

Curriculum Vitae

Candice Lea Brinkmeyer-Langford

Associate Professor
Texas A&M University
Department of Environmental and Occupational Health
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EDUCATION

Texas A&M University, College Station, Texas	Dec 2002
Bachelor of Science in Genetics	
College of Agriculture and Life Sciences Distinguished Student Award	
Texas A&M University, College Station, Texas	Dec 2006
PhD in Genetics	
Title of Dissertation: "Integrated high-resolution physical and comparative gene maps in horses"	

RESEARCH AND PROFESSIONAL EXPERIENCE

Associate Professor, Dept. of Environmental and Occupational Health, School of Public Health, Texas A&M University	Aug 2024 – present
Research Associate Professor	Sep 2021 – July 2024
Research Assistant Professor	Jan 2013 – Aug 2021
Assistant Research Scientist	Sep 2010 – Dec 2012
Dept. of Veterinary Integrative Biosciences, College of Veterinary Medicine Texas A&M University, College Station, TX Current effort assignment: 60% research, 20% teaching, 20% service	
Postdoctoral Research Associate	Jan 2010 – Aug 2010
Dept. of Veterinary Integrative Biosciences, College of Veterinary Medicine Texas A&M University, College Station, TX Advisor: Dr. C. Jane Welsh <i>Identified changes to gene expression and pathology following perinatal exposure to bisphenol a and/or infection with Theiler's murine encephalomyelitis virus</i>	
Postdoctoral Research Associate	Jan 2007 – Dec 2009
Dept. of Veterinary Integrative Biosciences, College of Veterinary Medicine Texas A&M University, College Station, TX Advisor: Dr. Loren C. Skow <i>Developed high-resolution comparative maps for the major histocompatibility complex regions of cattle and horses; designed and evaluated polymorphic markers for associations with health</i>	
Graduate Research Assistant	June 2003 – Dec 2006
Dept. of Veterinary Anatomy and Public Health, College of Veterinary Medicine Texas A&M University, College Station, TX Advisor: Dr. Bhanu P. Chowdhary <i>Developed comparative gene maps of horse chromosomes using radiation hybrid mapping, overgo probes, and fluorescent in situ hybridization</i>	
Undergraduate Research Assistant	Jan 2002 – May 2002

Dept. of Veterinary Pathobiology, College of Veterinary Medicine
Texas A&M University, College Station, TX

Mentor: Dr. James E. Womack

Mapped genes to chromosomes in cattle using somatic cell hybrid panel

HONORS AND AWARDS

GENEious Mentor, Genetics Interdisciplinary Program	2022
Invited member: Texas A&M ADVANCE Center for Women Faculty Roadmap for a Successful Academic Career Workshop	2014
Invited participant: NINDS Grant Writing Workshop for Diverse Researchers, Bethesda, MD	2014
Texas A&M Assoc. of Former Students University Distinguished Graduate Student Award	2007
Texas A&M Veterinary Faculty Auxiliary Graduate Award	2007
Academic Excellence Award: Assoc. of Former Students Memorial Scholarship	2006-2007

PROFESSIONAL SOCIETY MEMBERSHIPS

Texas A&M Institute for Neuroscience
Society for Neuroscience – Texas A&M Chapter
Texas Genetics Society
Whole Systems Genomics Initiative/Texas A&M Institute for Genome Sciences & Society
Texas A&M Center for Environmental Health Research
American Association for the Advancement of Science
Sigma Xi

EDITORIAL BOARDS/REVIEWER

Special topics editor, <i>Frontiers in Cellular Neuroscience</i>	2024-present
<i>Ad hoc</i> reviewer: <i>Cells</i>	2024-present
<i>Ad hoc</i> reviewer: <i>Frontiers in Genetics</i>	2023-present
<i>Ad hoc</i> reviewer: <i>Frontiers in Neuroscience</i>	2023-present
<i>Ad hoc</i> reviewer: <i>Aging Cell</i>	2023-present
Review Editor, <i>Frontiers in Aging Neuroscience</i>	2022-present
Special topics editor, <i>International Journal of Molecular Sciences</i>	2022-present
<i>Ad hoc</i> reviewer: <i>Frontiers in Immunology</i>	2022-present
Editorial board member, <i>Scientific Reports</i>	2018-present
<i>Ad hoc</i> reviewer: <i>Mammalian Genome</i>	2018-present
<i>Ad hoc</i> reviewer: <i>G3</i>	2017-present
<i>Ad hoc</i> reviewer: <i>Scientific Reports</i>	2017-present
<i>Ad hoc</i> reviewer: <i>BMC Musculoskeletal Disorders</i>	2016-present
<i>Ad hoc</i> reviewer: <i>Animal Genetics</i>	2015-present
<i>Ad hoc</i> reviewer: <i>Canine Genetics and Epidemiology</i>	2015-present
<i>Ad hoc</i> reviewer: <i>Bioinformatics and Biology Insights</i>	2015-present
<i>Ad hoc</i> reviewer: <i>Disease Models and Mechanisms</i>	2014-present
<i>Ad hoc</i> reviewer: <i>Neurotoxicology</i>	2014-present
<i>Ad hoc</i> reviewer: <i>PLoS One</i>	2011-present

GRANT REVIEW COMMITTEES

<i>Ad hoc</i> reviewer for Deutsche Forschungsgemeinschaft	2024
Invited reviewer for NINDS R35 Research Program Awards (RFA-NS-22-038)	2023

Ad hoc pilot project reviewer for CTEHR “P30 Centers Pilot Grant Reviewer Consortium”: Michigan Center on Lifestage Environmental Exposures and Disease (M-LEEaD) Center 2017
Ad hoc reviewer: Association Francaise contre les Myopathies (AFM - French muscular dystrophy association) 2014-2017

OTHER PROFESSIONAL ACTIVITIES

Member: Texas A&M Faculty of Genetics	2022-present
Member: Texas A&M Institute for Neuroscience Training Faculty	2021-present
Member: Academic Women’s Writing Roadmap	2020-present
Member: Texas A&M Faculty of Toxicology	2017-present
Member: Texas A&M Graduate Faculty	2013-present
Completed Texas A&M University Summer Bioinformatics Workshop	2014
Participated in CIRTl Coffee Hour series	2011-2012
Attended Texas A&M Center for the Integration of Research, Teaching & Learning (TAMU-CIRTl) Post-Doctoral Professional Development program workshops	2011
Texas A&M College of Veterinary Medicine Postdoctoral Association – <i>president</i>	2010
Texas A&M University Graduate Student Council – <i>representative</i>	2005-2006
Texas A&M College of Veterinary Medicine Graduate Student Association	2004-2006
Texas A&M University Genetics Graduate Student Association	2003-2006

GRANT SUPPORT

Current (descending order by funding date)

U2CTR004868 Menon, Han, Rusyn (MPIs) 06/04/2024-06/03/2029
 NIH NCATS

TraCe MPS-Based Drug Development Tools for Pregnancy and Women’s Health

This major initiative aims to use an existing, cutting-edge technology called Microphysiological Systems (MPS), or “organ-on-a-chip,” to replicate all aspects of the human female reproductive organs involved in pregnancy as a drug development tool. This approach will also reduce the use of animal models in research. The UTMB-Texas A&M partnership is one of four centers funded by NCATS and the only center that will conduct pregnancy and women’s health research. The five-year grant will establish the Translational Center for Microphysiological Systems Based Drug Development Tools for Pregnancy and Women’s Health.

Role: QA/QC Manager

Team Building Pilot Funding Welsh (PI) 03/30/2024-03/30/2025

Texas A&M Department of Veterinary Pathology

The impact of puberty on the development of virus-induced neurological diseases

In this experiment we will test the hypothesis that there is a difference in susceptibility to developing multiple sclerosis when viral exposure occurs during late prepubertal and/or peripubertal development compared to before or directly after these times.

Role: Co-PI

R25 MH129792 Smotherman (PI) 02/01/2022-03/30/2027

NIH NIMH

Cultivating a Sustainable Neuroscience Research-Intensive Community to Build Equity

Role: Faculty Preceptor

T32 GM135748

Butler-Purry (PI)

02/01/2020-01/31/2025

NIH

renewal submitted

IMSD at Texas A&M University: Initiative for Maximizing Student Diversity in Biomedical Sciences

The overall mission of the IMSD T32 Program at Texas A&M University “Initiative for Maximizing Student Diversity in Biomedical Sciences” is to increase diversity in biomedical sciences at Texas A&M by focusing on recruitment and retention of under-represented minority (URM) populations of trainees seeking a Ph.D. degree and to provide them with the skills to successfully transition into careers in the biomedical research workforce.

Role: Co-I; Director of Special Programs. In this role, I develop and coordinate a series of weekly skill-building workshops to empower trainees from traditionally under-served backgrounds such as socially and economically disadvantaged, and those with disabilities.

P30 ES029067

Threadgill (PI)

04/01/2019-03/31/2029

NIH

Texas A&M Center for Environmental Health Research

The Texas A&M Center for Environmental Health Research (TiCER) will nucleate research and translational activities of faculty and trainees around the overarching theme “Enhancing Public Health by Identifying, Understanding and Reducing Adverse Environmental Health Risks.” This vision will be achieved by building on Texas A&M University’s ongoing investments in people and facilities and a history of state-wide outreach to community stakeholders, with a particular focus on underserved populations. Overall, the Center will expand the established investigator base and expertise that can be deployed to increase the impact of environmental health research in Texas and beyond.

Role: Member

R01 NS103934-01

Brinkmeyer-Langford (PI) 12/01/2017-11/30/2024

NINDS

(includes 2 year NCE)

Host genetic determinants of diversity in viral-induced neuropathology

The goal of this project is to determine how genetic background influences disease diversity following TMEV infection. The central hypothesis is that genetic background, as modeled by a new population-based mouse model, will differentially modify susceptibility to TMEV-induced diseases based upon genetic polymorphisms. The rationale for the proposed research is that a delineation of the genetic effects underlying the diverse outcomes of TMEV infection is likely to contribute new insights into the heterogeneity of virally induced human neurological conditions.

