For almost 20 years, Pat Moore’s smiling face has been the first thing you see upon entering the DBS Office. From Abilene, Texas, Pat graduated from Abilene High School in 1959. She then attended Texas Tech University where she majored in Education and pledged the Zeta Tau Alpha Sorority. After her time at TTU, Pat went on to be a flight attendant with Braniff International Airways before settling down in Richardson, Texas to raise her three children, Monica, John, and Kristie.

In 2001, Pat began her career in our department, being hired by Dr. Carlton Phillips to work as the Senior Office Assistant for DBS. Pat has worked with numerous Department Chairs, faculty, and staff during her tenure. She most enjoyed working with graduate and undergraduate students, making lifelong relationships and memories. During retirement Pat will be looking forward to spending more time with her grandchildren and looks forward to what the future holds. Pat would like to thank everyone in the department who she has worked alongside and has loved every minute of it!
Dr. Jorge Salazar-Bravo edited a volume in honor of Syd Anderson’s contributions to Neotropical and Bolivian Mammalogy in the journal Therya. The volume includes 15 papers, contributed by 42 authors from 25 institution. Dr. Salazar-Bravo also gave a virtual keynote address at the bi-annual meeting of the Ecuadorian Mammal Society on Saturday, October 24th.

Nancy McIntyre is co-PI on a grant from the TTU College of Visual and Performing Arts in a “STEAM collaboration” to develop place-based curriculum for two east Lubbock elementary schools. Dr. McIntyre also captured a photo recently of a striped bark scorpion (Centruroides vittatus) under a blacklight. Scorpions fluoresce under UV light for unknown purposes (many are speculated), but it makes them easy to spot if you’re out at night with a UV flashlight!

Kendra Phelps was a student in Dr. Tigga Kingston’s lab and is featured in an episode of Nat Geo on Sunday 8C called Virus Hunters. Kendra travels all over Europe chasing bats and viruses.

Noshin Mubtasim, (Ph.D. Student, Gollahon Lab) recently got the confirmation of getting Study Abroad Competitive Scholarship (SACS) for Spring 2021.

In the lab of Dr. David Ray, Diana Moreno spoke on a panel related to the COVID-19 pandemic discussing Zoonotic Detective and how Animals can be ground zero for infectious diseases.

Nicole Paulat (Ph.D. Student, Ray Lab) and Jenna Grimshaw (Ph.D. Student, Ray Lab) both presented their research at the Biodiversity Genomics 2020 meeting. While virtual, the meeting itself was hosted by the Wellcome Sanger Institute in Cambridge, UK. Ms. Paulat presented her research on mutation rates related to genomic change in Myotis bats and Mrs. Grimshaw discussed her work studying the genetic diversity of the Northern long-eared bat in the US.

Dr. Hong Zhang was recently featured on Texas Tech Discoveries in an article titled “Researchers Double Cotton Yields With Genetic Modification” where they discussed his current research, finding a way to double fiber yield for cotton in semi-arid areas like that of West Texas, where drought, heat, and salinity are working against farmers.

Mohammad Jodeiri-Farshbaf (Ph.D. Student, Alvina Lab) recently won the 3-min thesis competition at Tech and will go on to compete nationally next year. Mohammad was also featured in Texas Tech Today discussing his research.
Evan Perkowski (Ph.D. Student, Smith Lab) participated in this year’s remote Graduate Climate Conference where he presented a poster titled “Plant carbon costs to acquire nitrogen are determined by interactions between plant nitrogen demand, soil nitrogen availability, and nitrogen acquisition strategy”. This is a conference put on by graduate students at the University of Washington for other graduate students conducting work relevant to climate science.

Dr. Nick Smith, Graduate Student Risa McNellis and Dr. Natasja Van-Gestel recently presented at the Fall Meeting of the American Geophysical Union, with a talk titled, “Winter cover cropping increases albedo and latent heat flux in the Texas High Plains”. Dr. Smith also presented another talk, “How does optimal photosynthetic acclimation affect future carbon and nutrient cycling?”.

Karishma Bishit (Ph.D. Student, Wakeman Lab) was awarded a Doctoral Dissertation Completion Fellowship by the Texas Tech graduate school.

Sean Sutor (M.S. Student, McIntyre Lab) won a Best Presentation award in GIS in Wildlife Ecology at The Wildlife Society’s annual meeting.

Danielle Husband, another M.S. student in the McIntyre Lab, won a TTU Graduate School Graduate Student Research Support Award.

Md Ashraf Ul Hasan, (Ph.D. Student, Kingston Lab) won the Michelle C. Knapp Memorial Scholarship for 2020.

Dr Tigga Kingston was invited to present “NASBR in the 2000s” as part of the North American Society for Bat Research’s Celebration of its 50th Anniversary on November 20th, 2020.

Undergraduate Honors student Andrea Perez working under the supervision of Dr. Zemfira Karamysheva won an award at the national SACNAS conference promoting multidisciplinary and multicultural STEM diversity for her research presentation titled: Study of Ribosome Specialization in Leishmania Parasites Using Polysomal Profiling and CRISPR-Cas9 Gene Editing Technology.

