This annual review is compiled to promote scholarship and document a record of the published and creative works of The University of Texas at Tyler faculty for academic year 2017-2018. Information was compiled from Faculty180©, the University’s platform for faculty activity reporting.

Through university research and scholarly works, we develop a wealth of knowledge that serves both our internal and external communities.

When we draw on the scholarship of University experts, we can discover innovative solutions to issues facing those communities. Our scholarship not only fortifies our academic foundation but also significantly enhances the East Texas region.

For a region as large and vibrant as ours to continue to prosper, it must have a strong university at its core. As the only University of Texas general higher education institution in the entire region, we are a rich resource, and as always, it is my pleasure to recognize and celebrate the vast array of expertise that we possess.

We recently launched the 100 Communities initiative intended to build partnerships in cities and towns across East Texas to enhance economic and educational outcomes and improve the well-being of the region.

It is the great work represented here that will support this initiative and help move our region forward.

Whether it is finding better ways to deliver cancer treatment, working to decrease infant mortality in rural areas, supporting victims of human trafficking or providing resources to facilitate small business development and entrepreneurship, your scholastic endeavors will touch our region.

This continues to be an exciting time for The University of Texas at Tyler. We are ripe with knowledge and opportunity that can benefit all of East Texas.

Dr. Michael Tidwell
President, The University of Texas at Tyler

The Robert R. Muntz Library is delighted to be an active participant in acknowledging The University of Texas at Tyler faculty’s scholarly and creative works. As primary knowledge supporters for our institution, Muntz Library staff are here to work with, and for, our faculty in any way we can to promote their academic endeavors. We have shown our respect and admiration for this in a most profound way for the past five years via the “A Celebration of Scholarship and Creativity” event. We confirm this by our constant interactions and support for faculty and students through our librarian liaisons, library public services, technical services, library systems and university archives. On behalf of all the Robert R. Muntz staff, I extend to you all a heartfelt congratulations on your scholarly and creative accomplishments for AY 17/18.

-Rebecca McKay Johnson, Executive Director of Robert R. Muntz Library
The faculty in the College of Arts and Sciences are extraordinary scholars, teachers and mentors. Their student focus is evident in everything they do, including scholarly and creative work. The ability of our students to participate in research and then present or publish the results alongside their faculty mentor is important.

Over just the last year, the faculty has published dozens of articles in professional and peer-review journals and authored or co-authored multiple books published by prestigious outlets. Many of these efforts involved student co-authors. In addition, our faculty or their students made over 100 presentations at professional conferences at the regional, national and international level.

The faculty also continue to earn recognition for their effective and innovative teaching achievements. A large number of UT Tyler’s Regents’ Outstanding Teaching Awards, the most prestigious teaching recognition given by the University of Texas System, have been received by faculty in arts and sciences. Faculty have also received several other teaching awards.

The Talon student newspaper, Debate Club and Model United Nations are all housed in the College of Arts and Sciences and are the recipients of numerous awards and recognitions at regional and national competitions. The Debate Club program is considered one of the top 10 in North America. All of these activities are open to students regardless of their major and home college and are coordinated by well credentialed members of the faculty.

The College of Arts and Sciences is also the pre-professional school of medicine, law and pharmacy. Others are staying with us and entering graduate programs in their area of interest in the humanities, social sciences and natural sciences.

The college has as its main mission to be instrumental in building and sustaining the middle class in its service area. Of the top 10 skills that employers seek in ideal employees, almost all have their home in arts and sciences. Skills like communication, critical thinking, creativity, reasoning, ethics and problem-solving are all foundational skills for the arts and sciences. Because of the value of all our disciplines, our advisors are strong advocates for the double major, an initiative that can, with planning, be completed in a four-year time period.

The arts and sciences are the heart and soul of a university. We are the crossroads for all of higher education. As bearers of this important responsibility, we are dedicated to the education of every student regardless of major. Our goal is to ensure that every UT Tyler student has a strong and diverse skill set that will prepare them for the unprecedented challenges and opportunities in the 21st century.

**ART AND ART HISTORY**

**Chapters**


**Creative Performances**


**Creative Productions**


Wright, M. (2017). Studio Art Faculty Exhibition. Meadows Gallery, University of Texas at Tyler. Tyler, TX: University of Texas at Tyler.


**Journal Publications**


**Presentations**


Journal Publications


Watters, A., Williams, L. R., Williams, M., Ford, N., & Banta, J. (2017). Ecological niche modeling supports the current taxonomy of freshwater mussels that are considered at risk in east Texas, USA. Aquatic Conservation: Marine and Freshwater Ecosystems.


