

KATELYN E. SADLER

Department of Neuroscience, The University of Texas at Dallas
800 W Campbell Road, BSB 10.538, Richardson, TX 75080
972-883-2406, katelyn.sadler@utdallas.edu

ACADEMIC APPOINTMENTS

2023 - Assistant Professor of Neuroscience, The University of Texas at Dallas
2023 - Faculty, Center for Advanced Pain Studies, The University of Texas at Dallas

EDUCATION and TRAINING

2017 – 2022 **Postdoctoral Fellowship in Pain Neuroscience**, lab of Dr. Cheryl Stucky
Medical College of Wisconsin, Milwaukee, WI

2011 – 2017 **PhD in Biology**, lab of Dr. Benedict Kolber
Duquesne University, Pittsburgh, PA

2007 – 2011 **BS in Biological Sciences**, *summa cum laude*, chemistry minor
University of Pittsburgh, Greensburg, PA

RESEARCH FUNDING

ACTIVE

2024 – 2027 **Rita Allen Foundation Award in Pain**
Effects of antibiotics on nociceptive and analgesic circuits in gut
Role: PI, Award: \$150,000

2023 – 2026 **NIH Pathway to Independence Award (R00)**
Sickle cell disease gut dysbiosis effects on CNS pain processing
National Heart, Lung, and Blood Institute, R00HL155791
Role: PI, Award: \$747,000

2022 – 2027 **HEAL Initiative: Discovery and Functional Evaluation of Human Pain-associated Genes & Cells (U19)**
Human nociceptor and spinal cord molecular signature center
National Institute of Neurological Diseases and Stroke, U19NS130608
Role: Co-I, PIs: Ted Price (UTD), Michele Curtalo (UW), Pat Dougherty (MD Anderson)

COMPLETED

2021 – 2023 **NIH Pathway to Independence Award (K99)**
Sickle cell disease gut dysbiosis effects on CNS pain processing
National Heart, Lung, and Blood Institute, K99HL155791
Role: PI, Award: \$230,256

2018 – 2019 **NINDS Ruth L. Kirchstein NRSA for Training of Postdoctoral Fellows (F32)**
Fibroblast-to-neuron communication in muscle pain
National Institute of Neurological Diseases and Stroke, F32NS106789
Role: PI, Award: \$104,201

2016 – 2017 **Duquesne U. Aging Research and Teaching Consortium Stimulator Grant**
Age-dependent changes in amygdala signaling responsible for altered pain sensitivity
Role: PI, Award: \$2,250

2014 – 2017

Ruth L. Kirchstein NRSA Predoctoral Fellowship (F31)

Effects of central amygdala lateralization on descending control of bladder pain

National Institute of Diabetes and Digestive and Kidney Diseases, F31DK104538

Role: PI, Award: \$115,269

PUBLICATIONS

h-index: 15

* denotes equal author contribution, † denotes corresponding author, denotes mentee

PEER REVIEWED RESEARCH ARTICLES

1. Mikesell AR, Isaeva E, Schulte ML, Menzel AD, Sriram A, Prael MM, Shin SM, **Sadler KE**, Yu HE, Stucky CL (2024). Increased keratinocyte activity and Piezo1 signaling contribute to paclitaxel-induced mechanical hypersensitivity. *Science Translational Medicine* 16: eadn5629.
2. Rodríguez García DM, Szabo A, Mikesell AR, Zorn SJ, Kemmo Tsafack U, Sriram A, Waltz TM, Enders JD, Mecca CM, Stucky CL, **Sadler KE** (2024). High-speed imaging of evoked rodent mechanical behaviors yields variable results that are not predictive of inflammatory injury. *Pain* 165(7): 1569-1582.
 - *Editor's Choice manuscript*
3. Ehlers VL, **Sadler KE**, Stucky CL (2023). Peripheral TRPV4 hypersensitivity contributes to chronic sickle cell disease pain. *Pain* 164(8): 1874-1886.
 - *Editor's Choice manuscript*
4. Mikesell AR, Isaeva O, Moehring F, **Sadler KE**, Menzel AD, Stucky CL (2022). Keratinocyte PIEZO1 modulates cutaneous mechanosensation. *eLife* 11:e65987.
5. Trask S, Mogil JS, Helmstetter FJ, Stucky CL, **Sadler KE**[†] (2022). Contextual control of conditioned pain tolerance and endogenous analgesic systems *eLife* 11:e75283.
 - *Pain Research Forum Editors' Paper of the week, March 12-18, 2022*
 - *Sex Differences in the Contextual Control of Conditioned Pain Tolerance; Pain Research Forum Coverage*
6. Waltz TB, Burand AJ, **Sadler KE**, Stucky CL (2021). Sensory-specific peripheral nerve pathology in a rat model of Fabry disease. *Neurobiology of Pain* 10: 100074.
7. **Sadler KE**^{*}, Moehring F^{*}, Shiers SI, Laskowski LJ, Mikesell AR, Plautz ZR, Brezinski AN, Mecca CM, Dussor G, Price TJ, McCorvy JD, Stucky CL (2021). Transient receptor potential canonical 5 (TRPC5) mediates inflammatory mechanical and spontaneous pain in mice. *Science Translational Medicine* 13: eabd7702.
 - *Repurpose this Drug; NeoLife feature*
 - *TRP Channels and Mechanical Pain: Starring TRPC5!; Pain Research Forum coverage*
 - *TRPC5 and the Path Towards Analgesic Drug Development; Trends in Neuroscience Spotlight*
 - *Pain Research Forum #3 Most Popular Paper of 2021*
 - *Pain Research Forum Editors' Paper of the week, May 22-28, 2021*
8. **Sadler KE**^{*}, Moehring F^{*}, Stucky CL (2020). Keratinocytes contribute to normal cold and heat sensation. *eLife* 9: e58625.
 - *Keratinocytes keep their cool; Nature Reviews Neuroscience In Brief*
9. **Sadler KE**, Lewis TR, Waltz TB, Besharse JC, and Stucky CL (2019). Peripheral nerve pathology in sickle cell disease mice. *Pain Reports* 4(4): e765.

