# College of Science and Engineering Technology (COSET)

2019 STATE OF THE COLLEGE ADDRESS

#### Overview

- **Dean's Office Introductions**
- **Departmental New Faculty and Staff Introductions**
- **Presentation of College Awards**
- **Recognition of Tenure and Promotion**
- Year in Review
  - Enrollment and Teaching
  - Research and Scholarship
  - Service
- Review of Goals for 2018-2019
- Goals for 2019-2020

#### Office of the Dean

- Dean-Dr. John Pascarella
- Associate Dean of Curriculum and Assessment • Dr. Marcus Gillespie
- Associate Dean of Research and Graduate Programs • Dr. Anne Gaillard
- Assistant to the Dean-Angie Burgess
- Administrative Coordinator-DeLynn Say
- Administrative Associate-Shellie Armstrong
- Administrative Assistant- Susan Floyd

# New Faculty and Staff joining COSET since August 2018

15 new full time faculty

11 new staff members

### Agricultural Sciences Chair: Doug Ullrich

TT in Wildlife Management: Dr. Philip Urso (starts in January)

Visiting Assistant Professor: Dr. Darrin Paine

Staff: Farm Manager, Alvin Kmiec

#### Biological Sciences Chair: Tamara Cook

Tenure-Track Faculty:

Environmental Science: Dr. Amber Ulseth (started in January 2019)

Staff:

Microscopy Technician: Dr. Rajesh Balaram (started in November 2018)

Curator, Natural History Collections: Dr. Will Godwin (transferred from ORSP Fall 2019)

Administrative Assistants: Ericka Dupclay and Crystal Radican

#### Chemistry New Chair: Donovan Haines

Tenure-Track Faculty:

Dr. Meagan Hinze (Biochemistry/Organic Chemistry)

### Computer Science Chair: Peter Cooper

Tenure Track Faculty:

Dr. Rezbaul Islam

Visiting Assistant Professor: Dr. Pat Ko

Staff: Administrative Assistant Ashley Miksch and Megan Ellisor Digital Forensics Lab Coordinator: Dustin Thornton Systems Administrator: Ricky Malcom

#### Engineering Technology Chair: Faruk Yildiz

Tenure Track Faculty:

Construction Management: Dr. Ebrahim Karan (Quanta Professor)

Design and Development: Dr. Ulan Dakeev

Safety Management: Dr. Ali Aljaroudi

Visiting Assistant Professor: Dr. Sorin Teodorescu

#### Geography and Geology Chair: Brian Cooper

Tenure Track Faculty in Geology:

Hydrology: Dr. Renjie Zhou

#### Mathematics and Statistics Chair: Melinda Holt

Visiting Assistant Professor:

Dr. Robert Williams

Visiting Lecturer:

Dr. David Dippel

Mrs. Julie Albert

Mrs. Ryanne McNeese

Administrative Assistant: Brandy Robinson

#### Physics Chair: Joel Walker

Staff: Administrative Assistant Anne Wheary

#### CAREER SERVICES AT SHSU

- JULIO C. QUIRALTE, M.ED, LPC
- LIAISON TO THE COLLEGE OF SCIENCE AND ENGINEERING TECHNOLOGY
- OFFICES ABIV 210 & LDB 425

- Help with choosing a major
- CAREER COUNSELING/ASSESSMENTS
- Resume critiques
- Mock interviewing
  - IN PERSON OR ONLINE
- Employer information sessions
- JOB SEARCHING STRATEGIES
- HELP WITH LINKEDIN PROFILES
- CAREER EVENTS AND JOB FAIRS

Please join me in congratulating the winners:

Graduate Student Excellence in Research – Ms Duwani Katumullage (Statistics) Student Excellence in Teaching – Ms. Alexandria Brown (Biological Sciences) Adjunct Faculty Excellence in Teaching – Sarah Couch (Biological Sciences) Faculty Excellence in Research – Dr. Shyam Nair (Agricultural Sciences) Faculty Excellence in Teaching – Dr. Dusty Jones (Mathematics) Faculty Excellence in Service – Dr. Faruk Yildiz (Engineering Technology)

### College of Science & Engineering Technology Excellence Awards

Dr Stanley Kelley-SHSU Excellence in Service Dr. Aaron Lynne-SHU Excellence in Scholarly and Creative Activity