Other Teaching Materials


Poster Presentations


Presentations


McCarley, J., Banta, J. A., Hertweck, K., Placyk Jr., J. S., Williams, M., & Williams, L. R. (2018). The status of the Katschike Painted Crayfish (Orconectes malaeata) in Louisiana. 42nd Annual Meeting of the Texas Chapter of the American Fisheries Society. Hilton College Station and Conference Center in College Station, Texas.


Reviews


Grants

Gray, Neil (PI), Mason (Co-PI), Pearce (Co-PI), Shtoyko (Co-PI), Smee (Co-PI). Welch Foundation Chemistry Department Research Grant FY2018. Robert A. Welch Foundation (June 1, 2017), USD $35,000.


Banta, Joshua. Distribution of Subspecies of wild Rose Mallow in East Texas, Texas Ecolabs (December 17, 2017), USD $3,141.

Kelner, Katrin. Spatial diversity of microbial communities of two fungus-gardening ants of Texas. Texas Memorial Museum/Texas Ecolabs (February 1, 2018), USD $8,815.17.


CHEMISTRY AND BIOCHEMISTRY

Chapters


Journal Publications


Grants

Gray, Neil (PI), Mason (Co-PI), Pearce (Co-PI), Shtoyko (Co-PI), Smee (Co-PI). Welch Foundation Chemistry Department Research Grant FY2018. Robert A. Welch Foundation (June 1, 2017), USD $35,000.

COMMUNICATION

Books

Chapters

Journal Publications

Poster Presentations


**LITERATURE AND LANGUAGES**

**Chapters**


**Journal Publications**


**Presentations**


**Reviews**


**MATHEMATICS**

**Journal Publications**


**Presentations**


**Proceedings Publications**


**Grants**

Milan, David. Texas Undergraduate Mathematics Conference, National Science Foundation (August 2018), USD $7,290.
MUSIC

Creative Performances

Creative Productions

Journal Publications

Other Teaching Materials

Presentations

POLITICAL SCIENCE AND HISTORY

Books

Chapters

Journal Publications

Other


Presentations
International University.


Books


Other

Presentations

Beach, Timothy, Luzzadder-Beach, Sheryl, Valdez, Fred, and Guderjan, Thomas. Ground-truthing the first LiDAR imagery of ancient Maya wetland fields: twenty years of field work and two days of LiDAR. Paper presented at the annual meeting of the American Association of Geographers (April, 2018, New Orleans).


Proceedings Publications

Grants
Sills, E. Cory. Labor Organization in A Traditional Complex Society. National Science Foundation (August 1, 2018), USD $74,669.
The College of Education and Psychology’s core purpose is to prepare competent, caring and qualified professionals in the fields of education, psychology and counseling and to advance the knowledge base in our respective disciplines.

We embrace this trust by:
1) preparing the next generation of educators and mental health professionals,
2) expanding the knowledge base in our respective disciplines,
3) providing service to improve the quality of life within our region and state.

The College of Education and Psychology consists of a community of scholars charged with enriching the knowledge base within our respective fields. This is accomplished through the research and scholarship that our faculty pursue. This past year, the college published three books, 25 chapters, 25 journal articles and presented 16 poster sessions and 59 presentations. In addition, the college in conjunction with the Ingenuity Center generated $2.9 million in external funding.

A major initiative of the College of Education and Psychology is addressing the pressing issues of our region. Two of the biggest issues impacting East Texas are educational attainment and mental health. The college is addressing these issues through a series of educational centers focused on conducting and/or disseminating research-based practices to concentrate on these challenges.

The K-16 Literacy Center is engaged in a number of research-based projects designed to promote literacy with a special emphasis on early literacy in East Texas. The Ingenuity Center is addressing the issue of science, technology, engineering and mathematics (STEM) by recruiting more STEM majors in education and more professionals in the field.

The Memory Assessment and Research Center (MARC) is working in conjunction with the Alzheimer Alliance to provide free dementia screening and family counseling for East Texans. The East Texas Center for School Based Research and Instruction is designed to provide high quality, research-based professional development activities for teachers and administrators that promote student achievement.

As Plutarch said, “The mind is not a vessel to be filled but a fire to be kindled.” And PSYCHOLOGY is an awesome responsibility and a tremendous public trust.

The College of Education and Psychology’s unique value proposition is that we want to inspire and educate. We want our students, staff and faculty to be “Architects of Human Potential.” It is an awesome responsibility and a tremendous public trust.

THE UNIVERSITY OF TEXAS AT TYLER  |  2017-2018

PSYCHOLOGY AND COUNSELING

Chapters


Oceja, L., & Stocks, E. (2017). The path from helping one to helping the group – and beyond. In E. van Leeuwen and H. Zagefka (Eds.), Intergroup Helping. Springer. 10.1007/978-3-319-53026-0.


