



SCIENCE NOTES

A College of Sciences Newsletter



Issue 1, Fall 2017



The University of Texas
Rio Grande Valley
.....
College of Sciences

DEAN'S MESSAGE



DR. PARWINDER GREWAL

The first two years of UTRGV presented significant challenges, but also many exciting opportunities. Our faculty and staff have done a tremendous job in building a solid foundation for the new college. Almost every process, procedure, and policy had to be carefully examined, tweaked, and implemented and many had to be developed from scratch. Our staff have worked diligently to develop and master new operating procedures and protocols, while continuing the daily operations of a large, complex, multi-campus college. Faculty have worked extremely hard developing and adapting to new policies and procedures, developing new self-evaluation criteria, hiring outstanding new colleagues, and developing new degree programs, and research, education and outreach centers, while continuing their scholarly activities including teaching, research, grant writing, and service. With 182 faculty, over 4000 undergraduate and graduate students, \$24.0M in external grant funding, and over 400 peer-review publications in 2016-17, the state of our college is strong. The following are some of the key accomplishments of the college within the first two years:

New Policies and Procedures

- Established the organizational structure, processes, protocols, and procedures for the smooth functioning of the college with facilities located in Brownsville, Edinburg, McAllen, Port

Isabel, South Padre Island, and Boca Chica Beach; appointed Department Chairs, School Directors, Associate Deans, Center and Program Directors, Assistant Dean, Budget Analysts, Administrative Associates, Program Coordinators, and other staff

- Developed and implemented a compassionate Faculty Workload Policy that recognizes different roles, strengthens and passions of faculty and is aligned with the university's aspirations of becoming a Carnegie Engaged and Emerging Research University
- Established metrics-based faculty performance evaluation criteria that are fully aligned with the university's aspirations of becoming an engaged and an emerging research university
- Established mechanisms and policies for faculty joint appointments across departments/schools

New Schools and Centers

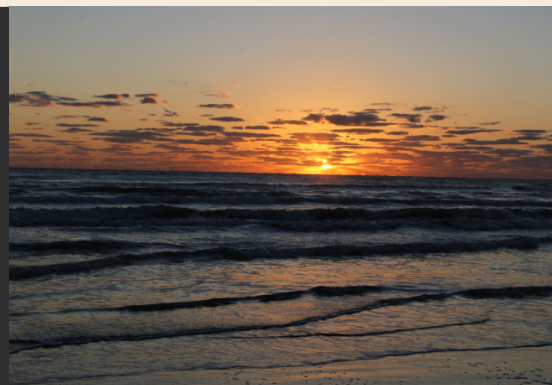
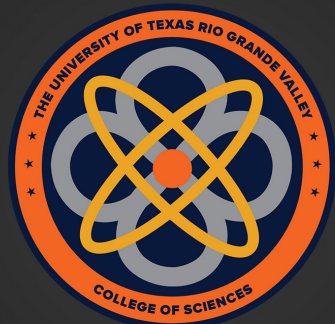
- Established a new School of the Earth, Environmental and Marine Sciences (SEEMS)
- Established a new Center for Sustainable Agriculture and Rural Advancement (SARA) to build an integrated systems research, education and outreach program to advance sustainable agriculture and resilient food systems in the Rio Grande Valley and beyond
- Initiated collaboration with the City of McAllen - Quinta Mazatlan to start developing a joint Center for Urban Ecology (CUE) to conduct research, education, and outreach to foster sustainable urban development;

created a jointly funded position for an urban ecologist; and the City received \$5.0M funding from the Texas State Legislature to build a dedicated facility for the center at Quinta-Mazatlan.

New Educational Programs

- Developed, received approval for, and launched two new interdisciplinary Masters programs: Ocean, Coastal and Earth Sciences & Agricultural, Environmental, and Sustainability Sciences
- Developed and received approval for two planning authorities for PhD. programs in Physics and in Cellular, Molecular & Biomedical Sciences (in collaboration with the South Texas Diabetes and Obesity Research Institute and the School of Medicine)
- Developed and submitted to UT System a planning authority proposal for a doctoral program in Mathematical & Statistical Sciences with Interdisciplinary Applications
- Developed another planning authority proposal for doctoral program in Applied Materials & Interfaces, which is under review by the Provost's Office
- Developed proposals for establishing three new Bachelors degrees in Biochemistry & Molecular Biology, Statistics, and Sustainable Agriculture & Food Systems and a new Masters degree in Biochemistry & Molecular Biology
- UTeach program completed its original grant-period and became the nation's largest program!