10. **Sadler KE**, Langer SN, Menzel AD, Moehring F, Erb AN, Brandow AM, and Stucky CL (2019). Gabapentin alleviates chronic spontaneous pain and acute hypoxia-related pain in a mouse model of sickle cell disease. *British Journal of Haematology* 187(2): 246-260.
11. **Sadler KE***, Zappia KJ*, Weyer AD, O'Hara C, Langer SN, Hillery CA, and Stucky CL (2018). Chemokine (c-c motif) receptor 2 mediates mechanical and cold hypersensitivity in sickle cell disease. *Pain* 159(8): 1652-1663.
12. **Sadler KE**, Gartland N, Cavanaugh JE, and Kolber BJ (2017). Central amygdala expression of metabotropic glutamate receptor 5 linked to age-dependent changes in pain sensitivity. *Neurobiol of Aging*. S0197-4580(17):30131-8.
13. **Sadler KE**, McQuaid NA, Cox AC, Behun MN, Trouten AM, and Kolber BJ (2017). Divergent functions of the left and right central amygdala in visceral nociception. *Pain*. 158(4): 747-759.
14. Wolz MJ, **Sadler KE**, Long CC, Brenner DS, Kim BS, Gereau RW IV, & Kolber BJ (2016). Post-inflammatory hyperpigmentation following human cold pain testing. *Pain Reports* 1: e569.
15. Long CC, **Sadler KE**, Kolber BJ. (2016) Hormonal and molecular effects of restraint stress on formalin-induced pain-like behavior in male and female mice. *Physiology and Behavior* 16: 278-285.
16. **Sadler KE**, Stratton JM, Kolber BJ (2014). Urinary bladder distension evoked visceromotor responses as a model for bladder pain. *Journal of Visual Experimentation*. (86), e51413.
17. **Sadler KE**, Stratton JM, DeBerry JJ, Kolber BJ (2013). Optimization of a pain model: effects of body temperature and anesthesia on bladder nociception in mice. *PLoS ONE* 8(11): e79617.
18. Crock LW, Kolber BJ, Morgan CD, **Sadler KE**, Vogt SK, Bruchas MR & Gereau RW IV (2012). Central amygdala mGluR5 in the modulation of visceral pain. *Journal of Neuroscience* 32(41): 14217-26.

REVIEWS AND BOOK CHAPTERS

1. Pratt ML, Plumb AN, Manjrekar AR, Cardona LM, Chan C, John JM, **Sadler KE[†]** (2025). Microbiome contributions to pain: a review of the preclinical literature. *Pain* 166(2): 262-281.
 - *Editor's Choice manuscript*
2. **Sadler KE**, Mogil JS, Stucky CL (2022). Innovations and advances in modeling and measuring pain in animals. *Nature Reviews Neuroscience* 23:70-85.
3. **Sadler KE**, Patitucci TN and Stucky CL (2022). *Ex vivo* skin-teased fiber recordings from tibial nerve. In: Seal R (ed) *Contemporary Approaches to the Study of Pain: from Molecules to Neural Networks*, Springer Nature, New York.
4. **Sadler KE[†]** and Stucky CL (2019). Neuronal transient receptor potential (TRP) channels and noxious sensory detection in sickle cell disease. *Neuroscience Letters* 694: 184-191.
5. **Sadler KE** and Kolber BJ (2016). Urine trouble: Alterations in brain function associated with bladder pain. *Journal of Urology* 196(1): 24-32.