Journal Publications


Other


Poster Presentations


THE UNIVERSITY OF TEXAS AT TYLER  |  2017-2018

21
Poster presented at the East Texas Psi Chi Student Research Conference. Tyler, TX.


Presentations


Proceddings Publications

Books


Case Studies


Chapters


Journal Publications


Conference. Austin, TX: Texas Council of Women School Executives at the Texas Association of School Administrators Mid-Winter Conference.


Proceedings Publications


Grants


Lamb, John. Middle Grade Matters 2018, Greater TX Foundation (June 1, 2018), USD $865,563.


Proceedings Publications


Grants


Lamb, John. Middle Grade Matters 2018, Greater TX Foundation (June 1, 2018), USD $865,563.
The professions of engineering and construction management are transformative endeavors that leverage creativity, critical thinking, technical skills, math and science, leadership, and ethical practices to innovate solutions for complex problems. As a multi-site College of Engineering with campuses in Tyler and Houston, we provide unique opportunities that leverage relationships with industries in East Texas, the Greater Houston area and the neighboring Dallas-Fort Worth metropolis. Our faculty is composed of highly engaged individuals dedicated to student success, research excellence and the advancement of their discipline.

Under the auspices of a growth mindset, the College of Engineering has identified three technical foci to focus efforts toward as we move forward. In the area of biotechnology and biomedical engineering, we have several faculty members, including Dr. Shih-Feng Chou, who is working in the area of tissue engineering and wound healing; Dr. Premananda Indic, who is focused on wearable sensors and analysis and processing of biomedical signals; and Prabha Sundaravadivel, whose research focus areas include smart healthcare.

More than a half dozen of our faculty are contributing in the area of infrastructure engineering, including Mena Souliman, who is studying advanced asphaltic pavement design; Michael Gangone, who is active in the area of bridge monitoring and sensing; Nelson Fumo, who is working with industry partners in advanced residential heating and air conditioning systems; and Mukul Shrivakar, whose work is related to power transmission.

Finally, the area of innovation in engineering education impacts the entire college. COE hosted the American Society of Engineering Education Gulf Southwest Conference in March 2019, where our faculty contributed to more than 20 papers across areas including developing ethics, leadership and character in engineering students, increasing the engagement of engineering students, and conducting technical research with graduate students. This year, our faculty have continued to increase their productivity in the area of research and scholarship. A few examples are provided below.

Dr. Fredericks Brown earned an award from the National Science Foundation (NSF) entitled “Research Initiation: Understanding the Impact of Engineering Faculty’s Mindset on Instructional Practice, Learning Environment and Teacher Authenticity.” Dr. Brown’s primary technical research interest is numerical modeling and simulation of thermal/flow transport phenomena in physiological and engineered systems. She has applied her expertise in finite element modeling to optimize the efficiency of parabolic solar trough collectors used for domestic heating applications, thermal comfort and energy demands, and thermal transport phenomena in skin, and has been productive in engineering education and increasing the number of students in the pipeline through P-16 initiatives.

Dr. Tahsin Khajah in mechanical engineering contributed to seven journal articles and 19 conference papers in the last year. Along with co-authors, he published a paper in the Journal of Computer Methods in Applied Mechanics and Engineering (CMAME) entitled “ Highly accurate acoustic scattering isogeometric Analysis coupled with local high order Fairfield Expansion ABC.” The paper is an exploration of microwaves in wave propagation, a field that Dr. Khajah has been making contributions in for nearly two decades.

Dr. Shih-Feng Chou received the American Heart Association Institutional Research Award in 2018, and his most current publication in 2019 described the use of electrospray drug-eluting fibers in stem cell therapy for skin tissue regeneration. Dr. Chou is an assistant professor in the Department of Mechanical Engineering with backgrounds in materials science, biomaterials, drug release and tissue engineering.

**Journal Publications**

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**Other**

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**Presentations**


ELECTRICAL ENGINEERING

Books

Journal Publications

Other

MECHANICAL ENGINEERING

Chapters

Creative Productions

Journal Publications

Grants

Posters Presentations
Presentations


Proceedings Publications


Grants


Chou, Shih-Feng. The use of membrane-tethered Kunitz-type inhibitors to prevent thromboresistance for implantable devices. AHA (April 1, 2018), USD $154,000.

Chou, Shih-Feng. TX National Security Network 2018: A rapid and cost-effective decontamination method for public transportations against chemical and biological warfare agents. UT System (June 1, 2018), USD $23,827.


