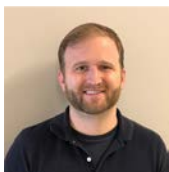




## Awards and Recognition

**Skylar King** and **Dua Quedan** were recipients of the Howard J. Arnott Student Competition Award for the Graduate Student Presentation Competition in Biological Sciences at the 2018 Texas Society for Microscopy Conference, which was held in Denton, TX. Skylar's PhD mentor is Dr. Pamela Padilla and Dua's PhD mentor is Dr. Doug Root.

Undergraduate **Matthew K. Jones** received the First Place for the Best Student Poster Presentation at the Texas Society for Ecological Restoration Annual Conference, Denton, TX. His Poster title was "Comparative diet of Barn Owl (*Tyto alba*) and Long Eared-Owl (*Asio otus*) in a Blackland Prairie in north-central Texas." Matthew was mentored by Dr. Jaime.E. Jiménez. Other co-authors include J.L. Baxter-Slye and K.L. Steigman.



Drew Sturtevant



Akila Muthukumar

**Drew Sturtevant** placed first, in concurrent session A, for best graduate student talk at the Southern Section of The American Society of Plant Biologists Conference, which was held in New Orleans. Drew's poster title was "Metabolite Imaging and Transcriptome Analyses of Jojoba (*Simmondsia chinensis*) Seed Tissues Suggest Unexpected Differential Localization of Pathways for Storage Lipid Accumulation". At the same conference, **Akila Muthukumar** placed first for best undergraduate poster titled "Evaluation of Cottonseed Protein and Oil Reserves in Wild Accessions Cotton (*Gossypium sp.*) grown under Rain-fed or Irrigated Conditions". Both students are from Regent Professor Kent Chapman's lab.



Skylar King, A. Bernardino-Schaefer and Dua Quedan at the 2018 Texas Society for Microscopy Conference.



Matthew Jones and Dr. Jaime E. Jiménez

## Staff Appointments

**Jean-Christophe Cocuron** joined the BioDiscovery Institute as a Research Scientist. He will manage the BioAnalytical Facility, and assist with metabolomics and lipidomics analyses. He has over fourteen years of experience in plant biochemistry with several peer-reviewed publications. He has spent the last seven years managing metabolomics facilities.

**Dr. Cintia Arias** joined the BioDiscovery Institute as a Postdoctoral Research Associate. She is working in Associate Professor Ana Alonso's lab on a project aiming to develop resources and tools to improve oil content and quality in Pennycress. She obtained a PhD in Biological Science from Rosario National University (Argentina).

**Tyler Swanson** joined the BioDiscovery Institute as Research Assistant and Laboratory Manager. He is working in Associate Professor Ana Alonso's lab on a project aiming to develop tools and resources for improvement of oil content and quality in *Thalspi arvense*. He obtained a Bachelor's of Science in Agriculture from The Ohio State University and is originally from Columbus, Ohio.

**Ademar Moreti** joined the BioDiscovery Institute as a Research Assistant in Associate Professor Ana Alonso's lab. He is working in a project that aims to unveil the metabolic interactions between different soybean varieties developed by traditional genetic crossbreeding by local farmers in order to select the most promising variety for fatty acid production. He holds a bachelor's degree in Food Science from the University of Sao Paulo and before he joined UNT, he worked in the area of biotechnology for a Korean company to produce amino acids from bacterial fermentation. His fields of study are biotechnology, microbiology and metabolomics.



Jean-Christophe Cocuron



Dr. Cintia Arias



Tyler Swanson



Ademar Moreti

## Thesis and Dissertations

**Amrita Pal** successfully defended her PhD dissertation titled "Identification of the Neurobiological Basis of Hemodynamic Responses Correlated with Cognitive Stroop Task Performance After an Acute Bout of Aerobic Exercise" on March 8, 2018. Amrita's graduate advisor was University Distinguished Research Professor Dr. Warren Burggren.