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DEPARTMENTS AND SCHOOLS

BIOLOGY



Chair: Dr. Frederic Zaidan

The Department of Biology is a large and vibrant department consisting of over 50 faculty members, 7 staff, and over 2,500 majors distributed across two campuses in Edinburg and Brownsville. The first two years of UTRGV saw the retirement of three faculty members (Dr. Rod Summy, Mr. Ron Nash, and Dr. Bob Edwards) and the move of our 2017 Regents' Outstanding Teaching Award winner Dr. Christine Mathews. Unfortunately, we also experienced the deaths of Dr. Anxiu Kuang and our Administrative Assistant

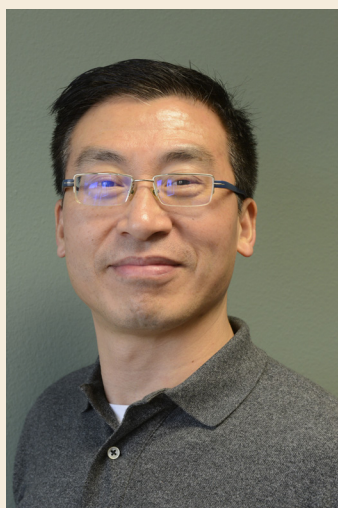
Ms. Diana Womble. We added Mr. Eleazar Saenz as our third Laboratory Supervisor/Coordinator and successfully recruited two excellent faculty members (Drs. Brad Christoffersen and Rupesh Kariyat) who began this fall.

The Department of Biology has been highly active in research from 2015-2017. We have a broad group of expertise that spans practically all areas of biology from cells to ecosystems. With this expertise, we received several million dollars in external funding, led by the efforts of Drs. Karl Berg, Robert Dearth, Robert Edwards, Mohammed Farooqui, Zen Faulkes, Patricia Fera, Robert Gilkerson, Megan Keniry, Kristine Lowe, Andrew McDonald, Kathryn Perez, Michael Persans, Erin Schuenzel, Matthew Terry, John Thomas, and Chris Vitek. Ninety-eight scientific articles and other scholarly works were produced and 84 scientific presentations were given. In addition to these, Dr. Rod Summy wrote the textbook which was adopted by our Biological Communication capstone course and

donated all current and future proceeds from this book to a graduate student scholarship fund. Notable local research includes the following: Dr. Karl Berg is working on a funded international project on vocal babbling in parrots, as well as research on local parrot species. Dr. Rob Gilkerson's research on mitochondria has attracted considerable funding and interest. Dr. Andrew McDonald's work in Southeast Asia on plant species in critically endangered habitats has been drawing international attention. Dr. Kathryn Perez and her students discovered a new species of snail in the Lower Rio Grande Valley. UTRGV Biology is leading the research on Zika and their mosquito vectors through the efforts of Dr. Chris Vitek, Dr. John Thomas, and Dr. Patricia Fera. Dr. Fera is also continuing her work on the vectors of Chagas Disease and is working on the vulnerable plant species Johnston's frankenia.

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CHEMISTRY



Interim Chair: Dr. Yuanbing Mao

The Department of Chemistry is an energetic department consisting of 30 faculty members, 4 staff, and over 400 majors distributed across two campuses in Edinburg and Brownsville. The first two

years of UTRGV saw the addition of three excellent faculty members Dr. Shervin Fatehi and Dr. Shizue Mito and Dr. M. Jasim Uddin. We successfully added Mr. Glenn Grissom and Mr. Joe Lara as our Lab Technical Service Supervisor and Chemistry Lab Coordinator, respectively. Unfortunately, we also experienced the resignation of Dr. Tarek Trad and Mr. Ed Villarreal. The Department of Chemistry has been highly active in research from 2015-2017 with several million-dollar external grants. With the "Student First" philosophy in mind, the Department of Chemistry is dedicated to inspiring our students and serving their needs. We also engage our students in research and they frequently bring in awards for their efforts. At this fresh and exciting beginning, the Department of Chemistry has paved a solid and bright way for more success. The opening of the Brownsville Multipurpose Academic Center and the Edinburg Science

Research Building next year will allow us to expand our instructional and research capacities and bring in extra expertise. We are confident that many more achievements and breakthroughs are on the way!

