Innovation is born when persistent, creative minds seek solutions to new needs. Texas A&M University-Corpus Christi is fast becoming a birthplace of innovation.

When you arrive on the shores of the Island University, you will see the palm tree-lined pathways leading into labs and classrooms where renowned faculty are preparing professionals who will build the future.

From the skies above the Texas Gulf Coast to the depths of the Gulf of Mexico, projects including our unmanned aerial systems and underwater rovers are enhancing our students’ experiences while boldly advancing work in areas such as engineering, marine biology, economic development, and sustainability.

Our determined efforts to find solutions for the emerging issues of our time are made possible by government, business and community partners, whose support allows us to create academic and research programs that bring the University to new heights.

I’m proud to share with you just a sample of the remarkable feats we are accomplishing every day at the Island University.

Dr. Flavius Killebrew
President/CEO

University President Flavius Killebrew has been selected to represent our students, Texas and the higher education community on several occasions:

- Among a 25-member delegation of selected university leaders at White House Roundtable on higher education
- Member of the board of trustees of the Southern Association of Colleges and Schools Commission on Colleges
- Chair of the Council of Public University Presidents and Chancellors (CPUPC) for fiscal year 2013
- Serves on the new Texas Statewide Transfer Issues Committee of the Community College Initiative.
Discover the Island University. At the heart of the Texas Gulf Coast, Texas A&M University–Corpus Christi is the only university in the nation located on its own island. With palm trees lining pathways throughout the campus, nearby natural wetlands, a scenic hike-and-bike trail, and a university beach that’s a prime spot for water sports, the Island University is a first-choice destination. A&M-Corpus Christi now encompasses 137 acres adjacent to Ward Island known as the Momentum Campus; a gift from the City of Corpus Christi. For those who love the outdoors, the island offers more than 280 days of sunshine, a gulf breeze, and mild weather year-round.

Offering more than 60 of the most popular degree programs in the state, Texas A&M-Corpus Christi has been proudly providing a solid academic reputation, renowned faculty, and highly-rated degree programs since 1947. The prestige and strength of a Texas A&M-Corpus Christi degree is known and respected worldwide.
Now more than ever, the University is working to make sure higher education remains affordable, while maintaining academic excellence. To partner with state funding, the future of our success is assured thanks to the commitment and perseverance of private donors, businesses, and organizations providing gifts to enhance facilities, and fund essential programs. Some programs help prepare students for top-paying jobs in high-demand fields, while others ensure students at the Island University are receiving their education by the top professionals in the field who will make Texas the home of world-class research.

The generosity of Dr. Jack Dugan, our new Momentum Campus Partner, has made possible a new soccer & track stadium. The $9.6 million Dr. Jack Dugan Family Soccer & Track Stadium will be home to the Islanders track team and the newly-established Islanders women’s soccer program, whose inaugural season is fall 2013. When completed in May 2013, the 15,300-square-foot facility, which includes a soccer field enclosed by an eight-lane track, will host Southland Conference competitions and non-conference games and tournaments featuring nationally-prominent programs.
University Develops Coastal Bend’s First Oyster Shell Recycling Program

A grassroots effort to develop the first oyster shell recycling program proves that partnering with local businesses and community volunteers yields the best results. The innovative program is creating a habitat where young oysters can attach and grow, ensuring an abundance of the mollusks for future commercial harvests.

Working with local establishments, Water Street Restaurant and Niko’s Steakhouse, the program has already reclaimed more than 90,000 pounds of oyster shells and returned them to bay waters. University students take bins of oyster shells from the restaurants to a stockpile at the Port of Corpus Christi, where they are dried in the sun and later reintroduced into the ecosystem.

Recycled shells have been used to restore a 3.8-acre reef in Copano Bay, and are used to build an educational oyster reef near Goose Island State Park that is accessible to Corpus Christi Independent School District students. As a result, the program has been awarded almost $100,000 from the National Oceanic and Atmospheric Administration.

Local Corpus Christi attorney Thomas J. Henry has contributed a $500,000 gift to build the new Thomas J. Henry Tennis Center. The $2.4 million complex includes 12 tennis courts built to NCAA specifications with the top-of-the-line Musco lighting system, an exterior public address system, a security fence and a 220-car parking lot.
A bright idea submitted by graduate student Lisa Ferrell is helping the Mary and Jeff Bell Library consume less electricity, saving an estimated $30,000 annually in energy costs. Her suggestion to install LED lighting within a second floor section of the library, the largest consumer of electricity among student areas on campus, will result in an annual reduction of 8.6 million pounds of carbon dioxide emissions or saving just under 7 million kilowatt hours of energy. The program is one of many green campus initiatives.