PREPRINTS AND MANUSCRIPTS IN REVIEW

1. Brandow AM, Atkinson SA, Ehlers VL, Pratt ML, Shiers SI, Mazhar K, Cervantes AM, Reese JC, Tavares-Ferreira D, Sankaranarayanan I, Schaub MK, Waltz TB, Hayward M, Rodríguez García DM, Dussor G, Salzman NH, Stucky CL, Price TJ, **Sadler KE[†]**. Gut microbiota and metabolites drive chronic sickle cell disease pain. Posted to *bioRxiv* April 28, 2023. doi: <https://doi.org/10.1101/2023.04.25.538342> (in review at

EDITORIALS AND COMMENTARIES

1. Manjarres Z, Plumb AN, and **Sadler KE** (in press) Bug in the syndrome: using the gut microbiome to diagnose complex regional pain syndrome. *Anesthesiology*.
2. **Sadler KE** and Price TJ (2024) A humanized focus on sickle cell pain. *Blood* 143 (20): 2016-2017.
3. Moehring F and **Sadler KE**[†] (2019) Female specific effects of CGRP suggest limited efficacy of new migraine treatments in males. *Journal of Neuroscience* 39(46): 9062-9064.
4. **Sadler KE** and Stucky CL (2019) Blocking COX-2 for sickle cell pain relief. *Blood* 133 (18): 1924-1925.

HONORS AND AWARDS

2024	Rita Allen Foundation Award in Pain Scholar
2023	Searles Scholar Program nominee , UT Dallas
2022	Travel Award , US Association for the Study of Pain
2020	Warren Alpert Distinguished Scholar Nominee , Medical College of Wisconsin
2019	Edward J Lennon, MD Award for an Outstanding Woman Postdoctoral Researcher , MCW
2019	Travel Award , MCW Office of Postdoctoral Affairs
2018	Excellence in Science Award , MCW Office of Postdoctoral Affairs
2018	Poster Award Winner , 28 th Annual Research Day at MCW
2018, 2016	Young Investigator Travel Award , American Pain Society
2017	Distinguished Dissertation Award , Duquesne University
2017	Max Mitchell Young Investigator Award Finalist , 12 th Annual NIH Pain Consortium Symposium
2016	Young Alumni Leadership Award , University of Pittsburgh at Greensburg
2016	New Frontiers of Pain Research Travel Award , University of Alabama at Birmingham
2016	Best Presentation , Clinical and Basic Science Data Blitz, 35 th Annual American Pain Society Meeting
2016	Outstanding Graduate Student Award , Department of Biological Science, Duquesne University
2016	Advanced Certificate of University Teaching , Center for Teaching Excellence, Duquesne University
2015	Bayer School for Natural and Environmental Sciences Award for Graduate Research Excellence , Duquesne University
2015	Best Poster , Duquesne University Department of Biological Sciences Retreat
2011	Senior of the Year , University of Pittsburgh at Greensburg
2011	Dr. and Mrs. Fred T. Campana Scholarship (top Biology student), University of Pittsburgh at Greensburg
2009 – 2011	University Scholar (top 2.5% of class) , University of Pittsburgh
2008 – 2011	Dean's List , University of Pittsburgh at Greensburg, 8 semesters

INVITED TALKS

11 intramural talks given between 2010-2023
denotes symposium chair

- 2025 **9th International Congress on Neuropathic Pain (NeuPSIG 2025)**, Berlin, Germany (September)
Part of *Bugs in and out of the gut: Understanding the role of the microbiota in chronic, non-visceral pain* symposium