**SHSU Awards** 



Ava Fujimoto-Strait: SHSU Staff Excellence Award

#### **Tenure and Promotion to Associate Professor**

- Mark Anderson (Agricultural Sciences)
- Min An (Computer Science)
- Samuel Adu-Prah (Geography)
- Taylor Martin (Mathematics and Statistics)

# Faculty Tenure and Promotion

#### **Promotion to Professor**

- Kyle Stutts (Agricultural Sciences)
- Justin Williams (Biological Sciences)
- Luis Garcia-Puente (Mathematics and Statistics)
- Linda Zientek (Mathematics and Statistics)
- Joel Walker (Physics)

# Faculty Tenure and Promotion

# **Emeritus Professor**

Dr. Brian Chapman, former Dean of the College of Arts and Sciences and Researcher at TRIES

# **Regents Professor**

Dr. Scott Chapman (Mathematics and Statistics)

### Retirements

Ms. Kathyrn Robertson (15 yrs), Computer Science Dr. Nedom Muns (41.5 yrs), Engineering Technology

Thank you for your years of service to SHSU! We wish you the best in your retirement!

## Funded Budget Initiatives FY20

New Initiative Funding: \$382,605

- Cohort #2 of Doctoral Students in PhD program
- Quanta Professor Dr. Pecen
- Chemistry Assistant Professor
- O&M Budget for Natural History Museum
- Math Lecturer

Funded HEF: \$390,000

- Start-up for new Faculty: \$285,000
- \$50,000 for Renovation of Art buildings for Engineering Technology
- \$15,000 for software purchase for Engineering Technology
- \$40,000 for servers for Computer Science

# New College Lab Fee

Most COSET majors will begin paying a \$50 fee in the fall and spring semesters but will be exempt from the current \$8/course fee (non-majors will continue to pay the course fee)

Increased college revenue of around \$225,000 (\$310,780 program fee plus \$68,040 course fee) per year to support laboratory instruction;

All departments will receive base funding from FY19; 5 largest will receive additional funds based on enrollment;

Beginning FY21, \$60,000 withheld each year for a \$120,000 competition to be held every other year, beginning in FY22-all departments can participate

- FY20-will replace 3 vans (\$120,000), support the Mechanical Engineering program start-up costs (\$50,000), and provide additional funds to department (\$40,000)
- FY21-save \$60,000 for competition, support for departments (\$155,000)
- FY22-save \$60,000 for competition; \$120,000 available for competition (details to be announced Fall 2021), support for departments (\$155,000)

# Enrollment and Credit Hours

UNIVERSITY ENROLLMENT EXPECTED TO BE UP 2% (UG UP 1.99%, GRAD UP 2.26%),

21, 759

#### Undergraduates in COSET

Data (8/13/2019)-compared to 2018 and 2017 3530/3475/3586, +1% over last year, -1% from 2 years ago Largest College by Majors!

Animal Science	562/557/530	Elec. And Computer Eng. Tech	91/ <mark>92</mark> /78
<b>Biomedical Sciences</b>	433/307/279	Interdisciplinary Ag	85/85/81
Biology	<mark>385/</mark> 447/450	Chemistry	77/102/113
Forensic Chemistry	340/303/302	Geology	57/ <mark>55/</mark> 76
Construction Management	t 263/271/255	Plant and Soil Science	48/43/46
<b>Computing Science</b>	257/ <mark>247/</mark> 354		
Agricultural Business	158/182/205	Design/Development ET	48/41/37
Mathematics	<mark>130</mark> /150/151	Digital Forensics Eng. Tech	45/20/9
Agricultural Eng. Tech	119/108/93	Environmental Science	41/1/0
Engineering Technology	119/105/103	Physics	39/45/56
Computer Software ET	113/89/89	Agricultural Communications	37/ <mark>37</mark> /40
Applied Arts and Sciences	<b>104/118/</b> 130	Geography	<mark>35</mark> /43/44

Composite Science 17/3/2

Red -5% change, blue +>5% change; New degrees in Green; SHSU up 1.74% in undergraduate students

#### Graduate Students in COSET

Data as of 8/13/2019, compared to 2018 and 2017 SHSU up 3.2% in graduate students down 2.9% total 8.6% of all graduate students 3% of all COSET sch