Role: PI. This project represents the current primary focus areas of my lab and, more broadly, my career. This project accounts for at least 50% of my time.

P42 ES027704

Rusyn (PI)

04/01/2017-06/30/2027

NIH/NIEHS

Comprehensive tools and models for addressing exposure to mixtures during environmental emergency-related contamination events

This Center brings together a team of scientists from biomedical, geosciences, data science and engineering disciplines to design comprehensive solutions for complex exposure- and hazard-related challenges. Our overall theme is to characterize and manage both existing and environmental emergency-created hazardous waste sites through the development of tools that can be used by first responders, the impacted communities, and the government bodies involved in site management and cleanup.

Role: PI of Research Experience and Training Coordination Core; Co-I of Data Science and Management Core. As PI of the Training Core, I facilitate interdisciplinary learning for trainees through interactive activities involving multiple projects and cores. I also promote trainees' long-term career success via special skill-building programs for development of critical scientific skills (data management and analysis) and strategies for professional development, such as networking. As Co-I of the Data Science and Management Core, I am responsible for data quality assurance and quality control by reviewing study design and analytical methods prior to data collection. For this, I interact with all personnel of the Texas A&M Superfund Center, and must be familiar with methodologies and data quality objectives.

T32 ES026568

Rusyn (PI)

04/01/2016-06/30/2027

NIH NIEHS

Regulatory Science in Environmental Health and Toxicology

This training program aims to strengthen training and research base at Texas A&M Interdisciplinary Faculty of Toxicology program and also to provide unique focus on regulatory science, a scientific discipline consisting of the development and application of scientific methods, tools, and approaches that are used to support regulatory and other policy objectives.

Role: Co-I; Director of Special Programs. I provide training relevant to multiple aspects of a scientific career. Learning objectives include 1) awareness of certain bioinformatics resources for evaluating scientific data, 2) understanding how best to communicate scientific findings to diverse audiences using platforms ranging from social media to poster and oral presentations at scientific meetings, and 3) development of strategies for long-term success in a scientific career.

Completed

EPA G2019-STAR-E1

Chiu (PI)

09/01/2020-08/31/2023

US EPA

Engaging the Galena Park Community to Build Resilience to Excess Industrial Pollutant Releases after Hurricanes and Floods in Greater Houston

U24TR002633

Rusyn (PI)

09/19/2018-07/31/2021

NIH NCATS

TEX-VAL: Texas A&M Tissue Chip Validation Center

This purpose of this award is to establish a Tissue Chip Validation Center at Texas A&M University (TEX-VAL Center). Our goal is to provide resources, personnel and infrastructure for tissue chip validation using standardized methodologies and reference test compounds.

Role: Co-I; Quality Assurance Manager. In this role, I ensure proper standards and procedures are in place for all experiments of the Center by guiding and overseeing the development and implementation of "quality assurance project plans." This role requires me to interact with all Center personnel and to be familiar with the experiments and technologies used to achieve Center goals.

RD-83580201

Rusyn (PI)

06/01/2015-05/31/2021

EPA STAR

Cardiotoxicity Adverse Outcome Pathway: organotypic culture model and in vitro-to-in vivo extrapolation for high-throughput hazard, dose-response and variability assessments.

This Center will develop and validate a population-based human and mouse organotypic culture model for characterizing susceptibility and variability in cardiac toxicity.

Texas A&M Genomics Seed Grant	Mary Nabity (PI)	05/01/2014-09/01/2015
Investigation of gene expression changes in chronic kidney disease and muscle degeneration using canine models of human diseases.		
The goal of this project is to enhance understanding of the mechanisms underlying fibrosis, using chronic kidney disease and muscle degeneration as examples of chronic progressive conditions influenced by inflammation and fibrosis.		
Role: Co-PI		

CVM Postdoctoral Trainee Research Grant	Brinkmeyer-Langford (PI)	2010-2011
Assessing gene expression and clinical changes due to bisphenol A exposure in a mouse model of multiple sclerosis.		
The goal of this project was to define the influences and mechanisms of the endocrine disrupting compound bisphenol A (BPA) in Theiler's murine encephalomyelitis virus (TMEV)-induced demyelination (TVID), a mouse model of the human disease multiple sclerosis (MS).		
Role: PI		

USDA CSREES NRI 2008-35205-18768 Brinkmeyer-Langford (PI) 01/01/2008-12/31/2010
Polymorphisms and haplotype structure of the equine leucocyte antigen complex.
The goal of this project was to identify genetic variation in the equine major histocompatibility complex (ELA) to better determine haplotype structure associated with disease predisposition.
Role: PI

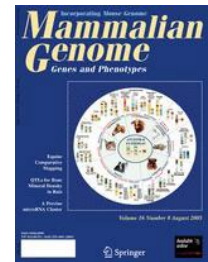
Publication policy: Trainees in the lab (including graduate and undergraduate students) who write manuscripts describing their own work are first authors; the corresponding author is listed last. All trainees are encouraged to collaborate and co-author papers. This policy is accepted in the field of neuroimmunology and encourages trainees to communicate their research findings.

<https://www.ncbi.nlm.nih.gov/myncbi/candice.brinkmeyer-langford.1/bibliography/public/>

<https://scholars.library.tamu.edu/vivo/display/n55d547f4/Persons/Publications>

<https://scholar.google.com/citations?user=3IlG6QEAAAAJ&hl=en>

1. Raudsepp T, Lee EJ, Kata S, **Brinkmeyer C**, Mickelson J, Womack J, Skow LC, Chowdhary BP. 2004. Exceptional conservation of horse-human gene order on X chromosome revealed by high resolution radiation hybrid mapping. *Proc. Natl. Acad. Sci.* 101(8):2386-91. PMID: PMC356960 (My contributions: data collection and analysis; GoogleScholar citations: 96)
In this study we demonstrated, through the construction of high-resolution radiation hybrid and fluorescence *in situ* hybridization maps of the horse X chromosome, the remarkable conservation of gene order and organization on the X chromosomes of mammalian species. At the time, these comparative maps were the most detailed and informative chromosomal maps of mammalian species aside from humans and rodents.
2. **Brinkmeyer-Langford C**, Raudsepp T, Lee E-J, Goh G, Schäffer AA, Agarwala R, Wagner M, Tozaki T, Mickelson JR, Womack JE, Skow LC, Chowdhary BP. 2005. A high-resolution physical map of equine homologues of HSA19 shows divergent evolution compared to other mammals. *Mamm Genome* 16(8):631-49. PMID: 16180145 (GoogleScholar citations: 32)
Article on cover page
3. Wagner ML, Raudsepp T, Goh G, Schäffer AA, Agarwala R, Dranchak PK, **Brinkmeyer-Langford C**, Venta PJ, Skow LC, Chowdhary BP, Mickelson JR. 2006. A 1.3-Mb interval map of equine homologues of HSA2. *Cytogenet Genome Res.* 112(3-4):227-34. PMID: 16484777 (My contributions: data collection and analysis; GoogleScholar citations: 17)
4. **Brinkmeyer-Langford C**, Raudsepp T, Gustafson-Seabury A, Mickelson JR, Chowdhary BP. 2008. A BAC contig map over the proximal approximately 3.3 Mb region of horse chromosome 21. *Cytogenet Genome Res.* 120(1-2):164-72. PMID: 18467843 (GoogleScholar citations: 5)
5. Raudsepp T, Gustafson-Seabury A, Goh G, Seabury C, **Brinkmeyer-Langford C**, Durkin K, Lee E-J, Wagner M, R. Agarwala R, Schäffer A, Tozaki T, Yasue H, Penedo C, Lyons L, Khazanehdari KA, Leeb T, Distal O, Binns M, MacLeod J, Mickelson J, Chowdhary BP. 2008. A 4,103 marker integrated physical and comparative map of the horse genome. *Cytogenet Genome Res.* 122(1):28-36. PMID: PMC2587302 (My contributions: data collection and analysis and figure design; GoogleScholar citations: 69)
6. **Brinkmeyer-Langford CL**, Childers CP, Fritz KL, Gustafson-Seabury AL, Cothran M, Raudsepp T, Womack JE, Skow LC. 2009. A high resolution RH map of the bovine major histocompatibility complex. *BMC Genomics*, 10:182. PMID: 19393056 (GoogleScholar citations: 24)
7. Bovine Genome Sequencing and Analysis Consortium, Elsik CG, Tellam RL, Worley KC, Gibbs RA, Muzny DM, Weinstock GM, Adelson DL, Eichler EE, Elnitski L, Guigó R, Hamernik DL, Kappes SM, Lewin HA, Lynn DJ, Nicholas FW, Raymond A, Rijnkels M, Skow LC, Zdobnov EM, Schook L, Womack J, Alioto T, Antonarakis SE, Astashyn A, Chapple CE, Chen HC, Chrast J, Câmara F, Ermolaeva O, Henrichsen CN, Hlavina W, Kapustin Y, Kiryutin B, Kitts P, Kokocinski F, Landrum M, Maglott D, Pruitt K, Sapojnikov V, Searle SM, Solovyev V, Souvorov A, Ucla C, Wyss C, Anzola JM, Gerlach D, Elhaik E, Graur D, Reese JT, Edgar RC, McEwan JC, Payne GM, Raison JM, Junier T, Kriventseva EV, Eyraas E, Plass M, Donthu R, Larkin DM, Reecy J, Yang MQ, Chen L, Cheng Z, Chitko-McKown CG, Liu GE, Matukumalli LK, Song J, Zhu B, Bradley DG, Brinkman FS, Lau LP, Whiteside MD, Walker A, Wheeler TT, Casey T, German JB, Lemay DG, Maqbool NJ, Molenaar AJ, Seo S, Stothard P, Baldwin CL, Baxter R, **Brinkmeyer-Langford CL**,



