

Chloe E. Page, PhD

Assistant Professor

Department of Psychiatry, University of Colorado School of Medicine

Contact

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Professional Experience

2024-present	Assistant Professor University of Colorado School of Medicine, Department of Psychiatry
2021-2024	Instructor University of Colorado School of Medicine, Department of Psychiatry
2020-2021	Postdoctoral Associate University of Pittsburgh, Department of Neuroscience
2019	Presidential Fellow Ohio State University
2016-2018	Graduate Advising Associate Ohio State University Neuroscience Undergraduate Advising Office
2015-2016	Graduate Teaching Associate Ohio State University College of Arts and Sciences
2014-2015	Graduate Research Associate Ohio State University College of Medicine

Education and Training

2020-2021	Postdoctoral Associate Dr. Shawn Sorrells Lab University of Pittsburgh, Department of Neuroscience
2014-2019	Doctor of Philosophy, Master of Science Neuroscience Graduate Program; Dr. Laurence Coutellier Lab Ohio State University, Departments of Psychology and Neuroscience
2008-2012	Bachelor of Arts Major: Psychology Minors: Biology, Theatre; Concentration: Neuroscience Kalamazoo College, Kalamazoo MI

Research and Scholarship

PUBLICATIONS

Peer-reviewed articles

Complete list of published work in PubMed MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/chloe.page.1/bibliography/public/>

22. Naibauer S, Branagan WT, Lehto S, Reynolds N, Mikulich-Gilbertson S, **Page CE**, Davis RA. (2025) Attitudes towards living organ donation: A cross-sectional survey study. *Frontiers in Public Health*, 13: 1552393. DOI: 10.3389/fpubh.2025.1552393.
21. **Page CE**, Ross DA. (2025) Adult hippocampal neurogenesis and the landscape of plasticity in the human brain. *Biological Psychiatry*, 97(6): 558-560. DOI: 10.1016/j.biopsych.2024.12.018.
20. Vargas LX, Ariefdjohan M, **Page CE**, Meisel ZF, Ulrich CM, Alegria M, Pimentel N, Epperson CN, Richmond TS. (2024) Field notes from the border: Lessons learned in conducting mental health research involving newly arrived Latinx immigrants as study participants. *Journal of Immigrant and Minority Health*, 27(1): 181-189. DOI: 10.1007/s10903-024-01643-0.
19. Metcalf CA, **Page CE**, Stocker B, Johnson RL, Duffy KA, Sammel MD, Loughhead J, Epperson CN. (2024) Treating new-onset cognitive complaints after risk-reducing salpingo-oophorectomy: A randomized controlled crossover trial of lisdexamfetamine. *Gynecologic Oncology*, 190: 62-69. DOI: 10.1016/j.ygyno.2024.07.689
18. **Page CE**, Epperson CN, Novick AM, Duffy KA, Thompson SM. (2024) Beyond the serotonin deficit hypothesis: Communicating a neuroplasticity framework of major depressive disorder. *Molecular Psychiatry*, 29(12): 3802-3813. DOI: 10.1038/s41380-024-02625-2.
17. **Page CE**, Coutellier L. (2023) Kv3.1 voltage-gated potassium channels modulate anxiety-like behaviors in female mice. *Neuroscience*, 538: 68-79. DOI: 10.1016/j.neuroscience.2023.12.011.
16. Alderman PJ, Saxon D, Torrijos-Saiz LI, Sharief M, **Page CE**, Baroudi JK, Biagiotti SW, Butyrkin VA, Melamed A, Kuo CT, Vicini S, García-Verdugo JM, Herranz-Pérez V, Corbin JG, Sorrells SF. (2023) Delayed maturation and migration of excitatory neurons in the juvenile mouse paralamina amygdala. *Neuron*, 112(4): 574-592.e10. DOI: 10.1016/j.neuron.2023.11.010.
15. Metcalf CA, Duffy KA, **Page CE**, Novick AM. (2023) Cognitive problems in perimenopause: A review of recent evidence. *Current Psychiatry Reports*, 25(10): 501-511. DOI: 10.1007/s11920-023-01447-3.
14. Phimphasone-Brady P, **Page CE**, Ali DA, Haller HC, Duffy KA. (2023) Racial and ethnic disparities in women's mental health: A narrative synthesis of systematic reviews and meta-analyses of U.S. samples. *Fertility and Sterility*, 119(3): 364-374. DOI: 10.1016/j.fertnstert.2023.01.032.
13. **Page CE**, Soreth B, Metcalf CA, Johnson RL, Duffy KA, Sammel MD, Loughhead J, Epperson CN. (2023) Natural vs. surgical postmenopause and psychological symptoms confound the