**Doctoral** 

Digital and Cyber Forensic Science (New) 4/6

Masters	225/223/210
Agriculture	35/30/31
Sustainable Agriculture	22/32/22
Biology	30/29/39
Chemistry	9/9/6
<b>Computing and Information Science</b>	13/16/15
Digital Forensics	20/19/19
Information Assurance and Security	37/33/30
Geographic Information Systems	22/19/15
Mathematics (MA, MS)	20/20/20
Statistics	13/16/13
Graduate Certificate	10/19/12
Cyber Security	4/10/4
Data Assurance	1/2/1
Digital Investigation	4/5/4
Geographic Information Systems	1/2/3

#### Enhancing Graduate Programs

Through a combination of reduced number of TA lines and/or use of college funds, increased graduate stipends for Biological Sciences, Computer Sciences, and Mathematics and Statistics to \$14,301 (up from \$13,005)

New Scholarship went into effect Fall 2018-\$2000 scholarship for all admitted MS TA students for first year, \$1000 competitive scholarships for first year (non-TA students) and second year for all students (TA or not); was able to fund nearly all second year and non-TA first year requests; this year may be more competitive

Filled all but 3 TA slots; did not reallocate this year

Please have all graduate students apply for Scholarships from Office of Graduate Studies (3 competitions per year). Please write a personalized letter of support and have students include all relevant experience (not just work) in section on experience.

#### SCH-Fall 2019 to Fall 2018

Data from 8/13/2019 , class day -7	2019	2018	Difference
Academic Affairs	3,313	2,970	343
Business Administration	21,260	19,882	1,378
Criminal Justice	37,106	37,181	-75
Education	28,007	24,723	3,284
Fine Arts and Mass Comm.	21,391	21,703	-312
Health Sciences	22,179	21,983	196
Humanities and Social Sciences	63,623	63,816	-193
Science & Engineering Technology	62,906	63,578	-672
Grand Total	259,785	255,836	3,949

SHSU up 1.5% in credit hour production with COSET down -1% 24% of all credit hours come from COSET, down 1% from 2018

## COSET Graduates (18/19)

	Fall 2018/ Fall 2017	Spring 2019/ Spring 2018	Summer 2019/ Summer 2018	Total AY19/ AY18
Undergraduate	219/194	289/300	116/130	624/624
Graduate	22/24	55/43	15/20	92/87
Total	242/218	344/343	131/150	716/711

Total graduates up 1% over previous year. Undergraduates flat Graduates up 6%

# **Teaching and Curriculum**

**Curriculum and Degree Programs** 

- PHD in Digital and Cyber Forensic Science started Fall 2018; Cohort 2 recruited
- ABET accreditation for Computing Science BS degree renewed
- BS in Mechanical Engineering Technology approved by SHSU; goes to TSUS in August and THECB in November; pending start date Fall 2020
  - 2 faculty searches for MET underway

#### Curriculum -continued

- Online Professional MS in GIS (option within existing program, multiple students already recruited)
- Online MA in Mathematics Education (continuing development of online courses per Dr. Bullock)
- Astronomy minor planned, added Physics to CORE
- Moved Instructional Design and Technology courses and faculty position (Dr. Donggil Song) to College of Education (we were providing faculty and courses from Computer Sciences): Better alignment with mission of both colleges
- Completed external review of undergraduate Agricultural Sciences program
  - Faculty and Programs of high quality, facilities need work

# Program Rankings/Awards

- Information Assurance and Security program ranked 5<sup>th</sup> in the nation by U.S. News and World Report for online programs; ranked 1<sup>st</sup> by BestCollegeReviews.org
- Forensic Chemistry program ranked #1 in Texas
- Chemistry program ranked top 15% Best for the Money and top 15% most popular by College Factual

### Teaching Awards

Dr. Marcy Beverly (Agricultural Sciences): 2019 USDA Food and Agricultural Sciences Excellence in Teaching Award

Dr. Robert Lane (Agricultural Sciences): 2019 Man of the Year in Texas Agriculture by Texas Agricultural Agents Association

Adrian Villalta-Cerda: Award for Chemistry in Pictures by Chemical and Engineering News



#### Open Educational Resources Grant (Reimagining the First Year Experience)

Lawrence A. (Art) Wolfskill (Department of Agricultural Sciences, COSET), redesigning AGBU 3367, partnered with librarian Kat Landry-Mueller.