Brown WC, Childers CP, Connelley T, Ellis SA, Fritz K, Glass EJ, Herzig CT, Iivanainen A, Lahmers KK, Bennett AK, Dickens CM, Gilbert JG, Hagen DE, Salih H, Aerts J, Caetano AR, Dalrymple B, Garcia JF, Gill CA, Hiendleder SG, Memili E, Spurlock D, Williams JL, Alexander L, Brownstein MJ, Guan L, Holt RA, Jones SJ, Marra MA, Moore R, Moore SS, Roberts A, Taniguchi M, Waterman RC, Chacko J, Chandrabose MM, Cree A, Dao MD, Dinh HH, Gabisi RA, Hines S, Hume J, Jhangiani SN, Joshi V, Kovar CL, Lewis LR, Liu YS, Lopez J, Morgan MB, Nguyen NB, Okwuonu GO, Ruiz SJ, Santibanez J, Wright RA, Buhay C, Ding Y, Dugan-Rocha S, Herdandez J, Holder M, Sabo A, Egan A, Goodell J, Wilczek-Boney K, Fowler GR, Hitchens ME, Lozado RJ, Moen C, Steffen D, Warren JT, Zhang J, Chiu R, Schein JE, Durbin KJ, Havlak P, Jiang H, Liu Y, Qin X, Ren Y, Shen Y, Song H, Bell SN, Davis C, Johnson AJ, Lee S, Nazareth LV, Patel BM, Pu LL, Vattathil S, Williams RL Jr, Curry S, Hamilton C, Sodergren E, Wheeler DA, Barris W, Bennett GL, Eggen A, Green RD, Harhay GP, Hobbs M, Jann O, Keele JW, Kent MP, Lien S, McKay SD, McWilliam S, Ratnakumar A, Schnabel RD, Smith T, Snelling WM, Sonstegard TS, Stone RT, Sugimoto Y, Takasuga A, Taylor JF, Van Tassell CP, Macneil MD, Abatepaulo AR, Abbey CA, Ahola V, Almeida IG, Amadio AF, Anatriello E, Bahadue SM, Biase FH, Boldt CR, Carroll JA, Carvalho WA, Cervelatti EP, Chacko E, Chapin JE, Cheng Y, Choi J, Colley AJ, de Campos TA, De Donato M, Santos IK, de Oliveira CJ, Deobald H, Devinoy E, Donohue KE, Dovc P, Eberlein A, Fitzsimmons CJ, Franzin AM, Garcia GR, Genini S, Gladney CJ, Grant JR, Greaser ML, Green JA, Hadsell DL, Hakimov HA, Halgren R, Harrow JL, Hart EA, Hastings N, Hernandez M, Hu ZL, Ingham A, Iso-Touru T, Jamis C, Jensen K, Kapetis D, Kerr T, Khalil SS, Khatib H, Kolbehdari D, Kumar CG, Kumar D, Leach R, Lee JC, Li C, Logan KM, Malinverni R, Marques E, Martin WF, Martins NF, Maruyama SR, Mazza R, McLean KL, Medrano JF, Moreno BT, Moré DD, Muntean CT, Nandakumar HP, Nogueira MF, Olsaker I, Pant SD, Panzitta F, Pastor RC, Poli MA, Poslusny N, Rachagani S, Ranganathan S, Razpet A, Riggs PK, Rincon G, Rodriguez-Ororio N, Rodriguez-Zas SL, Romero NE, Rosenwald A, Sando L, Schmutz SM, Shen L, Sherman L, Southey BR, Lutzow YS, Sweedler JV, Tammen I, Telugu BP, Urbanski JM, Utsunomiya YT, Verschoor CP, Waardenberg AJ, Wang Z, Ward R, Weikard R, Welsh TH Jr, White SN, Wilming LG, Wunderlich KR, Yang J, Zhao FQ. 2009. The Genome Sequence of Taurine Cattle: A window to ruminant biology and evolution. *Science*. 324(5926):522-8. PMID: PMC2943200

(My contribution: annotation of innate immune genes; GoogleScholar citations: 1,516)

This publication by the Bovine Genome Sequencing and Analysis Consortium described the genome sequence, annotation, and comparative analysis of the bovine genome. The findings of this study continue to enable the identification and functional understanding of genetic loci underlying traits of interest in livestock as well as other species.

8. **Brinkmeyer-Langford CL**, Murphy WJ, Childers CP, Skow LC. 2010. A conserved segmental duplication within ELA. *Animal Genetics*, 41 Suppl 2:186-95. PMID: 21070294 (GoogleScholar citations: 11)
9. **Brinkmeyer-Langford CL**, Cai JJ, Gill CA, Skow LC. 2013. Microsatellite variation in the equine MHC. *Animal Genetics*. 44(3):267-75. PMID: 23051181 (GoogleScholar citations: 21)
10. **Brinkmeyer-Langford C**, Kornegay JN. 2013. Comparative genomics of X-linked muscular dystrophies: the Golden Retriever model. *Current Genomics*. 14(5): 330-42. PMID: 24403852 / PMID: PMC3763684 (GoogleScholar citations: 31)
11. **Brinkmeyer-Langford CL**, Rodrigues A, Kochan K, Haney R, Rassu F, Steelman A, Young C, Riggs P, Storts R, Meagher M, Welsh CJ. 2014. Consequences of perinatal bisphenol A exposure in

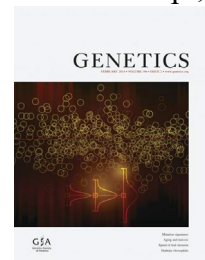
a mouse model of multiple sclerosis. *Autoimmunity*, 47(1):57-66. PMID: 24191696 (GoogleScholar citations: 21)

12. Wang G, Yang E, Mandhan I, **Brinkmeyer-Langford CL**, Cai JJ. 2014. Population-level expression variability of mitochondrial DNA-encoded genes in humans. *European Journal of Human Genetics*, 22(9):1093-9. PMID: 24398800 (My contributions: experimental conception and design and wrote the manuscript; GoogleScholar citations: 8)

13. Wang G, Yang E, **Brinkmeyer-Langford CL**, Cai JJ. 2014. Additive, epistatic, and environmental effects through the lens of expression variability QTLs in a twin cohort. *Genetics* 196(2):413-25. PMID: 24298061 (My contributions: conceived and designed experiments and wrote the manuscript; GoogleScholar citations: 41)

Article on cover page

For this study, we investigated the influence of nongenetic and genetic factors on variable gene expression using data from a large cohort of monozygotic and dizygotic twins. We also found that these variable-expression quantitative trait loci (QTL) are formed in part due to linkages with expression QTL SNPs that are additively associated with the mean of gene expression.



14. Fritz KL, Hendrickson JA, Kaese HJ, Rendahl AK, Bellone RR, Dynes KM, Wagner ML, Lucio MA, Cuomo FM, **Brinkmeyer-Langford CL**, Skow LC, Valberg SJ, Mickelson JR, Rutherford MS, McCue ME. 2014. Genetic risk factors for insidious Equine Recurrent Uveitis in Appaloosa horses. *Animal Genetics*, 45(3):392-9. PMID: 24467435 (My contributions: data collection and analysis; GoogleScholar citations: 75)
15. Kornegay JN, Spurney CF, Peter P, Nghiem PP, **Brinkmeyer-Langford CL**, Hoffman EP, Nagaraju K. 2014. Pharmacologic Management of Duchenne Muscular Dystrophy: Target Identification and Preclinical Trials. *ILAR*. 55 (1): 119-149. PMID: 24936034 (My contributions: data collection and analysis; GoogleScholar citations: 59)
16. Zeng Y, Wang G, Yang E, Ji G, **Brinkmeyer-Langford CL**, Cai JJ. 2015. Aberrant gene expression in humans. *PLoS Genetics*. 11(1):e1004942. PMID: 25617623 (My contributions: conceived and designed experiments and wrote the manuscript; GoogleScholar citations: 78)
In this study, we established a novel analytical framework for evaluating the effects of rare or private variants on gene expression. For this, we identified outlier individuals that show markedly different gene expression from the majority of a population, and then revealed the contributions of rare variants to the aberrant gene expression in these outliers.
17. Galindo CL, Soslow JH, **Brinkmeyer-Langford CL**, Gupte M, Smith HM, Sengsayadeth S, Sawyer DB, Benson DW, Kornegay JN, Markham LW. 2016. Translating golden retriever muscular dystrophy microarray findings to novel biomarkers for cardiac/skeletal muscle function in Duchenne muscular dystrophy. *Pediatr Res*. 79(4):629-636. PMID: 26672735 (My contributions: data analysis and writing the manuscript, GoogleScholar citations: 28)
18. Kornegay JN, Bogan DJ, Bogan JR, Dow JL, Wang J, Fan Z, Liu N, Warsing LC, Grange RW, Ahn M, Balog-Alvarez CJ, Cotten SW, Willis MS, **Brinkmeyer-Langford C**, Zhu H, Palandra J, Morris CA, Styner MA, Wagner KR. Dystrophin-deficient dogs with reduced myostatin have unequal

muscle growth and greater joint contractures. 2016. *Skelet Muscle*. 6:14. PMID: 27047655 (My contributions: myostatin qRT-PCR and sequencing studies; GoogleScholar citations: 33)

19. **Brinkmeyer-Langford CL**, Guan J, Ji G, Cai JJ. Aging Shapes the Population-Mean and - Dispersion of Gene Expression in Human Brains. 2016. *Front Aging Neurosci*. 8:183. PMCID: PMC4971101 (GoogleScholar citations: 31)

We evaluated gene expression levels across different regions of the brain using postmortem samples from people between 20 and 70 years of age. We found that age-related gene expression varies by genotype and brain region, and that this variation is associated with changes to mean expression levels and dispersion. This study provided a foundation for discerning the roles of gene expression changes in age-related neurodegenerative diseases in humans.