- Using Geothermal Energy Sources to Generate Electricity
- Finding New Methods of Creating Solar Cells
- Researching Algae-Based Biofuels
- Restoring Oyster Reefs for Future Commercial Harvests
- Monitoring Water Resources and Water Quality
University ‘Flips the Switch’ on Record-Breaking Installation
Texas A&M University-Corpus Christi officially “flipped the switch,” turning on the largest vertical-axis wind turbine installation of its kind in the United States. In all, three Texas A&M-Corpus Christi locations showcase a total of 11 wind turbines, with a combined total capacity of 92 kilowatts. The turbines have real-time data collection for faculty and students in engineering to analyze on a network. The initiative was funded by a $955,000 Distributed Renewable Energy Technology Stimulus Grant from the State Energy Conservation Office and the U.S. Department of Energy. The University then matched $265,000 in funds, for a total of $1.2 million for the project.

“This initiative will not only provide students and faculty with excellent learning and research opportunities, but will open doors for future generations who want to pursue this green technology.”

Dr. Flavius Killebrew
University President/CEO

Green Mountain Energy Donates $215,000 to Install Solar Arrays
Through its partnership with Green Mountain Energy, the University is researching ways to make solar energy more affordable by converting sunlight into pollution-free electricity.

- The University received $75,000 for the solar panel installation on the roof of the Engineering building. The solar project will be integrated into engineering research and summer camps for high school students.
- On Earth Day 2011, Green Mountain Energy’s Sun Club presented the Art Museum of South Texas with $140,000 to fund a 25-kilowatt solar panel system that, over a 30-year lifespan, is expected to save the Museum approximately $150,000 in energy costs.

Business Innovation Center
- Assisting 56 Small Businesses
- Creating 161 jobs
- Generating More Than $3M in Revenue

Technology
A dozen green companies at the Coastal Bend Business Innovation Center focus on numerous efforts from the conservation of energy and water to a reduction of toxins in the soil and less toxic methods of medical sterilization.

‘Go Green’ Center Built to LEED Specifications
The U.S. Economic Development Administration has awarded the Coastal Bend Business Innovation Center $1.4 million to assist entrepreneurial businesses that are developing energy-efficient and cost-saving technologies. A check from the EDA was presented to the College of Business to fund the construction of a “Go Green” Center. The 5,000 square-foot light manufacturing building will be built to LEED (Leadership in Energy and Environmental Design) specifications. The Innovation Center’s 35,500-square foot building will also be updated to improve its current LEED score.
“There is nothing more exciting for me than to be in the ocean with students like those at Texas A&M-Corpus Christi. They will be the leaders and scientists in whose hands we will be entrusting the oceans’ future.”

Sylvia Earle
National Geographic Explorer in Residence
New Sportfish Research Institute Compliments Artificial Reef Studies

Dr. Greg Stunz, Endowed Chair of the Harte Research Institute, is leading several projects uncovering the thriving ecosystems in the depths of the Gulf of Mexico. With the support of a $500,000 donation from the Coastal Conservation Association, Stunz is leading the first research center for the study of sportfish in the Western Gulf of Mexico.

In addition, his two-year project, funded through Texas Parks and Wildlife, monitors Texas artificial reefs. Abundant marine life has settled into “permanent” homes around abandoned oil and gas platforms and other artificial structures in the Gulf of Mexico.

University Scientists aboard R/V Falkor Study South Texas Coast

Scientists with the Harte Research Institute for Gulf of Mexico Studies (HRI) and the College of Science and Engineering studied the oceanography of the South Texas coast, including environmental influences on the distribution of red tide while aboard the R/V Falkor. Resources for the Falkor expedition were provided by the Schmidt Ocean Institute at no cost. Footage shot by A&M-Corpus Christi scientists on the cruise includes the first documented video confirmation that lionfish, a new non-native marine predator, may pose a threat to the ecology of the waters along the Texas coast.

University Scientists Research Fate of Petroleum from BP Oil Spill

Texas A&M University-Corpus Christi has been awarded an $800,000 grant from the Gulf of Mexico Research Initiative (GRI) to support research that will investigate the fate of petroleum in the environment from the BP Deepwater Horizon spill. The University is one member of a consortium of 12 research institutions across the nation which will investigate the dispersion of petroleum in sea water.