# ACE (Academic Community Engagement)

Dr. Jeff Wozniak (Biological Sciences) is the Coordinator for COSET

- Did not see an increase in ACE courses
- He will visit each department this fall to discuss how to ACE your course
- We need to increase our count of ACE courses to meet the university goal of an engaged university

## NSF STEM Grant 2017-2021

\$2.1 million NSF grant to establish a STEM Center (PI: **Brian Loft**, CoPIs **Taylor Martin**, **David Thompson**, **Faruk Yildiz**, **Adrian Villalta**-**Cerdas**). The STEM Center will increase student preparedness for firstyear math and chemistry courses, provide training & incentives for faculty to adopt active learning techniques in their classrooms, and promote undergraduate research for second-year and transfer students.

• Taylor Martin has taken over as lead PI from Brian Loft

Accomplishments 2018-2019

- 6 faculty participated in Fall 2028 Intro to STEM Research Course
- 10 faculty were 2018-2019 STEM Center Mini Grant Recipients
- 13 faculty served as 2019 STEM Camp Instructors and Guest Speakers
## **QEP-Active Learning-Brandy Doleshal**

Active Learning Summer Institute-Summer 2019

11 Faculty from 5 departments

Active Learning Teaching Fellows-Fall 2019 to Spring 2021

3 faculty from Mathematics and Statistics

Faculty Learning Communities Facilitators-Fall 2019 and Spring 2020

2 faculty from 2 departments

ACUE-Fall 2019 and Spring 2020

5 faculty from 3 departments

Need faculty from Engineering Technology and Physics to participate and all eight departments will be engaged in the QEP.

# Research and Scholarship

## Office of Graduate Studies Awards

#### **COSET ASPIRE Scholars:**

Previous year 2019/2020:

• 2 Mathematics: Kiara Sanchez and Ligia Flores

Biology: Javier Gomez

Incoming Cohort:

- Biology: Jovinna Villareal
- Mathematics: Jazmine Morales

#### **COSET 3MT (3 minute thesis) Finalists:**

Robyn Key, Agriculture

Payton Snokhous, Agriculture

**Outstanding Assistantship Award** – Masters – Upeksha Perera, Department of Mathematics and Statistics

**Outstanding Graduate Student** – Hayden Hays, Biological Sciences

## Internal Faculty Research Grants

56 proposal requesting \$581,812, 31 approved for \$268,077 COSET received 9 awards totaling \$95,000 (29% of all awards, 35% of all funding)

Jeremy Becheli (Biological Sciences)-"The role of mTOR during Rickettsiae infection"; \$4,999;

Aaron Lynne (Biological Sciences) and Amanda Venta (Department of Psychology and Philosophy)- "Caregiver relationships and the gut microbiome", \$15,800;

Kathleen Rice (Counselor Education), Jeremy Bechelli, James Harper, and Aaron Lynne (Biological Sciences)-"Investigating scholastic performance, emotional and social functioning and biomarkers of college students of alcoholic parents"; \$19,976

Adrian Villalta-Cerdas (Chemistry)-"Reformed chemistry laboratories: cooperative and projectbased experimentation", \$5,000;

Donovan Haines (Chemistry)-"The skin desease Lamellar Ichthosis: enzyme modeling", \$4,946;

Mingkui Wei (Computer Science)-"On evalution and analysis of the CDN Web cache poisoning attack"; \$14,675;

Qingzhong (Frank) Liu (Computer Science)- "Exposing information hiding positions in advanced JPEG image", \$14,767;

Mahdi Safa (Engineering Technology)-"Increasing power distribution network resilience: preand post-disaster situation", \$4,461;

Junkun Ma and Iftekhar Ibne Basith (Engineering Technology)-"Integrating a FANUC industrial robot with an EMCO machining center", \$10,376;

## Professional Development Leaves for FY20

Funded by Academic Affairs

Dr. Qingzhong (Frank) Liu (Computer Science)

Dr. Velvet Nelson (Geography)

COSET Dean's Office Funding for Undergraduate Research (\$15,000)

Funded undergraduate students through COSET Undergraduate Research Program (\$15,000) in spring and summer 2019 competition

• Two application deadlines per year. Contact Anne Gaillard for more information.