20. **Brinkmeyer-Langford C**, Balog-Alvarez C, Cai JJ, Davis BW, Kornegay JN. Genome-wide association study to identify potential genetic modifiers in a canine model for Duchenne muscular dystrophy. 2016. *BMC Genomics*. 17:665. PMCID: PMC4994242 (GoogleScholar citations: 10)

21. Markham LW, **Brinkmeyer-Langford CL**, Soslow JH, Gupte M, Sawyer DB, Kornegay JN, Galindo CL. GRMD cardiac and skeletal muscle metabolism gene profiles are distinct. 2017. *BMC Med Genomics*. 10(1):21. PMID: 28390424 (My contributions: study design, data interpretation, and edited manuscript; GoogleScholar citations: 11)

22. **Brinkmeyer-Langford CL**, Rech R, Amstalden K, Hillhouse A, Kochan K, Young C, Welsh CJ, Threadgill DW. Host genetic background influences diverse responses to viral infection in mice. 2017. *Sci Rep*. 7(1):12194. PMCID: PMC5610195 (GoogleScholar citations: 27)

In this paper we describe the profound influence of host genetic background on neurological responses to viral infection, using the Collaborative Cross mouse resource to model outcomes of infection by Theiler's murine encephalomyelitis virus.

23. Chu C, Hokamp J, Cianciolo R, Dabney A, **Brinkmeyer-Langford CL**, Lees G, Nabity M. RNA-Seq of Serial Kidney Biopsies Obtained During Progression of Chronic Kidney Disease from Dogs with X-Linked Hereditary Nephropathy. 2017. *Sci Rep*. 7(1):16776. PMCID: PMC5711945. (My contributions: experimental design and manuscript preparation; GoogleScholar citations: 15)

24. **Brinkmeyer-Langford CL**, Chu C, Balog C, Yu X, Cai JJ, Kornegay JN, Nabity M. Expression profiling of disease progression in canine model of Duchenne muscular dystrophy. 2018. *PLoS One*. 13(3):e0194485. PMID: 29554127 (GoogleScholar citations: 24)

25. Eldridge R[@], Osorio Hurtado D, Amstalden K, Edwards C, Young CR, Cai JJ, Konganti K, Hillhouse A, Threadgill DW, Welsh CJ, **Brinkmeyer-Langford CL**. Antecedent presentation of neurological phenotypes in the Collaborative Cross reveals four classes with complex sex-dependencies. 2020. *Sci Rep*. 10(1):7918. PMCID: PMC7220920 (GoogleScholar citations: 10)

For this study, we used the Collaborative Cross and Theiler's murine encephalomyelitis virus (TMEV) to demonstrate how different clusters of neurological phenotypes can result from the same virus, depending on the genetic background of the host. These phenotypic clusters/profiles can reflect the diversity of subtypes seen in human conditions such as MS, ALS, and Parkinson's disease, and also feature sex-dependencies which often depend on genetic background (i.e., some, but not all, Collaborative Cross mouse strains infected with TMEV show sex-dependent phenotypes).

26. Lawley K[#], Rech R, Elenwa F, Han G, Perez Gomez AA[#], Amstalden K, Welsh CJ, Young CR, Threadgill DW, **Brinkmeyer-Langford CL**. Host genetic diversity drives variable central nervous system lesion distribution in chronic phase of Theiler's Murine Encephalomyelitis Virus (TMEV) infection. 2021. PLoS One. 16(8):e0256370. PMCID: PMC8378701
Here, we have defined and categorized the diverse histopathological outcomes of TMEV infection, such as demyelination and neurodegeneration, and their relationships to host genetic background and phenotypic outcomes to long-term infection. (GoogleScholar citations: 5)
27. **Brinkmeyer-Langford CL**, Amstalden K, Konganti K, Hillhouse A, Lawley KS[#], Perez-Gomez AA[#], Young CR, Welsh CJ, Threadgill DW. Resilience in long-term viral infection: genetic determinants and interactions. 2021. Int. J. Mol. Sci. 22(21):11379. PMCID: PMC858414. (GoogleScholar citations: 3)
28. Perez-Gomez A[#], Karmakar M, Carroll RJ, Lawley KS[#], Amstalden K, Konganti K, Young CR, Threadgill DW, Welsh CJ, **Brinkmeyer-Langford CL**. Genetic and immunological contributors to virus-induced paralysis. 2021. Brain Behavior Immun-Health 18:100395. PMCID: PMC8645428. (GoogleScholar citations: 6)
29. Perez-Gomez AA[#], Karmakar M, Carroll RJ, Kochan KJ, Lawley KS[#], Amstalden K, Young CR, Threadgill DW, Welsh CJ, **Brinkmeyer-Langford C**. Temporal Cytokine Profiles of Heterogeneous Mouse Models with TMEV-induced Neurological Disease. 2022. Cells 11(13):2044. PMCID: PMC9265636 (GoogleScholar citations: 1)
30. Lawley K[#], Rech R, Hopkins L, Han G, Perez Gomez AA[#], Amstalden K, Welsh CJ, Young CR, Threadgill DW, **Brinkmeyer-Langford CL**. Viral Clearance and Neuroinflammation in Acute TMEV Infection Vary by Host Genetic Background. 2022. Int. J. Mol. Sci. 23(18):10482. PMCID: PMC9501595 (GoogleScholar citations: 3)
31. Karmakar M, Perez-Gomez AA[#], Carroll RJ, Amstalden K, Lawley KS[#], Young CR, Welsh CJ, Threadgill DW, **Brinkmeyer-Langford CL**. Baseline gait and motor function predict outcomes of chronic viral infection. 2023. Int. J. Mol. Sci. 24(3):2843. PMCID: PMC9917409
32. Perez-Gomez AA[#], Wang M, Kochan K, Amstalden K, Young CR, Welsh CJ, Phillips TD, **Brinkmeyer-Langford CL**. C57BL/6J mice exposed to perfluorooctanoic acid demonstrate altered immune responses and increased seizures after Theiler's murine encephalomyelitis virus infection. 2023. Front Immunol. 14:1228509. PMCID: PMC10434537.

Manuscript submitted

1. Lawley K[#], Kang TW[#], Rech R, Karmakar M, Carroll R, Perez Gomez AA[#], Amstalden K, Jones-Hall Y, Welsh CJ, Young CR, **Brinkmeyer-Langford CL**. The association between virus-induced spinal cord lesions and the genetic background of the host. *Submitted to Journal of Neuropathology and Experimental Neurology, November 21, 2024.*

Manuscripts in preparation

1. Gomez FP, Spoor EM, Bake S, Young CR, Sohrabji F, **Brinkmeyer-Langford CL**, Welsh CJR. Therapeutic effects of estrogens on inflammatory demyelination in a mouse model of multiple sclerosis.
 2. **Brinkmeyer-Langford CL**, Lawley K, Welsh CJ, Rech R. Comparative Genomics of Prolactin in Virus-Induced Demyelinating Disease.
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ARTICLES (in non-peer reviewed journals, chronological order; students in my lab are denoted by #graduate student, @undergraduate student)

1. Feik M[@], **Brinkmeyer-Langford CL**. The Impact of Genetic Background on Neurological Disease Outcomes. 2021. In: Explorations – The Texas A&M Undergraduate Journal, volume 13.
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BOOK CHAPTERS

1. Skow LC, **Brinkmeyer-Langford CL**. 2012. Unexpected Structural Features of the Equine Major Histocompatibility Complex. In: Equine Genomics (B. P. Chowdhary, ed.), Wiley-Blackwell, Chapter 6.
 2. **Brinkmeyer-Langford C**, Li J, Welsh CJ, Tiffany-Castiglioni E. 2017. Myelin and Myelination. In: Comprehensive Toxicology, 3rd edition, Elsevier.
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INVITED PRESENTATIONS

1. **C. Brinkmeyer-Langford**, Ashley Gustafson-Seabury, Terje Raudsepp, Eun-Joon Lee, Glenda Goh, Alejandro A. Schäffer, Richa Agarwala, Michelle L. Wagner, Teruaki Tozaki, Loren C. Skow, James E. Womack, James R. Mickelson and Bhanu P. Chowdhary. 2005. High-resolution physical map of equine homologues of HSA19 leads to detailed analyses of a 5Mb homologous segment on ECA21. Presented at the 6th International Equine Gene Mapping Workshop, Dublin July 11-14 2005. *Invited presentation*.
2. **C. Brinkmeyer-Langford**, A. Gustafson-Seabury, T. Raudsepp, L.C. Skow, J.R. Mickelson, B.P. Chowdhary. 2006. Characterization of a 5Mb HSA19 segment in horse provides a glimpse into its evolution in Equids. Presented at Plant and Animal Genome XIV Conference, Large Insert Library Workshop, San Diego January 14-18. *Invited presentation*.
3. **C. Brinkmeyer-Langford**, T. Raudsepp, M.L. Wagner, E.-J. Lee, A. Gustafson-Seabury, R. Agarwala, A.A. Schäffer, J.R. Mickelson, L.C. Skow, J.E. Womack, B.P. Chowdhary. 2006. Integrated high-resolution physical and comparative gene maps in horses. Presented at the Department of Veterinary Integrated Biosciences Retreat, College Station August 25. *Invited presentation*.
4. **C. Brinkmeyer-Langford**, T. Raudsepp, A. Gustafson-Seabury, M.-K. Lee, H. Zhang, L.C. Skow, R. Agarwala, A.A. Schäffer, B.P. Chowdhary. 2007. Comparative characterization of a 5Mb region on horse chromosome 21. Presented at Plant and Animal Genome XV Conference, Large Insert Library Workshop, San Diego January 15-17. *Invited presentation*.
5. **C.L. Brinkmeyer-Langford**. 2011. Genomic variation in the MHC: Consequences for animal health. Invited seminar at the University of Vermont, Burlington, Vermont February 17. *Invited presentation*.
6. **C. Brinkmeyer-Langford**. 2012. The future of genomics and bioinformatics. Invited lecture at the University of Texas – Tyler, Tyler, Texas, September 27. *Invited presentation*.
7. **C. Brinkmeyer-Langford**. 2012. Comparative genomics: Insights into dynamic genomes. Invited seminar at the University of Texas – Tyler, Tyler, Texas, September 28. *Invited presentation*.
8. **C. Brinkmeyer-Langford**. 2013. Comparative genomics of Golden Retriever Muscular Dystrophy. Texas A&M University Neuroscience Faculty meeting, College Station January 30. *Invited presentation*.
9. **C. Brinkmeyer-Langford**. 2014. Genomes and Genomics. Lecture for Dr. James Derr's Biomedical Genetics class, Texas A&M, College Station March 26. *Invited lecture*.