- 2025 **USASP Annual Meeting**, Chicago, IL (April)
 “Microbiome Targets for Chronic Pain Management”
 Part of the *Scholars Research Panel: Rita Allen Foundation Award in Pain and USASP-MAYDAY Fellows* symposium
- 2025 **University of Florida**, Pain Research and Integrated Neuroscience Symposium (March)
 “Targeting the gut microbiome for chronic pain management”
 Part of *New Kids on the (Pain) Block: Emerging Stars of the Field* session
 - Had to reschedule due to personal injury
- 2025 **Michigan State University**, Neuroscience Program (March)
 “Gut Microbiome Targets for Chronic Pain Management”
 - Had to reschedule to do personal injury
- 2025 **Pain 2025 Virtual Meeting** (February)
 “Gut Microbiome Targets for Chronic Pain Management”
- 2025 **Washington University in St. Louis**, Center for Clinical Pharmacology (February)
 “Gut Microbiome Targets for Sickle Cell Disease Pain Management”
- 2024 **Rita Allen Foundation Scholars Symposium**, Princeton, NJ (September)
 “Effect of antibiotics on nociceptive circuits”
- 2024 **McGill University**, Alan Edwards Centre for Research on Pain, The PNS and Pain Symposium (June)
 “Effect of antibiotics on nociceptive circuits”
- 2024 **Pain Mechanisms and Therapeutics Conference**, Verona, Italy, (May)
 “The gut microbiome and gastrointestinal chemosensation drive chronic sickle cell disease pain”
 Part of *The Microbiome and Pain* session
- 2024 **UT Southwestern**, Pediatric Hematology-Oncology Division Grand Rounds (April)
 “Using mouse models to identify novel targets for chronic sickle cell disease pain management”
- 2024 **University of Cincinnati**, Neuroscience Graduate Program (February)
 “Gastrointestinal chemosensation drives chronic sickle cell disease pain”
- 2024 **Mammalian Somatosensation: Mechanisms of Itch, Touch, Pain and Interoception in Health and Disease Keystone Symposium**, Santa Fe, NM (January)
 “Gastrointestinal chemosensation drives chronic pain in sickle cell disease”
 Part of *Interoception* session
- 2023 **Texas Woman’s University**, Department of Biology (October)
 “Pain in the gut: how the microbiome and gastrointestinal chemosensation drive chronic pain in sickle cell disease”
- 2023 **NIH Neural Mechanisms of Sickle Cell Pain workshop** (October)
 “Ascending gastrointestinal sensory circuits drive chronic sickle cell disease pain”
- 2023 **Gordon Research Conference: Amygdala Function in Emotion, Cognition and Disease**, Castelldefels, Spain (July)
 “Amygdalar involvement in gut microbiome-related pain signaling”
 Part of *Amygdala Regulation of Pain and Arousal* session
- 2023 **Peripheral Nerve Society Meeting**, Copenhagen, Denmark (June)
 “Peripheral nerve dysfunction and pain in sickle cell disease”

Part of *Emerging Talent Joint SIG Session*

- 2023 **Canadian Pain Society Annual Scientific Meeting**, Banff, Canada (May)
“Pain in the gut: gastrointestinal chemosensation drives chronic pain in sickle cell disease”
Part of *Bridging the Gap: Translational Approaches to Studying Pain in Rodent and Human Models* symposium
- 2023 **United States Association for the Study of Pain Annual Meeting**, Durham, NC (April)
“Gastrointestinal chemosensation drives chronic pain: implications for sickle cell disease”
Part of *Of mice, men, and microbes: How alterations in gut-brain axis drive pain and co-morbid conditions* symposium
- 2022 **International Behavioral Neuroscience Meeting**, Glasgow, United Kingdom (June)
“Sickle cell disease associated changes in the gut microbiome contribute to persistent pain”
Part of *Taking great pains: identifying novel factors that influence pain behavior* symposium
- 2022 **University of Iowa**, Department of Neuroscience and Pharmacology (January)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **The University of Texas at Dallas**, Department of Neuroscience (December)
“Gut feelings: How the microbiome modulates chronic pain”
- 2021 **Penn State University**, Department of Biology (December)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **University of Minnesota**, Department of Anesthesiology (October)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **Cincinnati Children’s Hospital**, Department of Anesthesia (September)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **Saint Louis University**, Department of Pharmacology and Physiology (September)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **The University of Texas at Dallas**, Department of Neuroscience (August)
“Identification of novel chronic pain targets using sickle cell disease mice”
- 2021 **University of Kansas Medical Center**, Department of Anatomy and Cell Biology (January)
“Leveraging transgenic sickle cell disease mice to identify novel pain targets”
- 2020 **Pain 2020 Virtual Meeting**
“TRPC5 mediates inflammatory mechanical pain”
- 2020 **Pain Research Forum digital webinar**
“The role of keratinocytes in heat transduction, cold transduction, and mechanotransduction”
- 2019 **Midwest Regional Pain Interest Group (MR PIG) Meeting**, Kansas City, KS
“Mammalian keratinocytes detect and relay environmental cold signals”
- 2019 **American Pain Society Annual Meeting**, Milwaukee, WI
“Translational models for investigation of non-opioid based pain therapies for sickle cell disease”
- 2018 **North American Pain School**, Montebello, Canada
“Go with the (sometimes blocked) flow: circulating metabolites drive chronic sickle cell disease pain”