Amrita Pal

## Recent Publications

Alves dos Santos, D., Hoesinghaus, D.J., and Gomes, L.C. 2018. Spatial scales and the invasion paradox: a test using fish assemblages in a Neotropical floodplain. *Hydrobiologia* (Special Issue – Invasive Species II), DOI: 10.1007/s10750-018-3531-1 <https://link.springer.com/article/10.1007/s10750-018-3531-1>

Alves, G.H.Z., Tófoli, R.M., Message, H.J., Lima Junior, D.P., and Hoesinghaus, D.J. 2018. New decree promotes fish invasion in the Amazon and Pantanal. *Biodiversity and Conservation*, DOI: 10.1007/s10531-018-1533-y <https://www.springerprofessional.de/en/new-decree-promotes-fish-invasion-in-amazon-and-pantanal/15502090>

Berkunsky, I., Quillfeldt, P., Brightsmith, D.J., Abbud, M.C., Aguilar, J.M.R.E., Alemán-Zelaya, U., Aramburú, R.M., Arce Arias, A., Balas McNab, R., Balsby, T.J.S., Barredo Barberena, J.M., Beissinger, S.R., Rosales, M., Berg, K.S., Bianchi, C.A., Blanco, E., Bodrati, A., Bonilla-Ruz, C., Botero-Delgado, E., Canavelli, S.B., Caparroz, R., Cepeda, R.E., Chassot, O., Cinta-Magallón, C., Cockle, K.L., Daniele, G., de Araujo, C.B., de Barbosa, A.E., de Moura, L.N., Del Castillo, H., Díaz, S., Díaz-Luque, J.A., Douglas, L., Figueroa Rodríguez, A., García-Anleu, R.A., Gilardi, J.D., Grilli, P.G., Guix, J.C., Hernández, M., Hernández-Muñoz, A., Hiraldo, F., Horstman, E., Ibarra Portillo, R., Isacch, J.P., Jiménez, J.E., Joyner, L., Juárez, M., Kacoliris, F.P., Kanaan, V.T., Klemann-Júnior, L., Latta, S.C., Lee, A.T.K., Lesterhuis, A., Lezama-López, M., Lugarini, C., Marateo, G., Marinelli, C.B., Martínez, J., McReynolds, M.S., Mejia Urbina, C.R., Monge-Arias, G., Monterrubio-Rico, T.C., Nunes, A.P., Nunes, FdP, Olaciregui, C., Ortega-Arguelles, J., Pacifico, E., Pagano, L., Politi, N., Ponce-Santizo, G., Portillo Reyes, H.O., Prestes, N.P., Presti, F., Renton, K., Reyes-Macedo, G., Ringler, E., Rivera, L., Rodríguez-Ferraro, A., Rojas-Valverde, A.M., Rojas-Llanos, R.E., Rubio-Rocha, Y.G., Saldenberg, A.B.S., Salinas-Melgoza, A., Sanz, V., Schaefer, H.M., Scherer-Neto, P., Seixas, G.H.F., Serafini, P., Silveira, L.F., Sipinski, E.A.B., Somenzari, M., Susanibarb, D., Tella, J.L., Torres-Sovero, C., Trofino-Falasco, C., Vargas-Rodríguez, R., Vázquez-Reyes, L.D., White Jr., T.H., Williams, S., Zarza, R., and Masello, J.F. (2017) Current threats faced by Neotropical parrot populations. *Biological Conservation* 214:278-287. <https://doi.org/10.1016/j.biocon.2017.08.016>

Castillo, S.P., Crego, R.D., Jiménez, J.E., and Rozzi, R. (2017) Native-predator–invasive-prey trophic interactions in Tierra del Fuego: the beginning of biological resistance? *Ecology (Scientific Naturalist)* 98:2485-2489. <https://doi.org/10.1002/ecy.1873>

Cooper, G.L., Huseby, C.J., Chandler, C.N., Cocuron, J.C., Alonso, A.P., Kuret, J. (2018) A liquid chromatography tandem mass spectroscopy approach for quantification of protein methylation stoichiometry. *Anal Biochem.* 545:72-77.

Crego, R.D., Jiménez, J.E., and Rozzi, R. (2018) Macro- and micro-habitat selection of small rodents and their predation risk perception under a novel invasive predator at the southern end of the Americas. *Mammal Research* 63:1-9. <https://doi.org/10.1007/s13364-018-0361-5>

Dodds, W.K., Higgs, S.A., Spangler, M.J., Guinnip, J., Scott, J.D., Hedden, S.C., Frenette, B.D., Taylor, R., Schechner, A.E., Hoesinghaus, D.J., and Evans-White, M.A. 2018. Spatial heterogeneity and controls of ecosystem metabolism in a Great Plains river network. *Hydrobiologia* 813: 85-102. <https://link.springer.com/article/10.1007/s10750-018-3516-0>