- effect of menopause on executive functioning domains of cognitive experience. *Maturitas*, 170: 64-73. DOI: 10.1016/j.maturitas.2023.01.007.
12. **Page CE**, Biagiotti S, Alderman P, Sorrells S. (2022) Immature excitatory neurons in the amygdala come of age during puberty. *Developmental Cognitive Neuroscience*, 56: 101133. DOI: 10.1016/j.dcn.2022.101133.
 11. Sorrells S, Paredes M, Zhang Z, Kang G, Pastor-Alonso O, Biagiotti S, **Page CE**, Sandoval K, Knox A, Connolly A, Huang E, Garcia-Verdugo JM, Oldham M, Yang Z, Álvarez-Buylla A. (2021) Positive controls in adults and children support that very few, if any, new neurons are born in the adult human hippocampus. *Journal of Neuroscience*, 41(12): 2554-2565. DOI: 10.1523/JNEUROSCI.0676-20.2020.
 10. **Page CE**, Shepard R, Hagerdorn P, Heslin K, Coutellier L. (2019) Prefrontal parvalbumin cells are sensitive to stress and mediate anxiety-related behaviors in female mice. *Scientific Reports*, 9(1): 19772. DOI: 10.1038/s41598-019-56424-9.
 9. **Page CE**, Coutellier L. (2019) Prefrontal excitatory/inhibitory balance in stress and emotional disorders: Evidence for over-inhibition. *Neuroscience & Biobehavioral Reviews*, 105: 39-51. DOI: 10.1016/j.neubiorev.2019.07.024.
 8. Joshi A, **Page CE**, Damante M, Dye CN, Haim A, Leuner B, Lenz KM. (2019) Sex differences in the effects of early life stress exposure on mast cells in the developing rat brain. *Hormones and Behavior*, 113: 76-84. DOI: 10.1016/j.yhbeh.2019.04.012.
 7. Aten S, **Page CE**, Kalidindi A, Wheaton K, Niraula A, Godbout J, Hoyt K, Obrietan K. (2018) Data highlighting the expression of two miR-132/212 target genes – Sirt1 and Pten – after chronic stress. *Data in Brief*, 21: 2323-2329. DOI: 10.1016/j.dib.2018.11.042.
 6. Aten S, **Page CE**, Kalidindi A, Wheaton K, Niraula A, Godbout J, Hoyt K, Obrietan K. (2018) miR-132/212 is induced by stress and its dysregulation triggers anxiety-related behavior. *Neuropharmacology*, 144: 256-270. DOI: 10.1016/j.neuropharm.2018.10.020.
 5. **Page CE**, Coutellier L. (2018) Adolescent stress disrupts the maturation of anxiety-related behaviors and alters the developmental trajectory of the prefrontal cortex in a sex- and age-specific manner. *Neuroscience*, 390: 265-277. DOI: 10.1016/j.neuroscience.2018.08.030.
 4. **Page CE**, Coutellier L. (2018) Reducing inhibition: a promising new strategy for the treatment of schizophrenia. *EBioMedicine*, 35: 25-26. DOI: 10.1016/j.ebiom.2018.07.043.
 3. **Page CE**, Alexander J, Shepard R, Coutellier L. (2018) Npas4 deficiency interacts with adolescent stress to disrupt prefrontal GABAergic maturation and adult cognitive flexibility. *Genes, Brain and Behavior*, e12459. DOI: 10.1111/gbb.12459.
 2. Shepard R, **Page CE**, Coutellier L. (2016) Sensitivity of the prefrontal GABAergic system to chronic stress in male and female mice: relevance for sex differences in stress-related disorders. *Neuroscience*, 332: 1-12. DOI: 10.1016/j.neuroscience.2016.06.038.
 1. Hansen K, Sakamoto K, Aten S, Snider KH, Loeser J, Hesse AM, **Page CE**, Pelz C, Arthur JSC, Impey S, Obrietan K. (2016) Targeted deletion of mir-132/-212 impairs memory and alters the hippocampal transcriptome. *Learning & Memory*, 23: 61-71. DOI: 10.1101/lm.039578.115.

Book Contributions

1. "Data Science and a Paradigm Shift for Psychiatry." *Analytics Interpreted: A Compilation of Perspectives*. Published by Women in Analytics, eds. Rehgan Avon and Dave Cherry, 2021.

Public Writings

4. ["Improving the Lives of Black Mothers and Their Children."](#) Contributor, CU Anschutz News, 19 June 2023.
3. ["Star Trek as a guide to sharing intimate, personal details."](#) Nieman Storyboard, 13 June 2023.
 - [Featured in Science Writing News Roundup #156, 8 July 2023](#)
 - [Featured in the Editor's pick for the top 10 Nieman Storyboard posts of 2023](#)
2. ["Guidance on the lonely road of writing."](#) Contributor, Nieman Storyboard, 13 January 2023.
1. ["For Migrants, the Path to Happiness Often Carries a Traumatic Mental Toll."](#) Contributor, CU Anschutz News, 26 October 2022.