- 2018 **Pain Mechanisms and Therapeutics Conference**, Taormina, Italy
“Lipid signaling in sickle cell disease pain”
- 2017 **NIH Pain Consortium Symposium**, Bethesda, MD
“Chemokine receptor 2 mediates mechanical and cold hypersensitivity in sickle cell disease pain”
Part of *Max Mitchell Junior Investigator Award Finalist Symposium*
- 2016 **American Pain Society Annual Meeting**, Austin, TX
“Opposing roles of the left and right central amygdala in bladder pain modulation”
Part of *Basic Science SIG Data Blitz*

SELECTED POSTER ABSTRACTS

67 abstracts accepted between 2010 and 2025

denotes mentee

- 2025 Gayluak N, Roy S, Ramos Freitas L, Burton M, **Sadler K**. “Assessing the impact of long-term hydroxyurea treatment on chronic pain in Townes sickle cell disease mice” *United States Association for the Study of Pain Annual Meeting*, Chicago, IL
- 2025 Pratt M, **Sadler K**. “Uterine-innervating neuron sensitization in a mouse model of endometriosis” *United States Association for the Study of Pain Annual Meeting*, Chicago, IL
- 2025 Plumb A, Brandon J, Lesnak J, Price T, **Sadler K**. “Acute effects of antibiotics on nocifensive behaviors and dorsal root ganglia neuronal activity” *United States Association for the Study of Pain Annual Meeting*, Chicago, IL
- 2025 **Sadler K**, Atkinson S, Highland J, Steiner N, Rico JJ, Retherford D, Hankins JS, Khan H, Brignac M, Field J, Singh A, Salzman N, Brandow AM. “Intestinal microbiome changes are associated with neuropathic pain in individuals with sickle cell disease” *United States Association for the Study of Pain Annual Meeting*, Chicago, IL
- 2024 Atkinson S, **Sadler K**, Highland J, Steiner N, Rico JJ, Retherford D, Hankins J, Khan H, Brignac M, Field J, Singh A, Salzman N, Brandow AM. “Individuals with sickle cell disease have decreased intestinal microbial diversity compared to healthy Black related and unrelated individuals without sickle cell disease” *American Society of Hematology Annual Meeting and Exposition*, San Diego, CA
- 2024 John JM, **Sadler K**, “Analgesic efficacy and mechanisms of minocycline in sickle cell disease pain” *UTD Summer Platform for Undergraduate Research Symposium*, Dallas, TX; *ABRCMS 2024 Conference*, Pittsburgh, PA
- 2024 Cho V, Brandon JM, **Sadler K**, “Examining the relationship between acute antibiotic use and pain in mice” *UTD Summer Platform for Undergraduate Research Symposium*, Dallas, TX
- 2024 Pratt M, Schaub M, Dussor G, **Sadler K**, “Probiotic treatment alleviates chronic pain in sickle cell disease mice” *United States Association for the Study of Pain Annual Meeting*, Seattle, WA
- 2024 **Sadler K**, Atkinson S, Ehlers V, Waltz T, Hayward M, Rodríguez García D, Salzman N, Stucky C, Brandow A, “Gastrointestinal chemosensation drives chronic pain in sickle cell disease” *Mammalian Somatosensation: Mechanisms of Itch, Touch, Pain and Interoception in Health and Disease Keystone Symposium*, Santa Fe, NM
- 2023 John JM, Pearce KM, **Sadler K**, “Effects of antibiotic administration on pain and amygdala activation in mice” *UTD Summer Platform for Undergraduate Research Symposium*, Dallas, TX