Drew Sturtevant, Mina Aziz, and Kent D. Chapman. (2018). Visualizing the oilseed lipidome. *INFORM* 29(4), 21-24

Duron, Q., Jiménez, J.E., Vergara, P.M., Soto, G.E., Lizama, M., and Rozzi, R. (2018) Intersexual segregation in foraging microhabitat use by Magellanic woodpeckers (*Campephilus magellanicus*): seasonal and habitat effects in the southernmost forest of the world. *Austral Ecology* 43: 25-38. <https://doi.org/10.1111/aec.12531>

He, Y., Zhou, L., Gao, S., Yin, T., Tu, Y., Wang, X., Rayford, R., Hu, M. (2018) Development and validation of a sensitive LC-MS/MS method for simultaneous determination of eight tyrosine kinase inhibitors and its application in mice pharmacokinetic studies. *Journal of Pharmaceutical and Biomedical Analysis.* 148, 65-72.

Hughes, L.E., Shaffer, C.D., Ware, V.C., Aguayo, I., Aziz, R.M., Bhuiyan, S., Bindert, I.S., Calovich-Benne, C.K., Chapman, J., Donegan-Quick, R., Farooq, A., Garcia, C., Graham, L.H., Green, B.Y., Kenna, M.A., Kneeream, E.R., Laing, C.E., Mageeney, C.M., Meridew, S.N., Mikolon, A.R., Morgan, R.E., Nayek, S., Olugbade, I.D., Pike, K.C., Schlegel, L.E., Shishido, T.C., Suresh, T., Suri, N., Weston Hafer, K., Garlanda, R.A., Russell, D.A., Cresawn, S.G., Pope, W.H., Jacobs-Sera, D., and G.F. Hatfull. (2018) Eight Genome Sequences of Cluster BE1 Phages isolated on *Streptomyces*. *Genome Announcements* 6:e01146-17. <https://doi.org/10.1128/genomeA.01146-17>.

Klyczek, K., Jacobs-Sera, D., Adair, T., Adams, S., Ball, S., Benjamin, R., Bonilla, J., Breitenberger, C., Daniels, C., Gaffney, B., Harrison, M., Hughes, L., King, R., Krukoni, G., Lopez, A., Monsen-Collar, K., Pizzorno, M., Rinehart, C., SEA-PHAGES, PHIRE Program, Staples, A., Stowe, E., Garlanda, R., Russell, D., Cresawn, S., Pope, W., and G. Hatfull. (2018) Complete Genome Sequences of 44 Arthrobacter Phages. *Genome Announcements* 6(5), e01474-17. <https://doi.org/10.1128/genomeA.01474-17>.

Pan, Z., Baerson, S.R., Wang, M., Bajsa-Hirschel, J., Rimando, A.M., Wang, X., Nanayakkara, N.P.D., Noonan, B.P., Fromm, M.E., Dayan, F.E., Khan, I., Duke, S.O. (2018) Sorghum cytochrome P450 CYP71AM1 catalyzes the conversion of pentadecatrienyl resorcinol to dihydrosorgoleone in sorgoleone biosynthesis. *New Phytologist*. 218, 616-629.

Price, E.R., Sirsat, T.S., Sirsat, S.K.G., Curran, T., Venables, B.J., and Dzialowski, E.M. (2018) The membrane pacemaker hypothesis: novel tests during the ontogeny of endothermy. *Journal of Experimental Biology* 221: jeb.174466

Rozzi, R., Massardo, F., Mansilla, A., Squeo, F.A., Barros, E., Contador, T., Frangopulos, M., Poulin, E., Rosenfeld, S., Goffinet, B., González-Weaver, C., MacKenzie, R., Crego, R.D., Viddi, F., Naretto, J., Gallardo, M.R., Jiménez, J.E., Marambio, J., Pérez, C., Rodríguez, J.P., Méndez, F., Barroso, O., Kalin-Arroyo M. and Martinic, M. (2018). Parque Marino Cabo de Hornos - Diego Ramírez. Punta Arenas, Chile, Ediciones Universidad de Magallanes, pp. 274 [https://issuu.com/umag9/docs/ebook\\_low\\_parque\\_marino\\_umag\\_fin\\_di](https://issuu.com/umag9/docs/ebook_low_parque_marino_umag_fin_di)

Schüttler, E., Saavedra-Aracena, L., and Jiménez, J.E. (2018). Domestic carnivore interactions with wildlife in the Cape Horn Biosphere Reserve, Chile: husbandry and perceptions of impact from a community perspective. *PeerJ*, <https://peerj.com/articles/4124/>

Suwannasual, U., Lucero, J., McDonald, J.D., Lund, A.K. (2018) Exposure to traffic-generated air pollutants mediates alterations in brain microvascular integrity in wildtype mice on a high-fat diet. *Environ Res.* 160: 449-461. doi: 10.1016/j.envres.2017.10.029.