## Student Research









Undergraduate Chemistry student Kendra Ireland (along with Ibeth Caceres from Biology) presented research on photo-caged substrates of P450 cytochromes at the Second World Congress on Undergraduate Research at the University of Oldenburg, Germany.

Adriana Bonin (undergraduate in Agricultural Sciences) received 2<sup>nd</sup> prize in the 2019 Agricultural Consortium of Texas Undergraduate Poster Competition

Biology had 17 faculty involve 63 undergraduate students in research, 24 students gave presentations, 8 students were lead authors, 24 students were co-authors

Biology major Jeff Belanger won the Assam Scholarship for Honors Research award at the 12<sup>th</sup> annual Undergraduate Research Symposium

Biology major Stephanie Baker won the Best Overall Poster Presentation Award at the 12<sup>th</sup> annual Undergraduate Research Symposium

## External Funding (7/1/18-7/1/19)

Department	# New Apps	\$ New Apps	# Grants Awarded	\$ New 3Awards	# Active Awards	\$ spent active grants
Agricultural Sciences	6	\$149,437	4	\$1,126,055	6	\$189,685
<b>Biological Sciences</b>	16	\$1,331,429	5	\$119,231	14	\$177,287
Chemistry	5	\$1,027,638	3	\$493,849	9	\$304,317
Computer Science	13	\$3,684,831	1	\$22,032	1	\$4,286
Engineering Technology	4	\$402,995	1	\$85,000	2	\$20,575
Geography/Geology	1	\$469,150	0	\$0	0	\$0
Math and Statistics	5	\$1,925,114	1	\$95,288	7	\$361,781
Physics	1	\$750,197	1	\$240,000	2	\$37,781
Total	51	\$9,740,701	16	\$2,181,455	41	\$1,095,713
Last Year	44	\$8,717,564	15	\$2,468,386	39	\$809,565

#### 33 PI applied, 13 awarded, 21 active

## Selected Grants



Shyam Nair and Bobby Lane (Agricultural Sciences)-USDA NIFA, Integrated Approach to Enhance Sustainable Agriculture Education through researchbased pedagogical practices; \$676,635

Jerry Cook (Biological Sciences)-Texas Army National Guard, Invertebrate Planning Level Surveys of Camp Maxey, Swift, and Walters, \$85,482

Dustin Jones (Mathematics)-Middle Math Matters, Greater Texas Foundation (\$95,288)

Ilona Petrikovics (Chemistry)-Department of Army, Cyanide antidote research (\$240,999);

Christopher Hobbs (Chemistry): NSF Career Award (1<sup>st</sup> Career Award at SHSU); "CAREER: Developing new polymer supported catalysts with high school, undergraduate, and graduate students", \$244,101

Joel Walker and James Dent (Physics)- joint NSF grant; RUI: Neutrino, Collider, and Dark Matter Phenomonology; \$240,000

## Selected Scholarship/Awards

Bobby Lane (Agricultural Sciences) won first place in plant identification competition in the 2018 American Forage and Grassland Conference, Louisville, KY.

Ryan Saucier (Agricultural Sciences) won the first place in the research paper competition in the 2018 National Agricultural Mechanics Professional Development Blue Ribbon Research Conference

Juan Daza in Biology published 8 papers last year

Chemistry had 11 publications and 1 patent

Tiller, Jim, with Nancy Tiller and Gang Gong (Geography). A Boundary Atlas of Texas, 1821-1845: In Press.

Dusty Jones (Mathematics) published a textbook: Fundamentals of Calculus for Teachers

## SERVICE

## Gifts to COSET (7/1/18-6/30/19) compared to last year \$6,391,313/\$2,854,693

Agricultural Sciences- \$556,255/\$443,125

Biological Sciences-\$259,441 (\$53,307 excluding microscope donation)/\$49,222

Chemistry- \$7,177/\$9,938

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Computer Sciences-$4,083/$4,280
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Engineering Technology-\$5,481,254/\$2,208,520 (Pirkle and Quanta gifts were majority)

Geography and Geology-\$23,495/\$48,995

Mathematics and Statistics-\$12,618/\$8,108

Physics-\$6,359/\$29,970

College-\$30,631/\$52,536

## Fundraising 7/1/18-6/30/19

Departmental Support-\$511,016

Departmental Endowment-\$475,000

Annual Scholarships-\$137,765

Endowed Scholarships-\$17,550

Endowments for Scholarships-\$5,243,763

## Total Balances from Fundraising/Endowments

#### **Departmental Support Balances of \$1,745,231**

\$823,000 in unrestricted gifts to college and departments (Friends)

\$922,231 in departmental funds generated by \$15,659,814 in endowments

#### Scholarship Balances of \$873,832

\$108,000 in annual scholarship gifts

\$765,832 in endowed scholarships from \$14,494,017 in scholarship endowments

Total balance of endowments and funds = \$32,733,117!

