistant Professor

Environmental Science And Technology
DuMond, James W., Associate Professor
Nyamapfene, Kingston, Professor
Okome, Gloria E., Instructor
Spencer, Dolly M., Administrative Assistant
Yakubu, Momoh A., Visiting Professor

Industrial Technology
Allen, Mitchell, Adjunct Professor
Horner, Jessie E., Associate Professor and Chair
Lewis, Jonathan J., Associate Professor
Lott, Carl B., Assistant Professor
Nasser, Lulueua A., Administrative Assistant
Osakue, Edward E., Assistant Professor
Quinney, Rig, Technical Services Specialist

Mathematics
Abaneme, Mike, Adjunct Faculty
Alexander, Mary Alice, Adjunct Faculty
Ariyaratna, Rajamanthri, Adjunct Faculty
Azzi, Elias, Adjunct Faculty
Basharat, Mahmoud, Adjunct Faculty
Bell, Della D., Professor
Chilakamarri, Kiram B., Associate Professor
Davis, Melanie, Adjunct Professor
Eakins, Nia, Administrative Assistant
Ekwo, Maurice, Visiting Professor
Evans, Joan, Instructor
Giles, Jackie, Adjunct Professor
Ginn, James, Professor
Glenn, Nancy, Associate Professor
Guha, Shyamal, Associate Professor
Hollins, Walter, Adjunct Faculty
Holmes, Roderick, Assistant Professor
Kazakos, Demetrios, Professor
Lufadeja, Paul, Adjunct Faculty
Nehs, Robert, Associate Professor
Obot, Victor, Professor
Okwuegbu, Augustine, Adjunct Faculty
Saydam , A. Serpil, Associate Professor and Chair
Taylor, Willie, Professor
Tesfai, Daniel, Adjunct Faculty
Williams, Joel, Adjunct Faculty
Wu, Tong, Instructor

Physics
Bessis, Daniel, Professor
Handy, Carlos, Chair
Harvey, Mark, Visiting Professor
Lee, Young, Adjunct Professor
Perotti, Luca, Assistant Professor
Petrochilos, Nicolas, Adjunct Professor
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Vrinceanuu, Isabela D., Instructor

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Godazi, Khosro, Associate Director
Goodwin, Gwendolyn, Research Associate
Lashore, Denita, Sr. Secretary
Lewis, Carol, Associate Professor
Mckamie, Reginald, Visiting Instructor
Miller, Michael, Adjunct Instructor
Morgan, Robert, Adjunct Professor
Qi, Yi, Assistant Professor and Interm Chair
Qiao, Fengxiang George, Assistant Professor
Rollins, Mary, Research Assistant
Simmons, Paul, Adjunct Professor
Williams, Ursurla, Program Coordinator
Yu, Lei, Professor and Dean

COLLEGE OF SCIENCE AND TECHNOLOGY ADMINISTRATION

Lei Yu
Professor and Dean

OFFICE OF THE DEAN

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Professor and Interim
Associate Dean

James W. DuMond
Associate Professor and
Interim Associate Dean

Desirée A. Jackson
Associate Professor and
Interim Assistant Dean

Charlotte Whaley
College Business Administrator III

Dolly Spencer
Sr. Administrative Assistant

Tioka Freeman
Administrative Assistant

AIRWAY SCIENCE AND TECHNOLOGY

Mark A. Sherman
Associate Professor and
Chair

Shiley L. Harris
Administrative Assistant

BIOLOGY

Desirée Jackson
Associate Professor and
Acting Chair

Helen P. Cockrell
Administrative Assistant

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Professor and Chair

Delois S. Johnson
Administrative Assistant

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Wei Wayne Li
Professor and Interim
Chair

Nadereh Jahedmotlagh
Administrative Assistant

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David Olowokere
Professor and Chair

Cristal Mason
Administrative Assistant

ENVIRONMENTAL SC. AND TECHNOLOGY

James W. DuMond
Associate Professor and
Interim Chair

Dolly Spencer
Sr. Administrative Assistant

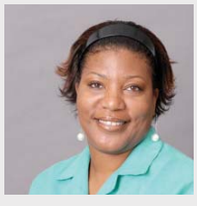
INDUSTRIAL TECHNOLOGY

Jessie E. Horner
Associate Professor and
Interim Chair

Lulueua A. Nasser
Administrative Assistant

MATHEMATICS

A. Serpil Saydam
Associate Professor and
Chair



Nia Eakins
Administrative Assistant

PHYSICS

Carlos Handy
Professor and Chair

Shirley L. Harris
Administrative Assistant

TRANSPORTATION STUDIES

Yi Qi
Associate Professor and
Interim Chair

Paula Eakins
Administrative Assistant

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