- 2023 Rodríguez García D, **Sadler K**, Kemmo Tsafack U, Szabo A, Stucky C, “High speed videography of evoked rodent behaviors: sources of variability and usefulness to identify pain phenotypes”
United States Association for the Study of Pain Annual Meeting, Durham, NC
- 2023 **Sadler K**, Atkinson S, Ehlers V, Waltz T, Hayward M, Rodríguez García D, Salzman N, Stucky C, Brandow A, “Gut microbiota and metabolites drive persistent pain in sickle cell disease”
United States Association for the Study of Pain Annual Meeting, Durham, NC
- 2022 Mikesell A, Moehring F, **Sadler K**, Isaeva O, Mecca C, Stucky C, “Keratinocyte PIEZO1 mediates touch sensation and touch allodynia”
Annual Meeting of the Society for Neuroscience, San Diego, CA
United States Association for the Study of Pain Annual Meeting, Cincinnati, OH
- 2022 Ehlers V, **Sadler K**, Menzel A, Mecca C, Stucky C, “Sickle cell disease hypersensitivity is mediated by TRPV4 in dorsal root ganglia neurons and keratinocytes”
Annual Meeting of the Society for Neuroscience, San Diego, CA
- 2022 Ehlers V, **Sadler K**, Menzel A, Stucky C, “Transient receptor potential vanilloid 4 mediates hypersensitivity in chronic sickle cell disease pain”
United States Association for the Study of Pain Annual Meeting, Cincinnati, OH
- 2022 **Sadler K**, Ehlers V, Brandow A, Stucky C, “Sickle cell disease associated changes in the gut microbiome contribute to persistent pain”
United States Association for the Study of Pain Annual Meeting, Cincinnati, OH
- 2021 Trask S, Mogil J, Helmstetter F, Stucky C, **Sadler K**, “Contextual control of conditioned pain tolerance and endogenous analgesic systems”
Annual Meeting of the Society for Neuroscience, virtual
- 2019 Rodríguez García D, **Sadler K**, Stucky C, “Longitudinal probiotic treatment decreases mechanical pain in sickle cell disease mice”
Annual Biomedical Research Conference for Minority Students, Anaheim, CA
- 2019 **Sadler K**, Moehring F, Stucky C, “TRPC5 is required for mechanical hypersensitivity in inflammatory pain models”
Annual Meeting of the Society for Neuroscience, Chicago, IL
- 2019 Moehring F, **Sadler K**, Stucky C, “Normal cold sensation requires keratinocyte-to-sensory neuron communication”
Mammalian Somatosensory Systems Keystone Symposium, Seattle, WA
International Association for the Study of Pain World Congress, Boston, MA
American Pain Society Annual Meeting, Milwaukee, WI
Midwest Regional Pain Interest Group Meeting, Kansas City, KS
- 2018 **Sadler K**, Zappia K, Weyer A, O’Hara C, Hillery C, Stucky C, “Chemokine receptor 2 (CCR2) mediates mechanical and cold hypersensitivity in sickle cell disease pain”
American Pain Society Annual Meeting, Anaheim, CA
12th Annual NIH Pain Consortium Symposium, Bethesda, MD
Annual Meeting of the Society for Neuroscience, Washington, DC
- 2016 **Sadler K**, Kolber B, “Divergent roles of the left and right central amygdala in visceral pain modulation”
New Frontiers of Pain Research in the 21st Century Meeting, Birmingham, AL
American Pain Society Annual Meeting, Austin, TX
Center for Neuroscience at the University of Pittsburgh Annual Retreat, Wheeling, WV
Overcoming Barriers to the Translation of Pain Research Conference, Pittsburgh, PA

- 2013 Sadler K, Stratton J, Kolber B, "Effects of body temperature and isoflurane induction on urinary bladder distension"
Annual Meeting of the Society for Neuroscience, San Diego, CA
Midwest Regional Pain Interest Group Meeting, Cincinnati, OH
Experimental Biology Annual Meeting, Boston, MA

TEACHING EXPERIENCE

Instructor

- 2025 **Sensory Neuroscience**, The University of Texas at Dallas, Richardson, TX
N = 40 undergraduate students per semester
- 2023 – **The Neuroscience of Pain**, The University of Texas at Dallas, Richardson, TX
N = 30 graduate (PhD or MS) students -or-
N = 25 Hobson Wildenthal Honors College undergraduate students per semester
- 2020 **Neuroscience Doctoral Program Journal Club**, Medical College of Wisconsin, Milwaukee, WI
N = 6 second year PhD students
- 2018 – 2019 **Introduction to Behavioral Neuroscience**, Carthage College, Kenosha, WI
N = 30 undergraduate students per semester
- 2018 **General Cell Biology Lab**, Carroll University, Waukesha, WI
N = 15 undergraduate students

Teaching Assistant

- 2020 **Foundations in Biomedical Science IV**, Medical College of Wisconsin, Milwaukee, WI
N = 40 first year PhD students
- 2019 – 2020 **Graduate Neuroanatomy Lab**, Medical College of Wisconsin, Milwaukee, WI
N = 20 PhD/MS students per semester
- 2019 – 2020 **Medical Neuroanatomy Lab**, Medical College of Wisconsin, Milwaukee, WI
N = 120 M1 medical students per semester
- 2014 **Introductory Microbiology**, Duquesne University, Pittsburgh, PA
N = 48 undergraduate students
- 2013 – 2014 **Experimental Biology I**, Duquesne University, Pittsburgh, PA
N = 16 undergraduate students per semester
- 2012 – 2013 **Biology II Lab**, Duquesne University, Pittsburgh, PA
N = 64 undergraduate students per semester
- 2011 – 2012 **Biology I Lab**, Duquesne University, Pittsburgh, PA
N = 64 undergraduate students per semester

Guest Lectures:

- 2025 **Contemporary Topics in Sociology**, Seton Hill University, Greensburg, PA (virtual)
Federal Research Funding, N=25 undergraduate students
- 2025 **The Neuroscience of Pain**, Pomona College, Claremont, CA (virtual)
Microbiome and Pain, N = 15 undergraduate students

- 2019 – 2022 **Fundamentals of Neuroscience**, Medical College of Wisconsin, Milwaukee, WI
Neuroscience of Emotion, N = 20 PhD/MS students per semester
- 2019 – 2021 **Medical Neuroscience**, Medical College of Wisconsin, Milwaukee, WI
Limbic System, N = 120 M1 medical students per semester
- 2016 **Systems Neuroscience**, Carnegie Mellon University, Pittsburgh, PA
Pain and Itch, N = 50 undergraduate students

MENTORING

Postdoctoral fellow mentor to:

- 2025 - Zulmary Manjarres Farias, PhD
2024 - Ashley Plumb, PhD
2023 - 2024 Katherine (Kate) Pearce, PhD

PhD mentor to:

- 2023 - Ynaluak (Nya) Gayluak
2023 - 2025 Salma AshShareef

PhD lab rotation mentor to:

- 2024 Ifunanya Okolie
2023 Salma AshShareef, Minsung Kim, Aoi Suzuki

PhD dissertation committee member to:

- 2025 - Michael Ojo (Kolber)
2025 - Audrey Green (Burton)
2025 - Aoi Suzuki (Thorn)
2024 - Hailey Welch (Thorn)
2024 - Shiva Nematgorgani (Dussor)
2024 - Marisol Mancilla Moreno (Price)
2024 - Mandee Schaub (Dussor)
2024 - Lucy He (Price)

First year committee member to:

- 2025 Isabella Casmedes (Burton)
2024 Michael Ojo (Kolber), Ana Sofia Carreón (Kolber), Aoi Suzuki (Thorn)
2023 Lucy He (Price), Marisol Mancilla Moreno (Price), Phuong Pham (Kolber)

Undergraduate mentor to:

- 2025 Nurfatihah (Teegah) Zulkifly, *Clark Summer Research Scholar*
2025 Raina Karakkattil, *URAP Summer Research Scholar*
2024 - Sourav Roy
2024 Victor Cho, *Clark Summer Research Scholar*
2023 - Divya Arivalagan
2023 - Juanna John, *Clark Summer Research Scholar*
2023 - Lucia Cardona
2023 - 2024 Cheri Chan
2023 - 2024 Aditi Manjrekar
2023 Nawal Khan

Awards received by UTD mentees

- 2025 Nya Gayluak, invited speaker at 48th National Sickle Cell Disease Scientific Meeting
2025 - 2029 McKenna Pratt, McDermott Graduate Fellow

2024 Juanna John, full Travel Award for 2024 Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS)

2024 Juanna John, Jonsson School of Engineering and Computer Science Poster Award for SPUR poster

2024 Nya Gayluak, received USASP Diversity, Equity, and Inclusion Scholarship

2024 Salma AshShareef, received USASP Diversity, Equity, and Inclusion Scholarship

2024 McKenna Pratt, abstract selected for Basic Science SIG oral presentation at USASP meeting

2023 Juanna John, Office of Graduate Education Poster Award for SPUR poster

Mentorship prior to UTD Faculty Appointment

2022 *Christina Mecca*, PhD student in Stucky Lab, Medical College of Wisconsin

2021 – 2022 *Tyler Waltz*, PhD student in Stucky Lab, Medical College of Wisconsin

2021 – 2022 *Alex Mikesell*, PhD student in Stucky Lab, Medical College of Wisconsin

2021 *Emma Bonniwell*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2019 *Christina Mecca*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2019 *Kayla Schwartz*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2019 *Dianise Rodriguez García*, undergraduate in Stucky Lab, Medical College of Wisconsin

2018 *Sarah Timmler*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2018 *Tyler Waltz*, MD student in Stucky Lab, Medical College of Wisconsin

2018 *Ben O'Brien*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2018 *Ashley Erb*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2018 *Rachel Serio*, undergraduate in Stucky Lab, Medical College of Wisconsin

2017 *Becca Slick*, PhD rotation in Stucky Lab, Medical College of Wisconsin

2017 *Christina Mecca*, undergraduate in Stucky Lab, Medical College of Wisconsin

2016 *Heather Allen*, PhD rotation in Kolber Lab, Duquesne University

2016 *Nathan Gartland*, undergraduate in Kolber + Cavanaugh Labs, Duquesne University