White, Jr., T.H., and Jiménez, J.E. (2017) *Lophozonia* tree cavities used for nesting by Slender-billed parakeets (*Enicognathus leptorhynchus*) in the central valley of southern Chile: a potentially vanishing keystone resource. *Avian Research* 8:3-15. <https://doi.org/10.1186/s40657-017-0061-x>

## Extramural Grants and Contracts

Engineering Seed Value in Cotton - Strategies to Modify Seed Quality. Cotton Incorporated. PI: Kent D. Chapman. \$55,000

Embryogenic Cell Culture Screening System for Herbicide Tolerance. BASF Plant Science, LP PI: Kent D. Chapman. \$126,686

IRES: Cross-cutting interdisciplinary research and integration of ecology and biocultural conservation in the world's southernmost forests. National Science Foundation- International Research Experiences for Students. PI: J.E. Jiménez, Co-PIs R. Rozzi and J.H. Kennedy. \$249,963

## Seminars/Talks

*A Systems Approach to Improve Oil Synthesis in Alternative Crops*. BioFrontiers, the Biological Sciences seminar series presentation by Ana Paula Alonso, Denton, TX. February 2018.

*Abietane Diterpenoids: A New Twist to their Function in Plants*. UNESCO Regional Center for Biotechnology, Faridabad, India. Invited talk by Jyoti Shah, March 20, 2018.

*Active Learning Activities in Large Classes*. Texas Branch-American Society for Microbiology Spring Meeting, New Braunfels, TX. Presentation by Dr. Lee Hughes. March 24, 2018.

*Adding Value to the Vitamin E Profile Of Cottonseed Through The Seed-Specific Production of Tocotrienols*. 2018 Beltwide Cotton Conference, San Antonio, TX. Shanmukh Salimath, Umidjon Iskandarov, Wei Zhang, Edgar B. Cahoon, Kent D. Chapman (Presenter). January 5, 2018.

*Cardinal orientation of cavities dug by birds in the Neotropics: relationships with environmental attributes at different scales*. Ornithological Congress of the Americas. Puerto Iguazú, Argentina. Ojeda, V., T. Altamirano, B. Bonaparte, L. Bragagnolo, L. Chazarreta, K. Cockle, R. Dias, F. Di Sallo, T. Ibarra, S. Ippi, A. Jauregui, J. Jiménez, M. Lammertink, F. López, G. Núñez, M. de la Peña, N. Politi, L. Rivera, C. Vivanco, M. Santillán, G. Soto, P. Vergara, A. Wynia (Ph.D. student) and A. Schaaf.

*Ceramides localize to granules within the centrosomes and P cell of C. elegans embryos*. 53<sup>rd</sup> Annual Texas Society of Microscopy Meeting, Denton, TX 2018. Student oral presentation by Skylar King. Co-author, Dr. Pamela Padilla.

*Cooperative activation of striated muscle thick filaments by S2 binding*. Texas microscopic meeting, Denton, Texas. February 24, 2018. Presentation by Dua Quedan. Won the best presentation award.

*Exploring the Metabolic Network of Alternative Crops Producing Unusual Fatty Acids*. Southern Section of the American Society for Plant Biologists Annual Meeting presentation by Dr. Ana Paula Alonso, New Orleans, LA. Co-authors: Cocuron, J.C., Bhandari, S., Bates, P. March 2018.

*Heart Rot Hotel 2: the next generation of tree cavities and fungi.* Joint meeting of the American Ornithological Society (135<sup>th</sup>) and the Society of Canadian Ornithologists (35<sup>th</sup>), East Lansing, MI. Jusino, M.A., T. Lorenz, E.L. Walters, A. Wynia (Ph.D. student), M.T. Banik, J.M. Palmer, W.D. Koenig, N.D.G. Hagemeyer, J. Stitt, P. Fischer, K. Vierling, J.E. Jiménez, J.R. Walters and D.L. Lindner.