10. **C. Brinkmeyer-Langford**. 2014. Epigenetics. Lecture for Dr. Mary Nabity's Advanced Mechanisms of Disease class, Texas A&M, College Station October 2. *Invited lecture*.
11. **C. Brinkmeyer-Langford**, K. Amstalden, R. Rech, C. Young, C. J. Welsh, D. Threadgill. 2015. Host genetic determinants of diversity in viral-induced disease pathology. Population-Based Rodent Resources for Environmental Health Sciences Meeting, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina March 18-19. *Invited presentation*.
12. **C. Brinkmeyer-Langford**. 2015. Introduction to Genetics and Genomics. Lecture for Dr. Larry Johnson's VIBS289 class, Texas A&M, College Station April 7. *Invited lecture*.
13. **C. Brinkmeyer-Langford**. 2015. Epigenetics. Lecture for Dr. Mary Nabity's Advanced Mechanisms of Disease class, Texas A&M, College Station September 24. *Invited lecture*.
14. **C. Brinkmeyer-Langford**. 2016. Epigenetics. Lecture for Dr. Mary Nabity's Advanced Mechanisms of Disease class, Texas A&M, College Station September 15. *Invited lecture*.
15. **C. Brinkmeyer-Langford**. 2017. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 12. *Invited lecture*.
16. **C. Brinkmeyer-Langford**. 2017. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 19. *Invited lecture*.
17. **C. Brinkmeyer-Langford**. 2017. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 21. *Invited lecture*.
18. **C. Brinkmeyer-Langford**. 2017. Genetic modifiers of diverse phenotypes. Texas A&M Biochemistry and Genetics Society, College Station October 4. *Invited presentation*.
19. **C. Brinkmeyer-Langford**. 2018. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 27. *Invited lecture*.
20. **C. Brinkmeyer-Langford**. 2018. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 18. *Invited lecture*.
21. **C. Brinkmeyer-Langford**. 2018. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 20. *Invited lecture*.
22. **C. Brinkmeyer-Langford**. 2018. Host genetic determinants of viral-induced neuropathologies. Texas A&M Comparative Genomics Seminar, College Station February 21. *Invited presentation*.
23. **C. Brinkmeyer-Langford**, K. Amstalden, R. Rech, C. Young, C.J. Welsh, D.W. Threadgill. 2018. Neuropathological diversity associated with viral infection based on host genetic background. Keystone Symposia: Advances in Neurodegenerative Disease Research and Therapy, Keystone, CO June 17-21. *Invited poster presentation*.
24. **C. Brinkmeyer-Langford**. 2018. Host genetic determinants of viral-induced neuropathologies – for URI. University of Rhode Island, Kingston, RI October 3. *Invited seminar*.
25. **C. Brinkmeyer-Langford**. 2019. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 5. *Invited lecture*.

26. **C.L. Brinkmeyer-Langford**, R. Eldridge, K. Lawley, D. Osorio Hurtado, K. Amstalden, R. Rech, C.R. Young, J.J. Cai, C.J. Welsh, D.W. Threadgill. 2019. Modeling complex neurological diseases using genetically diverse mice. Cell Symposia: Neuro-Immune Axis, Long Beach, CA September 22-24. *Invited poster presentation.*
27. **C. Brinkmeyer-Langford**. 2019. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station October 8. *Invited lecture.*
28. **C. Brinkmeyer-Langford**. 2019. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station October 10. *Invited lecture.*
29. **C. Brinkmeyer-Langford**. 2019. Diverse Host Responses to Neurotropic Viral Infection. Texas A&M Immunology Consortium Retreat, College Station December 14. *Invited presentation.*
30. **C. Brinkmeyer-Langford**. 2020. Neurotoxicology: Central Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station March 16. *Invited lecture.*
31. **C. Brinkmeyer-Langford**. 2020. Neurotoxicology: Peripheral Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station March 23. *Invited lecture.*
32. **C. Brinkmeyer-Langford**. 2020. Role of host genetic background in a viral infection model of multiple sclerosis. Presentation for annual Brazos Valley Chapter of the National Multiple Sclerosis Society, College Station August 14.
33. **C. Brinkmeyer-Langford**. 2020. The genetic and genome bases of neurological diseases. Lecture for Dr. C. Jane Welsh's Neuroanatomical Systems: Neurodegenerative Diseases class (VIBS 606), Texas A&M, College Station September 3. *Invited lecture.*
34. **C. Brinkmeyer-Langford**. 2020. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 17. *Invited lecture.*
35. **C. Brinkmeyer-Langford**. 2020. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 22. *Invited lecture.*
36. **C. Brinkmeyer-Langford**. 2020. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 24. *Invited lecture.*
37. **C. Brinkmeyer-Langford**. 2021. Neurotoxicology: Central Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station February 1. *Invited lecture.*
38. **C. Brinkmeyer-Langford**. 2021. Neurotoxicology: Peripheral Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station February 8. *Invited lecture.*
39. **C. Brinkmeyer-Langford**. 2021. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 30. *Invited lecture.*
40. **C. Brinkmeyer-Langford**. 2021. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station October 5. *Invited lecture.*
41. **C. Brinkmeyer-Langford**. 2021. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station October 7. *Invited lecture.*

42. **C. Brinkmeyer-Langford.** 2021. The influences of genetics on virus-affected neurological diseases. Sharon Boston Memorial Multiple Sclerosis Society Meeting, College Station December 10. *Invited presentation.*
 43. **C. Brinkmeyer-Langford.** 2022. Neurotoxicology: Central and Peripheral Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station February 28. *Invited lecture.*
 44. **C. Brinkmeyer-Langford.** 2022. Host genetic determinants of viral-induced neuropathologies. University of North Texas, Denton March 3. *Invited seminar.*
 45. **C. Brinkmeyer-Langford.** 2022. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 20. *Invited lecture.*
 46. **C. Brinkmeyer-Langford.** 2022. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 22. *Invited lecture.*
 47. **C. Brinkmeyer-Langford.** 2022. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 27. *Invited lecture.*
 48. **C. Brinkmeyer-Langford.** 2022. Host genetic determinants of diversity in viral-induced neuropathologies. Genetics and Genomics weekly seminar series, Texas A&M, College Station November 7. *Invited seminar.*
 49. **C. Brinkmeyer-Langford.** 2023. Host genetic determinants of diversity in viral-induced neuropathologies. VMBS Biomedical Genetics faculty candidate seminar, Texas A&M, College Station January 23. *Invited seminar.*
 50. **C. Brinkmeyer-Langford.** 2023. Factors affecting neurological outcomes in a mouse model of virally induced neurological disease. Veterinary Pathobiology seminar series, Texas A&M, College Station April 3. *Invited seminar.*
 51. **C. Brinkmeyer-Langford.** 2023. Epigenetics. Lecture for Dr. Mary Nabity's Mechanisms of Disease (VPAT 640) and Mechanisms of Metabolic Disease (VPAT 642) classes, Texas A&M, College Station September 7. *Invited lecture.*
 52. **C. Brinkmeyer-Langford.** 2023. Animal Models. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 12. *Invited lecture.*
 53. **C. Brinkmeyer-Langford.** 2023. Animal Models of Complex Disease. Lecture for Dr. James Derr's Mammalian Genetics class (GENE 405), Texas A&M, College Station September 14. *Invited lecture.*
 54. **C. Brinkmeyer-Langford.** 2023. Unraveling the complexity of Gene x Environmental Interactions in Neurological Diseases. School of Public Health, Texas A&M, College Station November 10. *Invited seminar.*
 55. **C. Brinkmeyer-Langford.** 2024. Unraveling the complexity of Genetic Interactions in Neurological Diseases. Department of Biology, Texas A&M, College Station January 25. *Invited seminar.*
 56. **C. Brinkmeyer-Langford.** 2024. Neurotoxicology: Central and Peripheral Nervous System. Lecture for Advanced Toxicology (VIBS 670), Texas A&M, College Station February 26. *Invited lecture.*
 57. **C. Brinkmeyer-Langford.** 2025. Gene x Environment Interactions in Neurological Disease. University of Illinois, Urbana-Champaign March 25. *Invited seminar.*
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OTHER PLATFORM PRESENTATIONS

1. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, L.C. Skow, B.P. Chowdhary. 2004. High-resolution RH, BAC contig and comparative maps of horse X chromosome to study health and fertility traits. Presented at Plant and Animal Genome XII Conference, Large Insert Library Workshop, San Diego January 10-14.
2. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2004. Building high-resolution maps of horse X chromosome to study health and fertility traits. Presented at Texas A&M University Student Research Week Competition, March 30, 2004.
3. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, L.C. Skow, B.P. Chowdhary. 2004. High-resolution RH, BAC contig and comparative maps of horse X chromosome to study health and fertility traits. Presented at Texas Genetics Society Meeting, South Padre Island April 14-18.
4. L.C. Skow, T. Raudsepp, G.Goh, E.-J. Lee, **C. Brinkmeyer**, A. Gustafson-Seabury, M. Wagner, H. Yasue, T. Tozaki, C. Penedo, L. Lyons, A. Young, T. Leeb, D. Adelson, J. Womack, J. Mickelson, B. Chowdhary. 2005. The Second Generation Whole Genome Radiation Hybrid (RH) And Comparative Map Of The Horse. Presented at Plant and Animal Genome XIII Conference, San Diego January 15-19.
5. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, G. Goh, M.L. Wagner, J.R. Mickelson, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2005. Analyzing the horse genome for improved health, reproduction and performance. Presented at Texas A&M University Student Research Week Competition, College Station March 29.
6. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, G. Goh, M.L. Wagner, J.R. Mickelson, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2005. A high-resolution physical map of equine homologues of HSA19 shows divergent evolution compared to other mammals. Presented at Texas Genetics Society Meeting, Dallas April 7-9.
7. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, G. Goh, M.L. Wagner, J.R. Mickelson, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2005. A high-resolution physical map of equine homologues of HSA19 shows divergent evolution compared to other mammals. Presented at College of Veterinary Medicine Graduate Student Association Research Symposium, College Station April 26.
8. **C. Brinkmeyer-Langford**, T. Raudsepp, A. Gustafson-Seabury, J.R. Mickelson, B.P. Chowdhary. 2006. BAC contig over a 5 Mb region of the horse genome for discovery of functional elements and evolutionary breakpoints. Presented at Annual Genetics Faculty Graduate Student Research Competition February 17.
9. **C. Brinkmeyer-Langford**, T. Raudsepp, A. Gustafson-Seabury, B.P. Chowdhary. 2006. High resolution comparative gene maps provide insights into the evolution of equine chromosomes. Presented at Texas A&M Student Research Week in conjunction with Ecological Integration Student Research Symposium April 1.
10. **C. Brinkmeyer-Langford**, T. Raudsepp, A. Gustafson-Seabury, J.R. Mickelson, B.P. Chowdhary. 2006. Development and characterization of a BAC contig over a 5 Mb segment of horse chromosome 21. Presented at Texas Genetics Society Meeting, Galveston April 6-8.
11. **C. Brinkmeyer-Langford**, T. Raudsepp, A. Gustafson-Seabury, J.R. Mickelson, B.P. Chowdhary. 2006. Development and characterization of a 5Mb BAC contig on horse chromosome 21 – a tool for detailed comparison and discovery of conserved functional elements in mammals. Presented at College of Veterinary Medicine Graduate Student Association Research Symposium, College Station April 26.