Unmanned Aerial Initiatives Creating a Framework for Drone Technology

The Unmanned Aerial Systems (UAS) program has received a Federal Aviation Administration (FAA) Certification Authorization to fly an RS-16 unmanned aircraft into national airspace. Practical UAS applications include wildlife inventory, border security, hurricane monitoring, detection and tracking of harmful algae blooms, and situational awareness for incident response. Texas Gov. Rick Perry has tapped Texas A&M University-Corpus Christi as the lead institution in the A&M System for a statewide effort to bring a UAS federal flight test range site to Texas.

“We have shared our coastal monitoring expertise with agencies and organizations in Mexico, Belize, Honduras, and Guatemala.” – Philippe Tissot, Conrad Blucher Institute
Diversity in STEM Programs
Texas A&M University-Corpus Christi is committed to increasing the number of underrepresented students participating in the science, technology, engineering and mathematics (STEM) fields.

The Island University is a founding member of the following organizations:
- Computing Alliance for Hispanic-Serving Institutions (CAHSI)
- South Texas Engineering Alliance (STEA)
- Society for the Advancement of Chicano and Native American Students (SACNAS)

PERL Lab Researches Use of Plasmas for Science, Engineering, Biomedical Applications
Dr. Magesh Thiagarajan, Assistant Professor in the College of Science and Engineering, has established a state-of-the-art Plasma Engineering Research Laboratory (PERL) facility. The Plasma Lab is leading the way to new solutions in wound healing, cancer treatment, food sterilization and the discovery of new applications for this emerging science.
The Island University’s College of Education is leading statewide efforts to find the best learning tools in math and science. Through grants and specialized programs, professors are training current and future teachers in the most innovative methods of engaging students.

“Educators can engage their students by reading interesting stories to the class and tying mathematical concepts into the lesson,” said Dr. Faye Bruun, Assistant Professor of Curriculum and Instruction. “This is a new area in math education for middle school students, and these students react positively to this type of instruction.”

- Gov. Rick Perry has appointed Dr. Faye Bruun to the Texas Academy of Mathematics and Science (TAMS) Advisory Board
- Dr. Denise Hill was re-elected to the Board of Directors of the Science Teachers Association of Texas (STAT) for 2012-2013.
- Dr. JoAnn Canales is the principal investigator on the CULTIVAR Project. The USDA-funded program prepares young Hispanic scholars for a career in the food and agricultural sciences.
- Sid Richardson Foundation funds teacher certification workshops to retrain elementary school teachers as math and science specialists.

For the fourth year in a row, the University has been designated as a “Military Friendly School” by G.I. Jobs magazine. Colleges, universities and trade schools named as “Military Friendly” must rank in the top 15 percent nationwide for efforts and results in recruiting and retaining military and veteran students to increase diversity among the student body, faculty and staff.

Our University continues to expand its military-friendly services and programs and encourages student organizations such as the United Student Veteran Organization (USVO) and the Islander ROTC Battalion.

**Efforts Include:**

- Assist the more than 900 veterans and their dependents attending the University.
- Adopted the Military Student Bill of Rights.
- Participate in the Servicemembers Opportunity Colleges, a consortium dedicated to helping service members and their families obtain college degrees.
Researchers, faculty and staff at Texas A&M University-Corpus Christi are working on sponsored programs valued at more than $24 million; an increase of almost $5 million from fiscal year 2010 to 2011. Private, federal, and state agencies have seen the value of projects including the Texas Coastal Ocean Observation Network (TCOON) monitoring stations that meet NOAA standards, the sampling of waters in the gulf for aftereffects of the Deepwater Horizon Oil Spill, and the evaluation of microalgae for use as biofuels.
CONHS Works with Military to Identify Strategies for Academic Credit

The College of Nursing and Health Sciences has been awarded a grant by the White House that allows the nursing school to align enlisted health care training and nursing academic credit. Dr. Mary Jane Hamilton, Dean of the College of Nursing and Health Sciences, was one of 20 university deans and the only dean from Texas to be recognized by First Lady Michelle Obama and Dr. Jill Biden for her College’s commitment to veterans’ education.