*How important is cavity provisioning by Magellanic Woodpeckers? A case study in the world's southernmost forests.* Joint meeting of the American Ornithological Society (135<sup>th</sup>) and the Society of Canadian Ornithologists (35<sup>th</sup>), East Lansing, MI. Wynia, A.L. (Ph.D. student), R. Rozzi and J.E. Jiménez

*Integrating Evolution across the Syllabus in a Non-majors Biology Course.* National Science Teachers Association National Conference, Atlanta, GA. Conference presentation by Dr. Janet Ray. March 17, 2018.

*Lipid Droplet Biogenesis in Plants.* The Nathan Edward Tolbert Endowed Lectureship in Biochemistry (Kent D. Chapman- presenter). Department of Biochemistry and Molecular Biology, Michigan State University, East Lansing, MI, March 22, 2018

*Metabolite Imaging and Transcriptome Analyses of Jojoba (*Simmondsia chinensis*) Seed Tissues Suggest Unexpected Differential Localization of Pathways for Storage Lipid Accumulation.* Southern Section of the American Society of Plant Biologists, New Orleans, LA. Drew Sturtevant (presenter), David J. Burks, and Kent D. Chapman. March 24-26.

*Modeling Hyperglycemia and Ischemia in *C. elegans*,* University of Texas El Paso, Biological Sciences. Invited Seminar by Pamela Padilla. February 9, 2018.

*Plant-Interaction with Phloem Sap-Feeding Aphids: A Tug-O-War for Supremacy.* Department of Plant Molecular Biology, Jawaharlal Nehru University, New Delhi, India. Invited talk by Jyoti Shah, March 20, 2018.

*Structural Insights into the Evolutionary Divergence of Acylethanolamide Signaling.* BioDiscovery Institute seminar presentation by Mina Aziz, Denton, TX. March 5<sup>th</sup>, 2018.

## Conference Presentations

Anderson, C., Sturtevant, D., Kothari, N., Hinze, L., and Chapman, K.D. Evaluation of Protein and Amino Acid Levels in Developing Cottonseeds. Southern Section of the American Society of Plant Biologists, New Orleans, LA. March 2018.

Arredondo, B., Orduno, K., Nayek, S., and Hughes, L.E. Annotation of Bacteriophage Olicious from *Streptomyces griseus*. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018.

Barba, J., Montgomery, L., Ray, S., Russ, E., Nayek, S., Bhuiyan, S., and Hughes, L.E. Isolation and Annotation of the Bacteriophage EGole. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018.

Benitez, L., Ceviker, L., Bhuiyan, S., Nayek, S., and Hughes, L.E. Analysis of Genome Structure and Gene Content of *Streptomyces xanthochromogenes* Phage Thestral. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Bhandari, S., Bates, P., Alonso, A.P. Metabolic pathway elucidation of triacylglycerol assembly in *Lesquerella*. Southern Section of the American Society for Plant Biologists Annual Meeting, New Orleans, LA. March 2018.

Calovich-Benne, C., Myers, K., Rapp, I., Wheeler, A., Bhuiyan, S., and Hughes, L.E. Potential DNA Primase Frameshift in *Streptomyces* phage BryanRecycles. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018.

Cannon, A.E., and Chapman, K.D. Tissue- and Lipid-Specific Transcriptomes Provide Novel Insights into *Arabidopsis* *N*-acylethanolamide Signaling Pathways in Early Seedling Development. Southern Section of the American Society of Plant Biologists, New Orleans, LA. March 2018.

Corley, C., and Chapman, K.D. Composition of and Responses to *N*-acylethanolamines in the Oil Seed Crop *Camelina sativa*. Southern Section of the American Society of Plant Biologists, New Orleans, LA. March 2018.

Davila, J., Chavez, J., Nayek, S., and Hughes, L.E. The Annotation of *Streptomyces* phage Haizum. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018.

Frederick, B., Lopez, E., Layton, S., Nayek, S., and Hughes, L.E. The Isolation and Annotation of *Streptomyces* phage LazerLemon. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Ghanbari-Adivi, Z., Lucero, J., Simpson, N., McDonald, J.D., and Lund, A.K. Traffic-Generated Air Pollution-Exposure Mediated Expression of Factors Associated with Onset and/or Progression of Multiple Sclerosis in a Female Mouse Model. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

Gibson, L., Naughton, A., Bhuiyan, S., Nayek, S., and Hughes, L.E. (Bacteriophages and the Current Research on *Streptomyces* phage Gibson. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Harried, B.L., Daugherty, D.J., Neeley, D., Sutton, T.M., Soulen, B.K., Fuller, J., Kim, D., Melton, A., Rubiano, M., Roberts, A.P., and Hoeinghaus, D.J. Mercury body burden and maternal transfer, egg quality and fecundity of Alligator Gar in the Lower Trinity River: Are bigger fish always better for recruitment? Texas Chapter American Fisheries Society Annual Meeting, College Station, TX. January 2018.