Garcia, Andres. TX Space Grant Student Design Challenge. Texas Space Grant Consortium (September 1, 2017), USD $1,200.

The College of Nursing and Health Sciences (CNHS) continues to contribute to excellence in scholarship and creativity at UT Tyler. We offer outstanding health-related degree programs in East Texas and beyond. Our graduates are well prepared to practice in a variety of complex, continually changing environments.

The CNHS currently houses the School of Nursing, Department of Health and Kinesiology, and Institute for Integrated Healthcare. The CNHS enrollment continues to grow with 2,672 students in fall 2018 (UT Tyler Factbook).

The School of Nursing accounts for 20 percent of the total enrollment at UT Tyler, and about 20 percent of prospective students are interested in the nursing program at UT Tyler’s top nursing program. The School of Nursing maintains the rigor of its programs. BSN graduates had a 94.38 percent pass rate on the national licensure exam (NCLEX) in 2018. MSN Family Nurse Practitioner (FNP) students had a pass rate of 100 percent in 2018. Our online Master of Science in Nursing (MSN) was ranked No. 1 in the nation for affordability of online master’s in nursing by affordablecolleges.com (https://www.affordablecolleges.com/rankings/affordable-online-masters-nursing-programs/).

The faculty in the Department of Health and Kinesiology continued their excellent teaching and research activities. Our online Master of Science in kinesiology was nationally ranked No. 12 in sports medicine by bestschools.org.

The Institute of Integrated Healthcare continued to support faculty research (ACL injury and rehabilitation, sleep hygiene, and exercise intervention for cancer patients). MSN Family Nurse Practitioner (FNP) students had a pass rate of 100 percent in 2018. Our online Master of Science in Nursing (MSN) was ranked No. 1 in the nation for affordability of online master’s in nursing programs by affordablecolleges.com (https://www.affordablecolleges.com/rankings/affordable-online-masters-nursing-programs/).

New Programs in the CNHS

1. The New Master of Occupational Therapy (MOT) program: The first class of 20 MOT students with an average GPA of 3.76 was admitted to the MOT program in fall 2018. The second class of 24 MOT students will be admitted to the MOT program in fall 2019.

2. The Communication Sciences and Disorders (CSD) BS program: The CSD BS program has been moved from the CAS to the CNHS smoothly. We are in the process of hiring the CSD program director and working with the faculty and students to ensure the success of the CSD program.

International Activities in the CNHS

1. The college has sponsored eight visiting scholars from four universities in China including Shandong University, Shandong University, Shandong Sports University, and Zhengzhou University, and four exchange international students from Shandong University.

2. The School of Nursing started a MSN Face-to-Face cohort for international students in the fall of 2018 and received an endowment of scholarship ($100,000) for 15 MSN Face-to-Face students.

3. The CNHS has worked on a 3.5+1 agreement with Central China Normal University in health and kinesiology and a MS transfer agreement with several universities in China and Hong Kong.

In summary, the CNHS leadership team, faculty, and staff continued to work diligently to promote our student enrollment, retention and graduation rates, and faculty scholar productivity, and to pursue external grant funding.

HEALTH AND KINESIOLOGY

Chapters


Journal Publications


Presentations


Breastfeeding Management. Deerfield Beach, Florida: Healthy Children Project.

Francis, J. (2018, January). Why is supporting the normal breastfeeding dyad so difficult in the first 3 days? Labor and delivery/neonatal/postpartum staff education day. Family Birthplace: East Texas Medical Center.


Sorensen, W. (2018, Spring). A experiência de pesquisa no Texas de local para internacional. Presented to Universidade de São Paulo, Ribeirão Preto College of Nursing. Ribeirão Preto SP, Brazil: USP EERP.


Reviews


Tseng, B., & Marzili, C. (2018). Diagnosis and Management of Post-Stroke Fatigue—What Do We Know, What Do We Still Need to Know. Research in Medical & Engineering Sciences.


Grants

Francis, Jimi. Community-Based Breastfeeding Education in Relation to Breastfeeding Initiation and Duration in the Tyler Area. Foundation for Maternal, Infant, and Lactation Knowledge (September 1, 2017), USD $1,250.


Francis, Jimi. Summer Fellowship Program, Connecticut Center for Entrepreneurship & Innovation (May 16, 2018), USD $15,000.