Student Success Initiatives

The Department of Chemistry also focused considerable time and effort toward the issue of student success in General Chemistry courses.

In partnership with Leslie Jones and the staff at the Learning Center, we created mandatory peer-led team-learning (PLTL) sessions attached to each general chemistry section. Dr. Chris Smith received professional development training at a workshop in NYC on how best to promote PLTL in these sessions. After 1 semester, we saw a 17% (53%) increase in the pass rate in CHEM 1312, which had a 5 year pass rate average of 35%.

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DEPARTMENTS AND SCHOOLS

PHYSICS & ASTRONOMY



Chair: Dr. Soma Mukherjee

The Department of Physics and Astronomy at the University of Texas Rio Grande Valley (UTRGV) has 25 tenure track and tenured faculty members and several lecturers, post-doctoral scholars, research and visiting faculty members actively engaged in research in the areas of Applied Optics, Biophysics, Computational Physics, Gravitational Wave Astronomy,

Nanotechnology, Optical Astronomy, Physics Education, Radio Astronomy and Relativistic Astrophysics. Besides excellence in research and teaching, the department places special emphasis on early involvement of undergraduate and graduate students in research. Several opportunities for generous financial support are provided to deserving students at all levels. Integration of research and education at all stages is one of the strengths of the department. The department lays emphasis on high quality teaching and student mentoring. The department has a strong, well-funded research program. The department faculty members have close research collaborations with scientists across the globe. To facilitate such cooperation and collaboration, an interdisciplinary research center - Center for Gravitational Wave Astronomy (CGWA) - was formed in 2003 that has been supported by NSF, NASA, and DoD grants of over \$30 million. On September 14, 2015, the first gravitational waves were detected by the Laser Interferometric Gravitational Wave Observatory (LIGO) detectors. Detection of gravitational waves opens a new window to our universe. The department of physics at UTRGV has the largest

group of gravitational-wave researchers in Texas and is one of the largest in the United States involved in the [LIGO Scientific Collaboration](#) global research effort. Its scientists and student researchers are key contributors to the first direct detection of gravitational waves.

In 2011, a second research center, the Center for Radio Astronomy (CARA), was formed with funds from DoD and NSF. CARA has received over \$5 million in external funding. The Spacecraft Tracking and Astronomical Research into Giga-hertz Astrophysical Transient Emission (STARGATE) is a space exploration based technology park that combines higher education, research, economic development, and commercialization. STARGATE resources will give students and faculty unprecedented opportunities for near and deep space exploration research and technology development. STARGATE has been funded by the UT System, state of Texas and Brownsville Economic Development Board for a total of over \$15 million. The department offers Bachelor's (B.S.) and Master's (M.S.) programs in Physics. In addition, a cooperative Ph.D in physics program is also offered with the University of Texas at Arlington.

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SCHOOL OF EARTH, ENVIRONMENTAL, AND MARINE SCIENCES



Director: Dr. David Hicks

The School of Earth, Environmental, and Marine Sciences (SEEMS) was the sole

novel academic unit emerging from the College of Sciences at the onset of UTRGV. SEEMS is truly multi- and transdisciplinary combining environmental sciences, geosciences, and marine science with sustainability, socioeconomics, and policy aimed at solving real-world problems. Since its inception, it has developed new academic programs and boasts the highest research revenues in the College of Science surpassing \$10 million during the 2016-2017 academic year. Existing academic programs include a bachelors of science in Environmental Science and Marine Biology and two masters of science in (i) Agricultural, Environmental, and Sustainability Sciences and (ii) Ocean, Coastal, and Earth Science. In addition to academic programs in Edinburg and Brownsville, SEEMS also has

education, research, and outreach programs hosted from its facilities in Port Isabel and South Padre Island. SEEMS has a fleet of bay and offshore vessels, the most notable are the 47 ft. R/V Vollert, a hydrographic research vessel and the R/V Ridley, a 56 ft. trawler outfitted as a floating classroom. The R/V Vollert additionally supports the SEEMS Scientific Diving Program with built-in stations to accommodate 10 divers. The R/V Ridley serves as a window to the marine environment for school groups (k-12), university courses, and community groups to observe fish and marine invertebrates in onboard touch tanks. SEEMS also has a set of autonomous ocean observing teleoperated vehicles for long-term monitoring and research in the Gulf of Mexico and beyond.