Hoeinghaus, D.J., Jensen, J., Pease, A.A., Buckmeier, D., Smith, N., Daugherty, D., Winemiller, K.O., Hardy, T.B., and Allen, Y. Flow-specific floodplain inundation modeling, availability of suitable spawning habitat and recruitment of Alligator Gar in the Lower Trinity River. Texas Chapter American Fisheries Society Annual Meeting, College Station, TX. January 2018.

Jones, M.K. (undergraduate student), and Jiménez, J.E. Barn Owl (*Tyto alba*) and Long Eared-Owl (*Asio otus*) diet in a Blackland Prairie in north-central Texas. America's Grasslands Conference, Fort Worth, TX.

Jones, M.K. (undergraduate student), Jiménez, J.E., Baxter-Slye, J.L., and Steigman, K.L. Comparative diet of Barn Owl (*Tyto alba*) and Long Eared-Owl (*Asio otus*) in a Blackland Prairie in north-central Texas. Texas Society for Ecological Restoration Annual Conference, Denton, TX. First Place Best Student Poster Presentation Award.

Kennedy, C., Lucero, J., McDonald, J.D., and Lund, A.K. Air Pollution-Mediated Alterations in CYP Enzyme Expression Dependent upon Age and Diet in the Brains of C57B16 Wild-Type Mice. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

King, S.D., Gray, C.F, Song, L., Mittler, R., and Padilla, P.A. (2018). The *cisd* gene family regulates physiological apoptosis through *ced-13* and the canonical cell death pathway within *Caenorhabditis elegans*. Federation of North Texas Area Universities Graduate Research Symposium, Denton, TX. March 2018.

LeFan, V., Carrillo, K., Griffiths, E., Beckwith, M., Nayek, S., and Hughes, L.E. The Characterization of Streptomyces phage Comrade. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Lund, A.K. and McDonald, J.D. Inhalation Exposure to Traffic-Generated Air Pollutants Results in Increased Plasma Angiotensin II and Angiotensin II Type 1 Receptor Expression in the Vasculature, Kidneys, and Adipocytes of C57Bl/6 Wildtype Mice. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

Maneekul, J. and Hughes, L.E. Correlation between *Streptomyces griseus* Phages' Genome Length and their Burst Time and Burst Size. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Menchaca, C., Devoll, A., Bhuiyan, S., Nayek, S., and Hughes, L.E. The Scientific Discovery of Streptomyces phage Austintatious. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Mercado, N., Murrer, H., Layton, S., Klug, H., Nayek, S., and Hughes, L.E. Isolation and Characterization of Streptomyces phage Saleté. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Montag, L., Winemiller, K., Leão, H., Benone, N., Prudente, B., Begot, T., Torres, N., Hoeinghaus, D.J., Bower, L., Keppeler, F., Saenz, D., Lopez-Delgado, E., Quintana, Y., and Juen, L. Evaluating the effects of different land uses on habitat and fish assemblages in Amazon rainforest streams. Texas Chapter American Fisheries Society Annual Meeting, College Station, TX. January 2018.

Muthukumar, A., Sturtevant, D., Hugie, K., Campbell, B.T., and Chapman, K.D. Evaluation of Cottonseed Protein and Oil Reserves in Wild Accessions Cotton (*Gossypium sp.*) grown under Rain-fed or Irrigated Conditions. Southern Section of the American Society of Plant Biologists, New Orleans, LA. March 24-26.

Nahar, S., Dumesnil, D., Burks, D., Shah, A., Webster, G., Azad, R., and Padilla P.A. The impact a glucose diet has on physiology, stress responses, behavior and gene expression in *C. elegans*. Federation of North Texas Area Universities Graduate Research Symposium, Denton, TX. March 2018.