2016 – 2017 *Abby Cox*, undergraduate in Kolber Lab, Duquesne University

2015 *Kara Jones*, undergraduate in Kolber Lab, Duquesne University

2015 – 2017 *Youstina Seliman*, undergraduate in Kolber Lab, Duquesne University

2014 – 2015 *Allison Trouten*, undergraduate in Kolber Lab, Duquesne University

2013 – 2015 *Rani Rajaram*, undergraduate in Kolber Lab, Duquesne University

2013 – 2015 *Missy Wolz*, undergraduate in Kolber Lab, Duquesne University

2013 – 2015 *Caela Long*, undergraduate in Kolber Lab, Duquesne University

2012 – 2013 *Devon Burkholder*, undergraduate in Kolber Lab, Duquesne University

2011 – 2013 *Jared Stratton*, undergraduate in Kolber Lab, Duquesne University

ACADEMIC SERVICE

Department/UTD Service:

2024 - Member, SCN Graduate Program Committee

2024 Member, BBS Colloquium Committee

2023 Faculty Advisor, Women in Neuroscience

2023 Cognitive and Systems Neuroscience PhD Program Retreat Planning Committee

2023 - Organizer, Center for Advanced Pain Studies Seminar Series

External Service:

2025 Reviewer, Clinical Topics in Neuroimmunology and Neuroinflammation Special Emphasis Panel (ZRG1 CN-X(85)), NIH

2024 Member, HEAL Pain Strategic Planning Workforce and Training Subcommittee, NIH

2024 Early Career Reviewer, Neurobiology of Pain and Itch (NPI) Study Section, NIH

2024 Member, Editorial Board, *The Journal of Pain*

2023 Co-chair, Neuropathic Pain Consortium Programming Committee, Peripheral Nerve Society

2023 - Co-chair, Education and Professional Development Committee, US Assoc. for the Study of Pain

2022 - Member, Education and Professional Development Committee, US Assoc. for the Study of Pain

Community Service:

2023 Speaker at the Addison Rotary Club meetings

Manuscript Reviews:

N = 2 Cell Host & Microbe (IF: 30.3)
N = 1 Blood (IF: 25.5)
N = 3 Brain, Behavior and Immunity (IF: 19.2)
N = 1 Cell Reports (IF: 10.0)
N = 1 Anesthesiology (IF: 9.1)
N = 1 eLife (IF: 8.7)
N = 7 Pain (IF: 7.9)
N = 1 Journal of Neuroscience (IF: 6.7)
N = 5 The Journal of Pain (IF: 4.8)
N = 1 Pain Reports (IF: 4.8)
N = 1 eNeuro (IF: 4.4)
N = 1 Pain Medicine (IF: 3.8)
N = 1 European Journal of Pain (IF: 3.5)
N = 2 Neurobiology of Pain (IF: 3.4)
N = 1 Genes, Brains and Behavior (IF: 3.4)
N = 1 Current Opinion in Physiology (IF: 2.4)
N = 1 Cell Reports Methods

Professional Affiliations:

2020 - US Association for the Study of Pain
 2018 – 2023 International Association for the Study of Pain
 2014 – 2019 American Pain Society
 2012 – 2021 Society for Neuroscience

Service prior to UTD Faculty Appointment

2022 Panelist, USASP Annual Meeting, Early Career Forum K Grant Panel
 2022 Panelist, MCW Spotlight on Science: Negotiation with a Gender Lens
 2022 Panelist, Advance: From Postdoc to Faculty course, Sessions 1 (Intro to Job Market), 5 (Interviewing)
 2021, 2020 Moderator and organizer, MCW Postdoctoral Research Symposium
 2021 Co-organizer, Society for Neuroscience Somatosensation and Pain Pub Quiz social
 2020 – 2021 Member, MCW Postdoctoral Advisory Committee
 2020 Moderator and organizer, USASP webinar series “Lost in Translation: Current state of preclinical pain manipulations and measures”
 2020 – 2021 Organizer, Pain Journal Club at MCW
 2020 Panelist, MCW Spotlight on Science: NIH Fellowship Writing
 2019 Moderator, Midwest Regional Pain Interest Group Meeting, U Kansas Med Center
 2019 Judge, MCW SPUR/DSHREP Research Symposium
 2019 Social Media Champions Captain, American Pain Society Annual Meeting
 2018, 2019 Planning committee, Incoming Neuroscience PhD Student Bootcamp, MCW + Marquette U
 2017 – 2021 Postdoctoral Representative, MCW CBNA faculty meetings
 2015 Organizer, Inaugural Department of Biological Sciences Annual Retreat at Duquesne
 2014 – 2016 Judge, PA Junior Academy of Science Regional Competition, Pittsburgh, PA
 2014 – 2016 Graduate Student Representative, Duquesne U. Biology Department faculty meetings
 2014 Moderator, Duquesne University Undergraduate Research Ethics Forum