In the Lab of Dr. Amanda Brown, Graduate Student McKinlee Salazar presented at the virtual Entomology Conference where she discussed her research over Genomic characterization of endosymbionts found in the bacteriomes of Brazilian Membracids. Undergraduate student Liane Vásquez-Weber presented a poster at ABRCMS titled “An initial computer model of biochemical signals through the gut-brain-axis”.

DECEMBER 2020 NEWSLETTER
Dr. Lauren Gollahon’s Lab:

Dr. Breanna Harris’ Lab:

Dr. Tigga Kingston’s Lab:

Dr. Nancy McIntyre’s Lab:

Dr. Matt Olson’s Lab:


**Dr. Caleb Phillips’ Lab:**


**Dr. Sean Rice’s Lab:**


**Dr. Jorge Salazar-Bravo’s Lab:**


**Dr. Dylan Schwilk’s Lab:**


**Dr. Catherine Wakeman’s Lab:**


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**ANNOUNCEMENTS**

The Texas Tech Association of Biologists is back online! We would love department faculty, staff, and alumni to follow us on Instagram and Facebook. Expect fresh content about what our members are researching, community service opportunities in Lubbock, and more. If anyone would like to contribute any photos or updates to our pages, send this content to our TTUAB Treasurer, Danielle Husband at Danielle.Husband@ttu.edu.

**DECEMBER 2020 NEWSLETTER**
GRADUATES DECEMBER 2020

Doctoral and Master’s Graduates:

Matthew Brym (Master’s)
Advisor: Dr. Ron Chesser

Sergio Castro Gonzalez (Ph.D.)
Advisor: Dr. Ruth Serra-Moreno & Dr. Lauren Gollahon
Thesis-Dissertation: “Understanding the Mutual Antagonism Between HIV and Autophagy”

Yu Ning (Ph.D.)
Advisor: Dr. Kai Zhang

Betzaida Rivera (Ph.D.)
Advisor: Dr. Lou Densmore
Thesis-Dissertation: “Difference in Heavy Metal Concentrations in the American Crocodile (Crocodylus Acutus) in Coiba Island National Park and The Gulf of Montijo, Panama”

Undergraduate Graduates:

Alvarez, Daysi M.
Alvizo, Ashli N.
Arnold, Shjon T.
Arzate, Fabiola
Ash, Kameron L.
Bakama, Waibi E.
Beckelhymer, Kaitlin A.
Bell, Audrey M.
Bharadwaj, Taru
Boakey, Derick N.
Burrow, Lauren T.
Campos, Tabitha R.
Choi, Kyeongun
Clifford, Clarissa I.
Cognasi, Savannah P.
Couch, Jennifer S.
Dalton, Tymon G.
Deans, Rebecca L.
Delgado, Betsaida A.
Delgado, Emily N.
Denton, McKenna E.

Everhart, Haliegh A.
Gallia, Oliver P.
George, Feba
George, Sarah
Gerner, Alexandra J.
Glidewell, Shane A.
Gonzalez, Diego
Graham, Kevin V.
Graham, Walker C.
Green, Conley J.
Guesmia, Sarra
Howell, Heather N.
Hubbard, Justice E.
Hylden, Evan H.
Irshid, Maryam
Johnston, Lyndsay T.
Jurado, Javier M.
Ledesma, Desirea
Long, Cathy N.
Loredo, Gisell C.
Manjane, Maya N.

McCoy, Shaeley J.
Mendez, Jennifer J.
Ming, Ethan L.
Morrah, Faith N.
Navarijo, Nicole J.
Nguyen, Annabelle T.
Nguyen, Mary A.
Northcut, Willem O.
Obisesan, Eniola A.
Oconnor, Emma G.
Padro, Alexandria N.
Pina, Elias A.
Pinal, Amanda I.
Ramos, Hazzel R.
Randolph, Kira K.
Roberts, Jacquelyn S.
Robinson, Mary K.
Rosado Alvarez, Yulitza M.
Rosing, Conner S.
Roth, Cade G.

Rutayomba, Elwin B.
Santana Lamboy, Gabriela M.
Shawky, Ibrahim M.
Shwani, Jila R.
Stephens, Ryan P.
Tairu, Fisayo A.
Thomas, Sarah K.
Thompson, Jared E.
Tienda, Alyssa M.
Trimier, Arden T.
Ugwa, Destiny O.
Valenzuela, Kaleb K.
Vasquez, Erin A.
Wahl, Joseph A.
Weitzel, Ryan E.
Worsham, Asha E.
Young, Kobe A.
Congrats and Happy Holidays to all our hard-working students and faculty!

“So birds of peace and hope and love
Come fluttering earthward from above,
To settle on life’s window-sills,
And ease our load of earthly ills”

- Paul Laurence Dunbar (1872-1906)
  (excerpt from The Sparrow)