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DEPARTMENTS AND SCHOOLS

SCHOOL OF MATHEMATICAL AND STATISTICAL SCIENCES



Interim Director: Dr. Timothy Huber

The School of Mathematical and Statistical Sciences (SMSS) had four new faculty join in fall 2017, significantly strengthening the scope of research activities in the statistics group. Two of the new faculty, Dr. Dembra Fofana and Dr. Zhengjun Jiang, have

backgrounds in statistics, economics, and Associate Professors in the School were promoted to full Professor. These include Dr. Jasang Yoon, Dr. Anahit Galstyan, Dr. Santanu Chakraborty, Dr. Elena Poletaeva, and Dr. Vesselin Vatchev. We are proud to announce that Dr. Zhijun Qiao was appointed to serve in the prestigious position of President's Endowed Professor from 2017-2019. Two new grants were awarded for innovative research, including a National Science Foundation for Dr. Baofeng Feng dedicated to mathematical models in nonlinear optics. Dr. Jasang Yoon reached out to colleagues across the border and was awarded an international collaboration grant from The University of Texas System and Consejo Nacional de Ciencia y tecnologia for work in Fredholm Theory.

Dr. Cristina Villalobos was recognized as

one of the leading Latinas and Hispanics in the M Hispanic Heritage Month by the American Mathematical Society; Dr. Villalobos also received the American Association of Hispanics in Higher Education Service/Teaching Award.

The School is proposing a new doctoral program in Interdisciplinary Mathematical and Statistical Sciences. The proposed program will have specializations in Pure & Applied Mathematics, Computational Mathematics, and Statistics, and is designed to meet the needs of students interested in a wide range of careers including those in academia, industry, and government. A Planning Authority proposal for the Ph.D. program is currently under consideration by the UT System.

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CENTERS & PROGRAMS

THE CENTER FOR GRAVITATIONAL WAVE ASTRONOMY



Director: Dr. Mario Diaz

The Center for Gravitational Wave Astronomy (CGWA), founded in 2003 through a grant from the NASA University Research Centers program, has been since its inception a member of the LIGO Scientific Collaboration -LSC- (UTRGV CGWA founders Joe Romano and Mario Diaz are members of LSC since 1998).

On February 11, 2016, LSC jointly with the VIRGO collaboration (its European counterpart) announced in a press conference that received worldwide coverage, its first detection of gravitational waves originated in the merger of two black holes located at more than a billion light years from us. The UTRGV CGWA has the largest group of gravitational-wave researchers in Texas and is one of the largest from the United States involved in the LIGO

Scientific Collaboration global research effort. Its scientists and student researchers are key contributors to the first direct detection of gravitational waves. Subsequent to the first detection, the LIGO observatories detected another merger of Black Holes on December 26, 2015, and a third detection was observed on January 4, 2017. The era of Gravitational Wave Astronomy has started! In the next few years, some of the most profound mysteries of our universe will be explored through this new window into it: how many black holes are out there? Could the massive black holes detected have been formed early in the history of our universe and thus explain what is dark matter, which constitutes almost 85% of the matter in the universe and whose nature is unknown? Are neutron star mergers the origin of the mysterious short duration Gamma ray bursts detected by NASA satellites coming from all directions in the universe?

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CENTERS & PROGRAMS



Director: Dr. Fredrick Jenet

For the last two years, the majority of efforts within CARA was focused on finishing the Texas Emerging Technology Fund milestones to unlock major funding for the STARGATE program. As of August 8th, 2017, the CARA team successfully obtained the third and final tranche of funding from the office of the governor. In addition, these two years also saw the creation of three new initiatives, the ARCC Network (ARCCNet), the CARA-UT Dallas collaboration, and the STARGATE Technology Launch Pad (STLP). ARCCNet is a collaboration of 8 universities using the successful ARCC education/research model. Members of CARA and UT Dallas teamed up to develop new radio frequency based data analysis algorithms for CARA's Low Frequency All Sky Monitor. The STLP is a focused NewSpace business incubator program that will give UTRGV students and local community members the tools they need to develop high-tech startup companies.