12. **C. Brinkmeyer-Langford**, T. Raudsepp, M. Wagner, A. Gustafson-Seabury, J.R. Mickelson, L.C. Skow, and B.P. Chowdhary. 2007. Development of high-resolution physically-ordered and comparative gene maps for the horse. Presented at Texas Genetics Society Meeting, San Antonio April 12-14.
13. **C.L. Brinkmeyer-Langford**, W.J. Murphy, C.P. Childers, L.C. Skow. 2009. Structural and expression analyses of a segmental duplication within the equine lymphocyte antigen. Presented at Texas Genetics Society Meeting, Austin April 2-4.
14. **C.L. Brinkmeyer-Langford**, W.J. Murphy, C.P. Childers, L.C. Skow. 2010. Organization and haplotype analysis of the equine lymphocyte antigen. Presented at Texas Genetics Society Meeting, Houston March 25-27.
15. Fritz KL, Hendrickson JA, Kaese HJ, Rendahl AK, Bellone RR, Dynes KM, Wagner ML, Lucio MA, Cuomo FM, **Brinkmeyer-Langford CL**, Skow LC, Valberg SJ, Mickelson JR, Rutherford MS, McCue ME. 2011. The influence of multiple genetic risk factors in Appaloosa Persistent Uveitis. Presented at the Plant and Animal Genome XIX Conference, Equine Workshop, San Diego, California January 15-19.
16. **C. Brinkmeyer-Langford**, A. Rodrigues, C. Young, C.J. Welsh. 2011. The effects of Bisphenol A in a mouse model of multiple sclerosis. Presented at the Brazos Valley Multiple Sclerosis Support Group, College Station November 5.
17. **C. Brinkmeyer-Langford**, A. Rodrigues, A. Steelman, C. Young, C.J. Welsh. 2012. Impact of bisphenol a in a mouse model of multiple sclerosis. Presented at the 2012 GSA/PDA Symposium, College Station May 20.

POSTER PRESENTATIONS

1. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, L.C. Skow, B.P. Chowdhary. 2004. Developing BAC Contigs on Horse X Chromosome with an RH-Comparative Map. Presented at Plant and Animal Genome XII Conference, Large Insert Library Workshop, San Diego January 10-14.
2. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2004. High-resolution RH, BAC contig and comparative maps of horse X chromosome to study health and fertility traits. Presented at Texas A&M University CVM GSA Research Symposium, College Station April 8.
3. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, G. Goh, M.L. Wagner, J.R. Mickelson, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2005. A high resolution comparative map of HSA19 homologues in horse. Presented at Texas A&M Agriculture Program Conference, College Station January 10-14.
4. **C. Brinkmeyer**, E.J. Lee, T. Raudsepp, G. Goh, M.L. Wagner, J.R. Mickelson, S. Kata, J. Womack, L.C. Skow, B.P. Chowdhary. 2005. A high resolution comparative map of HSA19 homologues in horse. Presented at Plant and Animal Genome XIII Conference, San Diego January 15-19.
5. **C. Brinkmeyer-Langford**, A. Gustafson-Seabury, T. Raudsepp, L.C. Skow, J.R. Mickelson, B.P. Chowdhary. 2006. Pilot resource for discovery of functional elements and evolutionary breakpoints in the horse genome. Presented at Texas A&M Agriculture Program Conference, College Station January 9-12.
6. A. Gustafson-Seabury, T. Raudsepp, **C. Brinkmeyer-Langford**, G. Goh, E.J. Lee, , M.L. Wagner, H. Yasue, T. Tozaki, C. Penedo, L. Lyons , A. Young, T. Leeb, D. Adelson, J. Womack, L.C. Skow, J.R.. Mickelson, B.P. Chowdhary. 2006. The second generation whole genome radiation hybrid

(RH) and comparative map of the horse. Presented at Plant and Animal Genome XIV Conference, San Diego January 14-18.

7. **C. Brinkmeyer-Langford**, A. Gustafson-Seabury, T. Raudsepp, L.C. Skow, J.R. Mickelson, B.P. Chowdhary. 2006. Characterization of a 5Mb HSA19 segment in horse provides a glimpse into its evolution in Equids. Presented at Plant and Animal Genome XIV Conference, San Diego January 14-18.
8. K.L. Fritz, John C. Huber, **C.L. Brinkmeyer-Langford**, M.L. Cothran, C.P. Childers, L.C. Skow. 2008. Utilizing Data From The Bovine Genome Sequencing Project And Bovine HapMap Project To Analyze BoLA Haplotype Structure. Presented at Plant and Animal Genome XVI Conference, San Diego January 12-16.
9. **C. Brinkmeyer-Langford**, L.C. Skow. 2009. Polymorphisms and Haplotype Structure of the Equine Leucocyte Antigen Complex. Presented at CSREES, USDA National Research Initiative Animal Genome Annual Investigator Meeting, San Diego January 9.
10. **C. Brinkmeyer-Langford**, L.C. Skow. 2009. Polymorphisms and Haplotype Structure of the Equine Leucocyte Antigen Complex. Presented at the Veterinary Integrative Biosciences Symposium June 25.
11. K.L. Fritz, J.A. Hendrickson, H.J. Kaese, A.K. Rendahl, R.R. Bellone, K.M. Dynes, M.L. Wagner, M.A. Lucio, F.M. Cuomo, **C.L. Brinkmeyer-Langford**, L.C. Skow, S.J. Valberg, J.R. Mickelson, M.S. Rutherford, M.E. McCue. 2011. The influence of multiple genetic risk factors in Appaloosa Persistent Uveitis. Presented at the 9th Dorothy Russell Havemeyer Foundation International Equine Genome Mapping Workshop, Cheska, Minnesota July 27-30.
12. **C.L. Brinkmeyer-Langford**, J.C. Huber, C.A. Gill, L.C. Skow. 2011. Microsatellite Markers and Haplotype Structure in the Equine MHC. Presented at the 9th Dorothy Russell Havemeyer Foundation International Equine Genome Mapping Workshop, Cheska, Minnesota July 27-30.
13. **C. Brinkmeyer-Langford**, A. Rodrigues, A. Steelman, C. Young, M. Meagher, J. Welsh, 2011. Increased inflammation following perinatal BPA exposure in a mouse model of multiple sclerosis. Presented at the Texas Brain and Spine Institute Symposium, College Station September 23.
14. **C. Brinkmeyer-Langford**, C. Balog-Alvarez, J.N. Kornegay, 2013. Discovery of genetic variation associated with phenotype in golden retriever muscular dystrophy. Presented at the 7th Annual Canine Feline Genomics Conference, Boston, Massachusetts September 25.
15. **C. Brinkmeyer-Langford**, C. Balog-Alvarez, J.N. Kornegay, 2014. Discovery of genetic variation associated with phenotype in golden retriever muscular dystrophy. Presented at the Society for Neuroscience Texas A&M Chapter poster session, College Station, Texas, January 29.
16. **C. Brinkmeyer-Langford**, K. Amstalden, R. Rech, C. Young, C. J. Welsh, D. Threadgill. 2015. Host genetic determinants of diversity in viral-induced disease pathology. Presented at the Texas A&M Institute for Neuroscience 7th Annual Symposium, College Station March 27.
17. **C. Brinkmeyer-Langford**, K. Lawley[#], A. Perez-Gomez[#], R. Rech, Amstalden K., Young C.R., Threadgill DW, Welsh CJ. 2021. Characterization of resilience in viral-induced neurodegenerative disease. Keystone Symposia eSymposia: NeuroImmune Interactions in Health and Disease, virtual event June 7-9.