Ortega, I., Mendoza, J., Sotelo, J., Bhuiyan, S. and Hughes, L.E. Isolation of the DNA Primase Gene from Streptomyces phage BryanRecycles for Examination of a Potential Slippery Sequence. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018. \*2<sup>nd</sup> Place Best Undergraduate Bacteriophage Poster

Pasparakis, C., Sweet, L., Mager, E., Stieglitz, J., Benetti, D., Roberts, A., and Grosell, M. Combined effects of oil exposure, temperature and ultraviolet radiation on the early life stages of mahi-mahi (*Coryphaena hippurus*). Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. February 2018.

Phillippi, D., Fitch, M.N., Lucero, J., Zhang, Y., Allen, M.S., McDonald, J.D., Campen, M.J., and Lund, A.K. Effects of Inhaled Air Pollution on Inflammation and Microbiota Profiles of the Intestines in Apolipoprotein E Knockout Mice. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

Phipps, B., Li, A., Morales, C., Nguyen, T.L., Bhuiyan, S., and Hughes, L.E. Experiment to Demonstrate the Programmed Translational Frameshift in Tail Assembly Chaperone Genes of Streptomyces phage BryanRecycles. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

Quedan, D., Bernardino-Schaefer, A., Singh, R., Thang, C., Bhaskaruni, M., Srivastava, R., and Root, D. Root. Cooperative activation of striated muscle thick filaments by S2 binding. 62<sup>nd</sup> Annual Biophysics Society Meeting. San Francisco, California. February 2018.

Rigg, S., Sivoravong, A., Bhuiyan, S., and Hughes, L.E. (2018). Genomic comparison between two closely-related Cluster BD1 bacteriophages, Nabi and Rana, that infect *Streptomyces griseus*. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018.

Rippamonti, J.D. and Dzialowski, E.M. The role of thyroid hormone on development of endothermy in White Leghorn chickens (*Gallus gallus*). SICB annual meeting, San Francisco, CA. January 2018.

Schlenk, D., Xu, E., Diamante, G., Chan, S., Mager, E., and Grosell, M. Integration of microRNA and mRNA in early life stages of mahi after exposure to Deepwater Horizon oil. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. February 2018.

Schneider, L., Lucero J., McDonald, J.D. and Lund, A.K. Alterations in Liver Protein Profiles of C57Bl6 Mice Exposed Mixed Vehicular Emissions Via Inhalation. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

Sivoravong, A., Ivy, K., Flores, L., Bhuiyan, S., and Hughes, L.E. Screening of Translational Frameshifting in Streptomyces phage BryanRecycles' Tail Assembly Chaperone Genes. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018. \*3<sup>rd</sup> Place Best Undergraduate Bacteriophage Poster.

Suwannasual, U., Lucero, J., McDonald, J.D., and Lund, A.K. The Effects of Inhaled Traffic-Generated Pollutant Exposure on Angiotensin II Receptor Expression and Blood Brain Barrier Integrity in Wildtype Mice on Either a High or Low Fat Diet. Society of Toxicology Conference: Air Pollution Toxicology, San Antonio, TX. March 2018.

Wang, Y., Pasparakis, C., Mager, E., Stieglitz, J. and Grosell, M. Ontogeny of urea and ammonia transporters in mahi-mahi (*Coryphaena hippurus*) early life stages. Gulf of Mexico Oil Spill and Ecosystem Science Meeting, New Orleans, LA. February 2018.

Wilmsen, S.M., Romano-Oliva, D.C., Rector, S.E., Martin, A.S., and Dzialowski, E.M. The effect of acclimation to a fluctuating temperature on CO<sub>2</sub> production during and after exercise in the desert tarantula *Grammastola rosea*. SICB annual meeting, San Francisco, CA. January 2018.

Wofford, K., Typhair, T., Castillo, J.C., Gonzalez, M., Klug, H., Smith, B., and Hughes, L.E. Isolation and Genomic Analysis of the Wofford Bacteriophage. Texas Branch – ASM Spring Meeting, New Braunfels, TX. March 2018

BIOsphere is a quarterly newsletter of the Department of Biological Sciences, University of North Texas

Physical Location

1511 West Sycamore  
Life Sciences Complex  
Denton, TX 76203-5017, USA

Phone (940) 565-3591

Web: <https://biology.unt.edu/>

Mailing Address

University of North Texas, Department of Biological Sciences  
1155 Union Circle # 305220  
Denton, TX 76203-5017, USA

Fax: (940) 565-3821

Facebook: <https://www.facebook.com/untbiology>