CENTER FOR ADVANCED RADIO ASTRONOMY

Major Accomplishments:

- 1) Groundbreaking and near completion of the 15,000 sq STARGATE facility at Boca Chica.
- 2) Completion of all milestones for the Texas Emerging Technology Fund unlocking major funding for the STARGATE program.
- 3) The ARCC Network, a collaboration of 5 Universities using the ARCC education/research model, was created.
- 4) The STARGATE Technology Launch Pad (STLP), a NewSpace Business incubator/accelerator was created in strategic alliance with the Houston Technology Center, was created.
- 5) CARA received an NSF EARS award to create a collaboration with UT Dallas to use CARA's Low Frequency All Sky Monitor (LoFASM) to develop advanced algorithms to better use the radio spectrum.
- 6) The first STARGATE Academy sponsored by a third party (BISD) as held this summer.
- 7) Two ARCC Team Leader Training Workshops were held, one here at UTRGV, and one at Franklin & Marshall College. The F&M workshop marked the first ARCCNet event organized by an external ARCCNet member.

CENTER OF EXCELLENCE IN STEM EDUCATION (C-STEM)



Director: Dr. Cristina Villalobos

The Center of Excellence in STEM Education (C-STEM) is an office dedicated to providing students interested in STEM with academic and professional development resources. These resources contribute to informing our students with vital information that is necessary in preparing them for some form of higher education (i.e., graduate or professional school) and the workplace. C-STEM informs students as to what it takes to start their undergraduate research careers, obtaining summer research internships, applying to graduate school and fellowships. We bring in distinguished professors, both local and national, in order to give students a firsthand account as to what it takes to be successful. Additionally, TED Talks are shown in order to promote conversation and networking amongst students in order to further develop as a professional. Aside from undergraduate

students, C-STEM also provides community outreach with students from K-12. Students come in to the center and learn about STEM, after a brief presentation that introduces specific STEM related concepts they get to apply their knowledge in a hands-on activity that is supervised by our technical staff. Overall, the Center of Excellence in STEM Education is here to assist and inform all students as to what it takes to be successful as they progress through their academic careers.

Attendance: Since the inception of the Center in Fall 2012, we have had over 35,400 faculty, college students and K-12 students/teachers visit the Center for workshops or hands-on activities. Breakdown is as follows:

- UTRGV Faculty: 2350
- College students: 7830
- K-12 Students: 23,000
- K-12 teachers: 2300
- Publications: 24
- External national-level presentations: > 30 (meaning greater than 30)
- Awards
 - 4 national-level awards in Leadership/Student Mentoring
 - 15 University/Regional/State-Level awards of which 5 were the UT Regents' Outstanding Teaching Award to faculty who co-founded the Center, that is served as CoPIs on the DoD grant
- Endowment—Secured a \$125K endowment from Mr. Lee Aaronson from Lack's Furniture Stores

CENTERS & PROGRAMS



Co-Director: Dr. Kenneth Smith

The UTeach Rio Grande Valley Program is a secondary teacher preparation program for mathematics and science majors at The University of Texas Rio Grande Valley. The program, which began as UTeach Brownsville and UTeach Pan American in 2012, has completing its five-year replication period on August 31, 2017. Dr. Roger Contreras has served as the science co-director/project manager for UTeach RGV and, previously, for UTeach Brownsville.

UTEACH

He is now retired as of August 31 and Dr. Kenneth Smith has taken up the mantle as Co-Director.

KEY ACCOMPLISHMENTS, 2015 - 2017

For AY 2016 – 2017, the UTeach Rio Grande Valley Program achieved the highest active enrollment of all 46 UTeach programs in the nation. The official count was 485 students.