STUDENT PRESENTATIONS (Names of graduate and undergraduate mentees are underlined)

1. J. Diaz, E. Snook, C. J. Balog-Alvarez, W.B. Stoughton, **C. L. Brinkmeyer-Langford**, J.N. Kornegay. 2017. Toll-like receptor expression in golden retriever muscular dystrophy. Presented at Biomedical Research Awareness Day, College Station April 19.
2. K.L. Bailey, **C.L. Brinkmeyer-Langford**, C.J. Balog-Alvarez, E.R. Snook, A.K. Bettis, H.H. Barnett, J.N. Kornegay. 2017. Molecular basis of phenotypic variation in two forms of canine muscular dystrophy. Presented at Biomedical Research Awareness Day, College Station April 19. (*K.L. Bailey was a veterinary student who did a summer research experience in the Kornegay lab under my supervision.*)
3. S. Schneider, C. Balog, P. Ngheim, **C. Brinkmeyer-Langford**, J. Kornegay. 2017. Brain-derived neurotrophic factor (BDNF) is preferentially up-regulated in golden retriever muscular dystrophy. Presented at Biomedical Research Awareness Day, College Station April 19.
4. C. Edwards, R. Eldridge[@], J. Welsh, D. Threadgill, **C. Brinkmeyer-Langford**. 2017. Investigation of Neurological Effects of Theiler's Murine Encephalomyelitis Virus in Varying Strains of Collaborative Cross Mice. Presented at Texas A&M Student Research Week, College Station March 28 and at Texas Genetics Society, College Station April 27-29.
5. C. Serrano[@], K. Amstalden, K.J. Kochan, A.E. Hillhouse, C. Young, C.J. Welsh, D.W. Threadgill, **C.L. Brinkmeyer-Langford**. 2018. Analysis of the Impact of Viral Load on Mortality Post-Infection with Theiler's Virus. Presented at Texas A&M Student Research Week, College Station and at Texas Genetics Society, College Station March 22-24.
6. A. Herron[@], G. Free[@], C. Young, J. Welsh, D. Threadgill, K. Amstalden, **C.L. Brinkmeyer-Langford**. 2018. Gait Differences Reflect Host Response to Viral Infection. Presented at Texas A&M Student Research Week, College Station and at Texas Genetics Society, College Station March 22-24. *Won 2nd place undergraduate student research poster award at SRW.*
7. X. Zhang[@], M. DeBever[@], R. Eldridge[@], K. Amstalden, C. Young, J. Welsh, D. Threadgill, **C. Brinkmeyer-Langford**. Neurological phenotypic diversity seen in CC mice following TMEV infection. 2018. Aggie Research Program Undergraduate Research Expo, College Station October 3.
8. J. Pinon[@], K. Kuruda[@], G. Free[@], C. Young, J. Welsh, D. Threadgill, K. Amstalden, **C.L. Brinkmeyer-Langford**. 2018. Theiler's virus and its effects on the gait and grip-strength of genetically diverse mouse strains. Aggie Research Program Undergraduate Research Expo, College Station October 3.
9. K.S. Lawley[#], R.R. Rech, K. Amstalden, D. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2018. Characterization of CNS lesions following viral infection of genetically diverse mouse strains. Presented at the Texas A&M Society for Neuroscience meeting, College Station December 5. *Won 1st place graduate student research poster award.*
10. K.S. Lawley[#], X. Zhang[@], R.R. Rech, K. Amstalden, D. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2019. Genetically diverse mouse strains exhibit variable CNS lesions in response to viral infection. Presented at the Texas A&M Institute for Neuroscience meeting, College Station April 5.
11. A. Perez[#], M. Nolan[@], K. Stephenson[@], S. Nayak[@], A. Fowler[@], N. Smotherman[@], Y. Escalante[@], R. Patel[@], K. Lawley[#], **C. Brinkmeyer-Langford**. 2019. Understanding Genetic Drivers of Virally Induced Neurological Diseases. Presented at the Aggie Research Program poster session, College Station October 2.
12. K.S. Lawley[#], R.R. Rech, K. Amstalden, A. Perez Gomez[#], C.J. Welsh, D. Threadgill, **C. Brinkmeyer-Langford**. 2019. Characterization of central nervous system lesions in response to

viral infection in genetically diverse mouse strains. Presented at the Society for Neuroscience conference, Chicago IL October 19-23.

13. A.A. Perez Gomez[#], K.S. Lawley[#], K. Amstalden, D. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2019. Virally induced neurological and immune responses on Collaborative Cross mice after viral infection. Presented at the 2019 Lone Star Society of Toxicology, Galveston, TX November 14, and at the 2020 CVM Trainee Research Symposium, College Station January 16.
14. K.S. Lawley[#], R.R. Rech, K. Amstalden, C.J. Welsh, D. Threadgill, **C. Brinkmeyer-Langford**. 2020. Genetically diverse mouse strains exhibit variable central nervous system lesions in response to viral infection. Presented at the 2020 CVM Trainee Research Symposium, College Station January 16.
15. A.A. Perez Gomez[#]. 2020. Virally induced immunological responses of genetically diverse mice. Presented at the annual meeting of the Brazos Valley chapter of the National Multiple Sclerosis Society, College Station August 14.
16. K.S. Lawley[#]. 2020. Genetic diversity contributes to neurological responses to viral infection. Presented at the annual meeting of the Brazos Valley chapter of the National Multiple Sclerosis Society, College Station August 14.
17. M. Feik[@], D. Le[@]. 2020. The influence of genetic background on neurological responses to viral infection. Texas A&M Student Research Week, College Station, March 29-April 2.
18. A.A. Perez Gomez[#], M. Karmakar, R.J. Carroll, K.S. Lawley[#], K. Amstalden, C.R. Young, D.W. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2021. Genetic and Immunological Contributors to Viral-Induced Paralysis. Presented at the Interdisciplinary Faculty of Toxicology Training Program 2021 Annual Regulatory Science Symposium, College Station September 26. *Won graduate student poster award*.
19. A.A. Perez Gomez[#], M. Karmakar, R. Carroll, K. Lawley[#], K. Amstalden, C. Young, D. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2021. Genetic and immunological contributors to virus-induced paralysis. International Society of Neuroimmunology, Virtual/Nice, France, November 8-12.
20. K. Lawley[#], **C. Brinkmeyer-Langford**. 2021. Genetic diversity contributes to variable responses in virally-induced clinical signs and central nervous system pathology. Texas A&M Center for Environmental Health Research (TiCER) Research Symposium, College Station December 8.
21. A.A. Perez Gomez[#], **C. Brinkmeyer-Langford**. 2021. Immunological Contributors to Virus-Induced Paralysis in a Genetically Diverse Population. Texas A&M Center for Environmental Health Research (TiCER) Research Symposium, College Station December 8.
22. K. Lawley[#], R. Rech, F. Elenwa, G. Han, A. Perez Gomez[#], J. Welsh, C. Young, D. Threadgill, **C. Brinkmeyer-Langford**. Host genetic diversity contributes to variable virally-induced clinical signs and central nervous system pathology. Texas A&M Chapter of Society for Neuroscience, College Station December 9.
23. C. S. Johnson[@], T. Gadberry, A. Perez Gomez[#], **C. L. Brinkmeyer-Langford**. 2021. Non-Stick Learning: The Effect of Adolescent Exposure to PFAS on Task Acquisition. Texas A&M Chapter of Society for Neuroscience, College Station December 9.
24. T.W. Kang[#], K.S. Lawley[#], K. Amstalden, R. R. Rech, C. G. Weindel, R. O. Watson, C. R. Young, **C. Brinkmeyer-Langford**, C. J. Welsh. 2021. Theiler's Virus Induced Neuroinflammation in LRRK2 G2019S Transgenic Mice. Texas A&M Chapter of Society for Neuroscience, College Station December 9.
25. A.A. Perez-Gomez[#], M. Karmakar, R. Carroll, K. Lawley[#], K. Amstalden, C. Young, D. Threadgill, C. Welsh, **C. Brinkmeyer-Langford**. 2022. Immunological Contributors to Virus-Induced Paralysis in a Genetically Diverse Population. Society of Toxicology, San Diego, CA March 26-31.

26. T.W. Kang[#], S. Patchametla, P. Chandramohan, S. Mulatu[#], C. Moshay, K.S. Lawley[#], K. Amstalden, R. R. Rech, C. G. Weindel, R. O. Watson, C. R. Young, **C. Brinkmeyer-Langford**, C. J. Welsh. 2022. Theiler's Virus Induced Neuroinflammation in LRRK2 G2019S Transgenic Mice. Annual meeting of Texas Genetics Society, College Station March 31-April 2.
27. M. Ellis[@], **C. Brinkmeyer-Langford**. 2022. Genetic Background Implication on Chronic Phase Disease Progression of TMEV Infection in Collaborative Cross Mice. Texas A&M Institute for Neuroscience 13th Annual Symposium, College Station May 4.
28. S. Patchametla, **C. Brinkmeyer-Langford**, C. Jane Welsh. 2022. Summary of semester-long research findings. Texas A&M Master of Biotechnology (MBIOT) Research Conference, College Station May 4.
29. T.W. Kang[#], C.J. Welsh, **C. Brinkmeyer-Langford**. 2022. Neuroimmune Modulation of Neurodegenerative Diseases with Viral Implications. Presentation to Texas A&M Comparative Medicine Program, College Station July 20.
30. A. Perez Gomez[#], M. Karmakar, R.J. Carroll, K.S. Lawley[#], K. Amstalden, C.R. Young, D.W. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2022. Serum Cytokines Predict Neurological Damage in Genetically Diverse Mouse Models. Texas A&M Toxicology Program Annual Symposium, College Station August 25.
31. A. Perez Gomez[#], M. Karmakar, R.J. Carroll, K.S. Lawley[#], K. Amstalden, C.R. Young, D.W. Threadgill, C.J. Welsh, **C. Brinkmeyer-Langford**. 2022. Serum Cytokines Predict Neurological Damage in Genetically Diverse Mouse Models. Lone Star Society of Toxicology, Houston November 30.
32. S. Mulatu[#], **C. Brinkmeyer-Langford**. 2022. Prenatal exposure to ultrafine particles may predispose microglia to premature activation. Lone Star Society of Toxicology, Houston November 30.
33. A.A. Perez Gomez[#], K. Amstalden, C.R. Young, D.W. Threadgill, C. J. Welsh, **C. Brinkmeyer-Langford**. 2023. Immune response to viral and environmental factors result in neurological disease in a mouse model. Society of Toxicology, Nashville, Tennessee March 19.
34. S.L. Mulatu[#], J.C. Bethlen, K. Amstalden, C.J. Welsh, N.M. Johnson, **C. Brinkmeyer-Langford**. 2023. Gestational Exposure to Ultrafine Particles Predispose Microglia to Premature Activation. Society of Toxicology, Nashville, Tennessee March 19.
35. C. Moshay, T.W. Kang[#], **C. Brinkmeyer-Langford**, R. Srinivasan, C.J. Welsh. 2023. Assessing the Effects of Theiler's Virus Injection into the Substantia Nigra on Motor Function in Mice: a Potential Model for Parkinson's Disease. Texas A&M Student Research Week March 23.
36. T.W. Kang[#], S. Patchametla, C. Moshay, **C. Brinkmeyer-Langford**, R. Srinivasan, C.J. Welsh. 2023. Effects of Theiler's Virus Injection into the Substantia Nigra in Mice: A Potential Model for Parkinson's Disease. VMBS Trainee Symposium May 18.
37. T.W. Kang[#], S. Patchametla, C. Moshay, **C. Brinkmeyer-Langford**, R. Srinivasan, C.J. Welsh. 2023. Long-term Assessment of the Effects of Theiler's Virus Injection into the Substantia Nigra in Mice as a Potential Model for Parkinson's Disease. Texas A&M Chapter of Society for Neuroscience Winter Symposium December 5.
38. T.W. Kang[#], **C. Brinkmeyer-Langford**, R. Srinivasan, C.J. Welsh. 2024. Long-term Assessment of the Effects of Theiler's Virus Injection into the Substantia Nigra in Mice as a Potential Model for Parkinson's Disease. Texas A&M Veterinary Medicine and Biomedical Sciences Trainee Research Symposium February 8.
39. T.W. Kang[#], S. Karippai, A. Espinosa, C. Subias[@], A. Ramakrishna, **C. Brinkmeyer-Langford**, R. Srinivasan, C.J. Welsh. 2024. Injection of Theiler's Virus into the Substantia Nigra for Mice: A Potential Model for Parkinson's Disease. Texas A&M Student Research Week March 18-22.