## Dean's Office Service

Supported Student Athletics events, BioBlitz, Alumni Awards Dinner, Piney Woods Game

Will be supporting College Tailgate activities at home Football Games this yearcontact Susan Floyd for more information and to have your student organization host the event

Games are 9/7, 9/21, 10/12, 10/19, 11/16 and 11/23

## Internationalization Activities

Dean visited Costa Rica with Faruk Yildiz, South Korea with Min Suh and Hungary with Ilona Petrikovics to pursue international agreements



South Korea

## 

Hungary

Computer Science hosted faculty member and students from Zhejiang Police College (Hangzhou, China) for three week visit summer 2019

Study abroad course proposals have been submitted for Costa Rica and South Korea for 2020; Chemistry to explore options in Hungary

## **COSET Faculty in Administration**

Dr. Chad Hargrave (Biology), Associate VP of Office of Research and Sponsored Programs

Dr. Brian Loft (Mathematics), Associate Vice President for Faculty and Student Success, Academic Affairs

Dr. Patrick Lewis (Biology), Associate Dean, Honors College

Dr. Madhusudan Choudhary (Biology), Director of SHSU Center for EURECA

Dr. Todd Prim (Biology), Director of Professional and Academic Center for Excellence (PACE)

Dr. Brandy Doleshal (Mathematics), Assistant Director for Development (PACE/QEP)

Dr. Li-Jen Lester (Computer Science), Assistant Director for Assessment (PACE/QEP)

## Editorships

- Kyle Stutts and Lawrence Wolfksill (Agricultural Sciences), Editorial Board NACTA
- Jerry Cook (Biological Sciences), Associate Editor, The SW Naturalist and Proc. Wash Ent. Soc.
- Madhu Choudhary (Biological Sciences), Editorial Board, J. of Microbial LifeJuan Daza (Biological Sciences), Section Editor, S. American J. of Herpetology
- Jim Harper (Biological Sciences), Editor, Frontiers in Endocrinology, WebMEdCentral
- Aaron Lynne, Madhu Choudhary and Todd Primm (Biological Sciences), Editor Board, J. Microbiology and Biology Education.
- Chris Randle (Biological Sciences), Editor, Castanea (Southern Appalachian Botanical Society)
- Justin Williams (Biological Sciences), Associate Editor, Phytotaxa

## Editorships-Continued

David Thompson (Chemistry), Associate Editor, Analytical Sciences Digital and reviewer for RSC Advances

Recayi Pecen (Engineering Technology), Editor, American Journal of Undergraduate Research Engineering/Technology

Min Jae Suh (Engineering Technology), Guest Editor, Int. J. Sustainable Building Technology and Urban Development

Don Albert and Samuel Adu-Prah (Geography), Editors-in-Chief, International Journal of Applied Geospatial Research

Velvet Nelson (Geography); J. of Cultural Geography editorial board

John Strait (Geography): Associate Editor of the European Science Journal

Scott Chapman (Mathematics and Statistics), Editor-in-Chief, Communications in Algebra (2<sup>nd</sup> largest circulation in world)

### Other Service

Shyam Nair (Agricultural Science): Chair of NACTA Awards Committee

Tim Pannkuk (Agricultural Science): Chair, Ornamental Landscape and Turf Working Group, American Society of Horticultural Sciences

Bobby Lane (Agricultural Sciences): Walker County Livestock and Pasture Committee, Treasurer; Member Texas AgriLife Extension Service Advisory Board

Dwayne Pavelock and Doug Ullrich (Agricultural Sciences): Co-Chairs, Texas State FFA LDE Commiteee

Kyle Stutts (Agricultural Sciences): Chair of Young Animal Scientist Education Award Com mittee