School District Partners for Field Placements, Including Apprentice Teaching (Student Teaching)

- Brownsville Independent School District
- Edinburg Consolidated Independent School District
- Harlingen Consolidated Independent School District
- Los Fresnos Consolidated Independent School District
- McAllen Independent School District
- Mission Consolidated Independent School District

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Principal: Dr. Wilma Smetter

The Mathematics and Science Academy (MSA) at the University of Texas Rio Grande Valley is about transforming potential into achievement; It's an award-winning program that provides a path for high School students gifted in math and science to foster their talents through unparalleled opportunities.

June 2015: UTRGV Mathematics and Science Academy receives \$1 million Special Line Item Funding to expand to the Edinburg Campus

MATHEMATICS AND SCIENCE ACADEMY

May 2016: First group of 62 students graduated from the UTRGV Math and Science Academy

October 2016: UTRGV Math and Science Academy celebrated expansion to Edinburg Campus with ribbon-cutting ceremony

October 2016: UTRGV Mathematics and Science Academy presented at the Hispanic Association of Colleges and Universities Annual Conference – UTRGV Mathematics and Science Academy: A Hybrid Model of Excellence

January 2017: MSA wins 1st place/\$150 Sodexo Credit at the UTRGV Homecoming Spirit Week Can-Struction Event

June 2017: Sixty-seven UTRGV Mathematics and Science Academy students attended UTRGV summer courses to accelerate their degree attainment.



DEVELOPMENT OFFICE

Dr. Lokenath Debnath Establishes the Debnath Endowed Professorship in Mathematical Sciences

Professor Emeritus for The University of Texas Rio Grande Valley, Dr. Lokenath Debnath, has established the Debnath Endowed Professorship in Mathematical Sciences. This is the first professorship for Mathematics within the UTRGV College of Sciences. "I established an endowed professorship in mathematical sciences to promote research and grant activities, and to expand graduate programs in mathematics and statistics," said Debnath. "It will also help us attract national and international scholars and professors to UTRGV."



Debnath also envisions the endowment creating innovative opportunities for students. "Our graduate students and junior faculty will be able to do research under the direction of a top expert in the field of mathematical sciences," said Debnath. "The Debnath Endowed Professorship will bring in an experienced and accomplished leader who will have a positive impact in the classroom." Debnath has been a generous donor to the university since 2003, with several gifts to the university library.

Debnath served as a professor at UTRGV legacy institution UTPA beginning in 2001. He served as chair of the Department of Mathematics in the College of Science and Mathematics. Debnath's research focused on pure math, applied math, math education, history of mathematics, and engineering. He also studied tsunami and tornado waves. A Senior Fulbright Fellowship recipient twice, Debnath has published more than 400 refereed research papers and 30 advanced graduate level books and research monographs in his career.

Several of Debnath's publications are used at top universities, including Princeton University, Stanford University, Georgia Institute of Technology, Clemson University, University of California Berkeley, Notre Dame University, The University of Texas, and University of Central Florida. He is the founding editor of the 39-year-old International Journal of Mathematics and Mathematical Sciences and has served in editorial capacities on 12 other national and international mathematics, physics and engineering journals.

2017 / 2018 DEAN'S GRADUATE FELLOWS



Acadia Larsen / SMSS
Advisor: Dr. Brandt Kronholm



Stephanie Kasper / SEEMS
Advisor: Dr. Christopher Gabler



Andrew Corder / SEEMS
Advisor: Dr. Christopher Gabler



Aminur Chowdhury / Chemistry
Advisor: Dr. Mohammed Uddin



Wendy Westerheide / Biology
Advisor: Dr. Zen Faulkes



Jackson Johnstone / SEEMS
Advisor: Dr. MD Rahman



Casey Hughes / Chemistry
Advisor: Dr. Jason Parsons



Palash Roy / Physics and Astronomy
Advisor: Dr. Malik Rakhmanov



Cameron Moody / SEEMS
Advisor: Dr. Richard Kline

FACULTY & STAFF

STAFF EXCELLENCE AWARDS



Left to right: Rosalinda Salazar, Thomas Eubanks, Hector Leal.
Not Pictured: Sylvia Y. Quintero

During the 2016/2017 academic school year, 4 outstanding employees were selected as recipients to the COS Staff Excellence awards. Nominations were submitted from COS faculty, staff and students and were evaluated by a committee whom selected the awardees. Mr. Thomas Eubanks from the department of Chemistry was recognized as employee of the year. Mrs. Rosalinda Salazar from the College of Science's Dean's Office was recognized for her service with the "Customer Service" award. Mrs. Sylvia Y. Quintero from the department of Biology received the "Inspirational Leadership" award, and Mr. Hector Leal from the department of Physics and Astronomy was awarded the "Innovation" award.