40. T.W. Kang[#], V. Baiju, S.R. Jadhav, S. Karippai, M. Lee, Z. Maredia[@], R. Novotny[@], B. Perez, A. Ramakrishna, K. Ramakrishnan, Z. Rehan[@], A. Satra, L. Wynn, C.J. Welsh, **C. Brinkmeyer-Langford**. 2025. Presentation for local chapter of National Multiple Sclerosis Society January 25.

GRADUATE COMMITTEE MEMBERSHIPS

William (Ben) Stoughton	Ph.D. in Biomedical Sciences	graduated Fall 2017
Caitlin Edwards	M.S. in Biomedical Sciences	graduated Fall 2017
Sarah Schneider	Ph.D. in Biomedical Sciences	graduated Spring 2019
Lauren Lewis	Ph.D. in Toxicology	graduated Fall 2019
Kristin McCamy	M.S. in Toxicology	graduated Spring 2020
Sarah Burnett	Ph.D. in Toxicology	graduated Summer 2021
Taylor Woodall	M.S. in Biomedical Sciences	graduated Fall 2021
Samera Mulatu	M.S. in Toxicology	graduated Fall 2024
Natanel Neumann	Ph.D. in Comp Med and Int Biol, MSU	expected graduation: Spring 2026

GRADUATE COMMITTEE CHAIR

Koedi Lawley	Ph.D. in Biomedical Sciences	graduated Summer 2022 <i>Currently veterinary student at Colorado State</i>
Aracely Perez-Gomez	Ph.D. in Toxicology	graduated Spring 2023 <i>Currently employed with Proctor and Gamble</i>
Tae Wook Kang	Ph.D. in Biomedical Sciences	expected graduation: Spring 2026

GRADUATE STUDENT AWARDS

Koedi Lawley

1. First place graduate student research poster award, Texas A&M Society for Neuroscience meeting, College Station (2018)
2. DeBakey Executive Research Leadership Program (2019-2020)

Aracely Perez-Gomez

1. DeBakey Executive Research Leadership Program (2019-2020)
2. Recipient of merit-based T32 fellowship, Texas A&M Institute for Maximizing Student Development (2020-2021)
3. Graduate student poster award, Interdisciplinary Faculty of Toxicology Training Program Annual Regulatory Science Symposium (2021)
4. Recipient of merit-based T32 fellowship, Texas A&M Toxicology Program (2022-2023)
5. Recipient of merit-based George T. Edds Award for academic excellence in the field of toxicology (2023)

Tae Wook Kang

1. Recipient of \$5,000 VMBS-Graduate Student Research Trainee Grant (2024)

MENTORED UNDERGRADUATE RESEARCHERS

(enrolled in research courses 285, 291, 485, 491, and 491W for credit, and/or research experience without course credit; current positions indicated if known; * denotes Aggie Research Scholars; ⁺ student co-mentored with Jane Welsh)

Alex Holliday – completed medical degree; now practicing dermatologist	2007-2009
Jamie Mayer – veterinary school	2008-2009

C. L. Brinkmeyer-Langford	Page 23
Madeline Frizzell – medical school	2014-2016
Angela Watts – graduate school	2014-2016
Jennifer Meier – graduate school	2015-2019
Darcy Friesenhahn – tech at biotechnology company Cone Bioproducts	2016-2017
Samantha Dillawn – medical school	2016-2018
Esther Gonzalez Medina – graduate school	2016-2018
Claudia Serrano – medical school	2016-2018
Raena Eldridge* – veterinary school	2016-2020
Morgan Chapman – medical school; MD/PhD program	2017-2018
McKenna DeBever – medical school after competing in 2020 Olympics	2017-2019
Gabrielle Free* – graduate school	2017-2019
Austen Herron* – medical school	2017-2019
Katlyn Kuruda	2017-2019
Jacob Pinon* – medical school	2017-2020
Xing Zhang* – graduate school	2017-2021
Emerald Pina	2019
Amanda Austin	2019-2020
Yori (Rob) Escalante	2019-2020
Annaliese Fowler	2019-2020
Mina Kim	2019-2020
Cameron Marbach	2019-2020
Sidharth Nayak	2019-2020
Molly Nolan	2019-2020
Yue (Michelle) Qiu	2019-2020
Nick Smotherman	2019-2020
Kathleen Stephenson	2019-2020
Camilla Ezra Tiamzon	2019-2020
Madilyn Feik* – medical school	2019-2021
Amber Finney*	2019-2021
Douglas Le*	2019-2021
Jarrah Schlosberg*	2020-2020
Jonah Robinson*	2020-2021
Megan Ellis*	2020-2023
Charles Johnson* – graduate school	2021-2022
Clifford Moshay* ⁺ – medical school	2021-2023
Mallory Mankin	2023
Rachel Koehl	2023
Steve Karippai* ⁺	2023-present
Aditya Ramakrishna* ⁺	2023-present
Cristina Subias	2023-present
Kaushik Ramakrishnan* ⁺	2024-present
Madeline Lee ⁺	2024-present
Zia Maredia*	2024-present
Lana Wynn*	2024-present
Ryan Novotny*	2024-present
Bella Perez* ⁺	2024-present
Anushruti Satra*	2024-present
Zara Rehan*	2024-present

TEACHING EXPERIENCE (* indicates High-Impact Learning Experiences, as per Texas A&M classification)

SOPH 680, Public Health Capstone	Spring 2025
Invited guest lecturer, PHEO 630, Environmental/Occupational Diseases	Fall 2024
NRSC/VIBS 277, Essential Neuroscience (3 credit hours)	Spring 2023-2024
Workshop for Texas A&M Superfund Center Big Data Series 2021: Manipulating Big(ish) Data In Excel, and Reading Into R	Fall 2021
*VIBS 491W, Undergraduate Research with thesis/capstone (writing intensive course)	Fall 2018-present
Semester-long special topics workshops for T32 and P42 grants: poster/platform presentations, data analysis and management, interview skills, resume building, networking, etc.	2016-present
Invited guest lecturer, providing multiple lectures annually for these courses since 2014: GENE 320 Biomedical Genetics, GENE 405 Mammalian Genetics, VPAT 640 Mechanisms of Disease, VPAT 642 Mechanisms of Metabolic Diseases, VIBS 670 Advanced Toxicology	Spring 2014-present
BIMS320/GENE320, Biomedical Genetics (3 credit hours)	Fall 2014
*VIBS311, Biomedical Explorations in Narrative (writing intensive course; two sections; online)	Summer 2014
*VIBS311, Biomedical Explorations in Narrative (writing intensive course; two sections)	Spring 2014
VIBS404, Food Toxicology and Safety (teaching assistant)	Fall 2010
*BIMS320/GENE320, Biomedical Genetics (honors section; 3 credit hours)	Spring 2010
*BIMS320/GENE320, Biomedical Genetics (honors section; 3 credit hours)	Spring 2007

PROFESSIONAL DEVELOPMENT - TEACHING

Completed GENE T32 Mentorship Program	May 2022
Completed “W Course Primer” workshop for successfully teaching W (writing intensive) courses	May 2014
Completed “Applying the Quality Matters Rubric” workshop for online class design	Summer 2013
Completed Texas A&M Center for Teaching Excellence Course Design Series	Summer 2012
Attended Wakonse South Conference on College Teaching, Burnet, Texas	Spring 2007
Completed the semester-long Graduate Teaching Academy, sponsored by the Texas A&M Center for Teaching Excellence	Spring 2006

SERVICE

Organizer: Annual Multiple Sclerosis Tea – engaging members of local chapter of National Multiple Sclerosis Society with research presentations, meal, and interactions	2025
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Texas A&M System University Council of Principal Investigators, Executive Committee (invited member; multiple meetings per month with required participation)	2021-2024
Texas A&M System University Research Compliance Committee (invited member; quarterly meetings with required participation)	2019-2024
Texas A&M System Council of Principal Investigators (elected member; monthly meetings with required participation)	2018-2024
Faculty advisor for student organization (RARE TAMU; monthly meetings)	2017-present
Founder and Chair: Specific Aims Group committee (I organized and led meetings every other week for this organization, with participation open to all.)	2014-2024
Texas A&M System Council of Principal Investigators Subcommittee 3: Improving Core Labs and Resources (invited member; monthly meetings with required participation)	2019-2020
Chair: CVM Neuroscience Faculty monthly meetings	2015-2016

This CV submitted is most current and correct as of the date of this signature, January 29, 2025.

Candice Brinkmeyer-Langford