Francis, Jimi. Evidence-Based Entrepreneurship, Accelerate UConnNSF (February 8, 2018), USD $3,000.
The Ben and Maytee Fisch College of Pharmacy was established in fall 2013 with the mission to advance the public health and wellness of the citizens of East Texas and beyond through innovation and collaboration in pharmacy, education, scholarship and advocacy. In fall 2015, the pioneer class of 82 students was enrolled and the faculty began delivering an integrated curriculum using an innovative pedagogy that emphasizes communication, critical thinking and teamwork. Students embraced the team-based learning method of teaching as it offered greater engagement during class and the opportunity to work in student teams to solve real-world problems. This pioneer class of students will graduate in spring 2019.

The Fisch College of Pharmacy is housed in the award-winning W.T. Brookshire Hall, which offers leading-edge technology in an elegant and comfortable setting. Classrooms are specifically designed to facilitate cooperative learning as instructors facilitate discussions amongst student teams. With faculty offices, classrooms and laboratories at the center of each floor, the building's design encourages interactions between faculty and students, which reinforces the student-focused approach to the Doctor of Pharmacy program.

Two departments are the academic components of the Fisch College of Pharmacy. The Department of Pharmaceutical Sciences, chaired by Dr. Rahmat Talukder, consists of nine faculty members with scholarship interests ranging from novel drug delivery systems to team-based learning through virtual reality. The Department of Clinical Sciences is chaired by Dr. Brad Brazill and consists of 20 faculty members. Areas of practice specialty are varied to meet the needs of the students and patients in East Texas. Scholarship interests include clinical trials design, health literacy, antibiotic stewardship and a host of other topics.

A great amount of energy has been spent on establishing the Fisch College, crafting policies, and developing a creative and impactful curriculum. The faculty have also been active in advancing research and scholarship in the pharmaceutical and clinical sciences. In 2018, the Fisch College of Pharmacy completed construction of over 4,500 square feet of new research space designed for collaborative, interprofessional research. The new research space will augment the ability of our faculty to advance knowledge around drug discovery, disease treatment and other therapeutic approaches to improve health and wellness.

The Deanship of Pharmacy, under the leadership of Dr. Lane Brunner, has been a driving force in the development of the new campus and the College of Pharmacy. Dr. Brunner, a passionate advocate for pharmacy education, has been instrumental in building the college and guiding its growth.

**CLINICAL SCIENCES**

**Journal Publications**


**Poster Presentations**


**Presentations**


Cook E. (2018, February). Beyond statins: additive / alternative lipid lowering therapies. The University of Texas Southwestern Medical Center - Clements University Hospital.


PHARMACEUTICAL SCIENCES

Chapters

Journal Publications
Coyne, L., & Kansari, P. S. (2018). An innovative addition to team-based-learning pedagogy to enhance teaching and learning: Students’ perceptions of team exams. Currents in Pharmacy Teaching and Learning, 10(1), 90–95.
Hamouda, Ayman. Neuronal nicotinic acetylcholine receptors (nAChRs), National Institute of Health (April 1, 2018), USD $117,763.

Poster Presentations

Grants
Hamouda, Ayman. Neuronal nicotinic acetylcholine receptors (nAChRs), National Institute of Health (April 1, 2018), USD $117,763.
projects involving 675 students were conducted during the 2017-18 academic year. Both undergraduate and graduate students are involved with faculty in research projects that benefit area businesses. Over 60 student research projects involving 675 students were conducted during the 2017-18 academic year.

In addition to the teaching and directing of student research projects, Soules faculty members published 75 peer-reviewed articles, five books, 10 book chapters and 23 proceedings. Faculty members were awarded 21 grants and presented 68 papers at academic conferences.

The Hibbs Institute for Business and Economic Research continues to be a significant participant in the regional outreach of the college through its briefs, newsletters, white papers, and other economic research and economics-related communications to the region. In addition, Hibbs Institute generated over $100,000 of external monetary support for economic impact and other fee-based economic research studies.

The Center for Family and Small Enterprises continued its outreach activities with area businesses by hosting three education/training events and discussions. The center plans to expand those activities in spring with the Soules College of Business Entrepreneurship and Innovation Institute and the Tyler Innovation Pipeline.

Dr. Roger Lirey
Dean of Business

COMPUTER SCIENCE

Journal Publications

Poster Presentations

Proceedings Publications

FINANCE, ACCOUNTING AND BUSINESS LAW

Journal Publications

Presentations
MANAGEMENT AND MARKETING

Books


Chapters


Journal Publications


Other Teaching Materials


Presentations

Beal, B. D. (2018, February). Management scholars, income inequality and public policy: A case of academic irrelevance or (unwitting) complicity? Public lecture given at Swinburne University of Technology, supported by the Swinburne Visiting Fellowships Scheme, Faculty of Business and Law, and the Department of Management and Marketing, Melbourne, Australia, February 9, 2018.


Books


Journal Publications


Presentations


TECHNOLOGY