Jerry Cook (Biological Sciences); US EPA Science Advisory Committee; Curator, SHSU Natural History Collections

Madhu Choudhary (Biological Sciences): President-Elect TX Branch of Am. Soc. of Microbiology

## Service Continued

Samuel Adu-Prah (Geography); Visiting Fellow for 2019 Council for the Development of Social Science Research in Africa; visited Kwame Nkrumah University of Science and Technology (Ghana)

Falguni Mukherjee (Geography): Regional Council of the SW division of the Gamma Theta Upsilon International Geographical Honor Society

Velvet Nelson (Geography): International Geographical Union Commission on Tourism, Leisure and Global Change board member; American Association of Geographers International Scholarship and Research Committee member

Faruk Yildiz (Engineering Technology), President-Electronics/Electricity and Computer Technology Division, ATMAE

Ram Kafle (Statistics) organized the 2<sup>nd</sup> Inter. Conf. on Applications of Mathematics to Nonlinear Sciences in Nepal.

Rebecca Garcia (Mathematics)-Director of the Mathematical Sciences Research Institute

Melinda Holt (Statistics) and Aaron Lynne (Biology) selected for 2019-2010 President's High Potential Employee Leadership Academy

## Equipment and Infrastructure

## Improvements/equipment

Added new end and coffee tables, art, soft bench seating and bistro barheight tables to LDB atrium and Video display monitor in LDB atrium to welcome visitors

LDB envelope sealing and repairs to address water penetration through roofs and external walls; 1<sup>st</sup> floor complete demolition to address water penetration through walls, remove mold sources, and prepare for reuse

Art Buildings A, C, and WASH transferred to COSET for use in expanded ETEC laboratories; assessing needs this fall with repairs/updates in spring 2020

Received a donated Hitachi Transmission Electron Microscope (value of \$260,000) from NIH lab (Biological Sciences)

Repurposed old Biology 3<sup>rd</sup> floor space for Math/Stats and Geography/Geology use-Used for adjunct offices, GIS grad student space, and tutorial room

Developed a Master Plan for Gibbs Ranch improvements-pending funding for construction of animal science/equine, greenhouses, and meat science labs

\$120,000 Computing Cluster with IT (Physics)

## SHSU Natural History Museum



Housed in the old Huntsville High school

Houses all Natural History Collections (Entomology, Nematology, Invertebrates, Plants, Birds, Mammals, Fossils)

Special Horace Burke Library collection focused on Natural History, Expeditions, and Texas Biology

Art collections and galleries will also be housed in the building in the near future

COSET provided shelving and cabinets and other items from LDB moveout worth approximately \$51,000 to the museum



# Review of Goals for 2018-2019

## Goals from FY19

Launched the PhD program in Digital and Cyber Forensic Science and recruited 2<sup>nd</sup> cohort of students-Yes, full enrollment in both funded cohorts

Completed curriculum planning for:

- online Professional GIS track (3 students already recruited)
- BS in Mechanical Engineering Technology, at TSUS in August and CB in Fall for 2020 start date

Renewed ABET accreditation for BS in Computing Science-Yes

Continued preparing for ABET review in Engineering Technology-Yes

Complete all training for online faculty through SHSU online ; as of 6/4/19, 52 signed up with 45 completed, ~47% complete; need to complete this training this year.

Increased ACE course participation-did not increase; Jeff Wozniak will visit departments this fall to discuss ways to increase ACE participation

Encourage Faculty Participation in NSF Stem Center and QEP-completed

Repurposed old Geography and Geology 3<sup>rd</sup> floor space for Math/Stats and Geography/Geology use-Use for adjunct offices, GIS grad student space, and tutorial room-completed

Repurposed Biology labs in LDB for Chemistry and Geology Use for Teaching/Research-completed

## Goals for FY20

Recruit the 3<sup>rd</sup> cohort in PhD program in Digital and Cyber Forensic Science

Complete curriculum planning for online MA in Mathematics Education;

Hire 2 professor to support the BS in Mechanical Engineering Technology

Complete repairs/additions for ETEC to use ART A, C, and WASH for laboratories and research space.

Continue preparing for ABET review in Engineering Technology

External review of ETEC programs (Spring 2020)

Examine marketing efforts and curriculum revision in declining programs in Physics and Geography

Complete all training for online faculty through SHSU online