NSF Grant Funds Investigation of Changes in Climate, Energy, and Environment

Dr. Luis Cifuentes, Vice President of the Division of Research, Commercialization and Outreach, is principal investigator for the Research Coordination Network CE3SAR (Climate, Energy, Environment and Engagement in Semi-arid Regions,) which will assess the availability and use of water in South Texas. Funded by a five-year $750,000 National Science Foundation grant, the research coordination network will focus on the effects of changes in the climate, energy production, and environment of the region during the next 20 years; and the impact these changes will have on the area’s increasing Hispanic population.

“As our venture succeeds, we will provide a new civilian aerospace company for the Coastal Bend that we anticipate will encourage more businesses like ours to locate to South Texas.” – Thurman Walling, Coastal Bend Aerospace, LLC, client of the University Business Innovation Center and winner of the 2012 Coastal Bend Business Plan Competition

Faculty Research Ensures Long-Term Health of Texas Gulf Coast

Four faculty members in the College of Science and Engineering at Texas A&M University-Corpus Christi have received grants totaling $282,536 from the Texas Coastal Management Program, an initiative to ensure the long-term environmental and economic health of the Texas Coast. The program, funded by the National Oceanic and Atmospheric Administration (NOAA), is managed by the Coastal Coordination Council.

- Dr. Riccardo Mozzachiodi Investigates Brain’s Reaction to Aversive Events
- USFWS Grant Addresses Recovery and Reintroduction of South Texas Ambrosia
- USDA Grant Helping to Prepare Hispanics for Careers in Agricultural Sciences
- $4.3 Million Grant To Increase Hispanic, Low-Income Student Retention, Graduation Rates in STEM Programs
- Ed Rachal Foundation Grant Provides Scholarships for ROTC Cadets

Dr. Darek Bogucki Investigates Fate of Oil from BP Deepwater Horizon Spill
A degree from Texas A&M University-Corpus Christi produces a significant boost in its graduates’ lifetime earnings. Based on the gains in earning streams from a university education, the University’s contribution to additional lifetime earnings of Texas residents is estimated at $1.4 billion annually.

For each dollar of state appropriated funds, Texas A&M University-Corpus Christi generates $7.3 in economic activity across Texas communities.

The employment benefit to Texas is 7,206 full-time-equivalent jobs.

- Texas A&M University-Corpus Christi boosts employment in Texas by a total of 7,206 full-time-equivalent job positions. Excluding student workers, 3,650 Texas residents are directly employed through the University and another 3,556 jobs are created as a result of economic activity related to the University.

The total earning power of Texas residents increases by $1,438,769,963 annually.

— EDA University Center for Regional Economic Research
New School of Arts, Media & Communication

The new School of Arts, Media & Communication (SAMC) was created to support growing Liberal Arts programs that have nearly doubled in majors since 2002. The SAMC consists of four departments: Art, Communication and Media, Music, and Theatre & Dance. Faculty perform on stages around the nation and are recognized worldwide for their works. All disciplines focus on collaboration and application of skills and knowledge, which result in students developing highly-marketable skills as they serve their community through an array of engaging projects.

- The Art program has added an MA/MFA program with 62 percent of the graduate students pursuing the terminal degree.
- The Communication program developed a Public Relations minor, one of the largest minors on campus. In 2009, a Master of Arts in Communication was added.
- The Theatre program has expanded six-fold in majors. Also, a certificate program in dance has been added.
- The Music program has developed a new program in music industry.
Engineering
The University is preparing the next generation of scientists for future careers by offering Mechanical Engineering, Electrical Engineering Technology, and Mechanical Engineering Technology degrees. Recently, the College of Science and Engineering held its first STEM Summer Institute where high school students from across Texas learned about exciting oceanography research and engineering opportunities, in particular ROVs (Remotely Operated Vehicles).

Nursing
The College of Nursing and Health Sciences was recognized by the White House for its one-of-a-kind eLine Military Program, which gives those with military medical training academic credit for their experience helping them get to graduation and into the medical field sooner. The College offers programs that address both the shortage of both nurses and nurse educators.

Physical Therapy
Due to an aging population, physical therapy is one of the 30 fastest-growing occupations and the Bureau of Labor Statistics predicts a 30 percent gain by 2018 in need. The Department of Kinesiology provides excellent preparatory programs in Pre-Physical Therapy/Pre-Occupational Therapy for graduate study, and post-baccalaureate study in exercise physiology, biomechanics, and cardiac rehabilitation.

- 77% of graduates find employment the year they graduate.
- Our alumni earn up to $92,000 a year after earning their diploma.