FACULTY EXCELLENCE AWARDS

College Award for Excellence in Teaching

Dr. Dambaru Bhatta is an accomplished professor and teacher in the School of Mathematical and Statistical Sciences in the College of Sciences at UTRGV. He has taught a variety of courses from entry level to graduate courses and has consistently received excellent ratings from students while maintaining high expectations of student performance. His teaching includes the use of technology to augment the classroom instruction, and assess student learning outcomes. His teaching contributions extend beyond the classroom with his involvement in outreach and community engagement related to mathematics. Dr. Bhatta is an outstanding and dedicated teacher who is described as a cornerstone of the School of Mathematical and Statistical Sciences!



College award for Excellence in Research

Dr. Yuanbing Mao is currently serving as Interim department chair for the department of Chemistry. His research focuses on the development of novel nano-structural materials and architectures, and exploration of their novel properties to solve global energy challenges. Dr. Mao's research contributions are highly impactful and have expanded the body of knowledge in his discipline. He has published 30 peer-reviewed research papers, written two book chapters and granted two patents over the last 5 years! Within only seven years of his arrival to UTRGV, he has established a vigorous and highly competitive research program with a total funding exceeding \$6.75 million. Dr. Mao's success in research, scholarship and creativity truly rivals that of Tier I research institutions!



College Award for Excellence in Service

Dr. Soma Mukherjee is a professor and chair of the Department of Physics and Astronomy. She is a dedicated teacher, an accomplished researcher, and a passionate academic leader. She is recognized internationally for her research in the field of gravitational wave astronomy and actively involved in highly collaborative research at national and international levels. In her role as department chair, Dr. Mukherjee serves with poise and professionalism! She is credited with creating a professional environment that is hospitable and encourages faculty participation, collegiality and innovation. She has also worked tirelessly to bring the faculty and students from both campuses together through a series of departmental seminar series which provide stimulating intellectual exchanges. Dr. Mukherjee is an ardent supporter of her faculty, staff and students and never misses the chance to brag about them and nominate them for any local or national award. She is a truly excellent and dedicated servant leader!

STUDENT ORGANIZATIONS

- Animal Therapy Club
- Astronomy Club
- Biomedical Sciences Association
- Chemical Agents
- Elliott Chemical Society
- Geology Club
- Gorgas Science Society
- Health Care Coalition
- Latino Medical Student Association
- Medicine, Education, and Development for Low Income Families Everywhere (MED-LIFE)
- Operation Smile Club
- Pre-Dental Society at UTRGV
- Pre-Optometry Society of UTRGV
- Pre-Medical Bio-Medical Association (PMBMS)
- Pre-PA Society
- Society for Industrial and Applied Mathematics
- Society of Physics Students
- South Texas Engineering, Math & Science Mentors club
- The American Medical Student Association
- UTeach Student Organization
- Vaquero Pre-Pharmacy Association

UPCOMING EVENTS

- **CoS Faculty & Staff Holiday Celebration**

December 7, 2017 at Edinburg Ballroom
12:00 - 2:00PM

- **CoS Alumni Reception**

February 8, 2018 at the Visitor's Center in Edinburg
5:30 - 6:30PM

- **CoS Annual Conference**

Spring 2018, Location TBD

- **Science Symposium**

In honor of Dr. Lokenath Debnath. April 7, 2018, Location TBD

- **Staff Excellence Awards - Nominations**

Deadline to submit nominations is February 2, 2018. Winners will be announced at the 2018 COS Annual Conference



Science Notes

College of Sciences

Parwinder Grewal, PhD, Dean

Mohammed Farooqui, PhD, Associate Dean for Faculty Success

Virgil Pierce, PhD, Associate Dean for Student Success

Alexis Racelis, PhD, Associate Dean for Community engagement and Outreach

Karen Martirosyan, PhD, Associate Dean for Research and Educational Innovation

Editors

John Trant, PhD, Professor of Biology

Leonardo Vazquez, Administrative Assistant