PAST INSTITUTIONAL GRANTS

2025	Growth & Development Grant, CU Anschutz Department of Psychiatry Role: Principal Investigator (\$9,000)
2019	Presidential Fellowship, Ohio State University Graduate School (full tuition, stipend, and fees)
2018	Alumni Grant for Graduate Research and Scholarship, Ohio State University (\$4,892)

HONORS AND AWARDS

2019	Voted Neuroscience Program Student Plenary Speaker by fellow students for the Interdisciplinary Graduate Programs Life Sciences Symposium (OSU)
2018	Trainee Professional Development Award, Society for Neuroscience
2018	Explorations in Neuroscience Camp Travel Award
2018	Travel Award to attend the Stress Neurobiology Workshop from the Pan American Neuroendocrine Society
2018	Outstanding Poster Presentation Award, Interdisciplinary Graduate Studies Life Sciences Symposium (OSU)
2018	Travel Award, Ohio State Department of Neuroscience
2018	Honorable mention, Hayes Graduate Research Forum poster presentation Council of Graduate Studies (OSU)
2018	Corporate sponsorship to attend Women in Analytics conference from the Columbus Collaboratory
2017-2019	Graduate Student Conference Presentation Travel Award, Ohio State Department of Psychology
2012	Pass with Distinction, Senior Individualized Project, Kalamazoo College Department of Psychology

- 2012 Pass with Distinction, senior comprehensive exams, Kalamazoo College
Department of Psychology
- 2012 Richard D. Klein Senior Award in Psychology, Kalamazoo College Department of
Psychology
- 2009 Outstanding First Year Theatre Award, Kalamazoo College Theatre Arts
Department

ORAL PRESENTATIONS

- 8. **Page CE**, Novick AM. "From neurotransmitters to neuroplasticity: Rethinking major depressive disorder." Behavioral Health Excellence Technical Assistance Center (BHE-TAC) webinar, 25 June 2025. *Invited talk*
- 7. Epperson CN, **Page CE**. "Beyond the serotonin deficit hypothesis: communicating a neuroplasticity framework of major depressive disorder." American Psychiatric Association, 17-21 May 2025, Los Angeles CA. *Invited talk supported by Boehringer Ingelheim U.S.*
- 6. **Page CE**. "Untangling the complexity of adult neuroplasticity." BRAIN Conference Pre-Meeting, Society for Biological Psychiatry, 23-26 April 2025, Toronto, Ontario, Canada.
- 5. Sorrells S, **Page CE**. "Molecular and morphological heterogeneity of immature neurons within the human paralaminar amygdala." Topics in Experimental Neuropathology, University of Pittsburgh Medical Center, 22 July 2021, Pittsburgh PA.
- 4. **Page CE**, Shepard R, Hagerdorn P, Heslin K, Coutellier L. "DREADD-induced modulation of prefrontal parvalbumin cell activity has sex-specific effects on emotional behaviors." Interdisciplinary Graduate Programs Life Sciences Symposium, 21 May 2019, Columbus OH. *Neuroscience program student plenary speaker*
- 3. **Page CE**. "The brain out of balance: How chronic stress leads to anxiety." Randolph-Macon College, 1 May 2019, Ashland VA. *Invited departmental talk*
- 2. **Page CE**, Alexander J, Coutellier L. "Npas4-deficient mice lack cellular resilience against mild stress in adolescence and show impaired cognitive flexibility in adulthood." 11th International Regional Stress and Behavior Neuroscience and Biopsychiatry Conference (North America), 22-24 June 2017, Miami Beach FL.
- 1. **Page CE**, Alexander J, Coutellier L. "Npas4-deficient mice lack homeostatic resilience against mild stress in adolescence and show impaired cognitive flexibility in adulthood." Interdisciplinary Graduate Programs Life Sciences Symposium, 23 May 2017, Columbus OH.

POSTERS

- 14. **Page CE**, Coutellier L. Prefrontal excitatory/inhibitory balance in stress-induced anxiety: Evidence for over-inhibition. Society for Neuroscience, 19-23 October 2019, Chicago IL. *Presenting author*
- 13. Lemanski E, **Page CE**, Coutellier L. Postnatal prefrontal myelination and associated maturation of social behaviors are regulated by Npas4 in mice. Society for Neuroscience, 19-23 October 2019, Chicago IL. *Presenting author*

12. **Page CE**, Hagerdorn P, Coutellier L. Effects of chemogenetic inhibition of prefrontal parvalbumin interneurons on emotional and cognitive behaviors following chronic stress exposure. Society for Neuroscience, 3-7 November 2018, San Diego CA. *Presenting author*
11. Saulsbery AI, **Page CE**, Nelson LH, Dodson CM, Lenz KM. Early life stress effects on mast cell degranulation and blood-brain barrier function depend on the severity and chronicity of stress. Society for Neuroscience, 3-7 November 2018, San Diego CA. *Non-presenting author*
10. **Page CE**, Coutellier L. Adolescent stress disrupts the maturation of anxiety-related behaviors and alters the developmental trajectory of the prefrontal cortex in a sex- and age-specific manner. Stress Neurobiology Workshop, 8-11 June 2018, Banff, Alberta, Canada. *Presenting author and poster teaser session oral presenter*
9. Shepard R, **Page CE**, Heslin K, Coutellier L. Modulation of prefrontal parvalbumin interneurons activity by chronic stress causes changes in anxiety-like behaviors in mice. Stress Neurobiology Workshop, 8-11 June 2018, Banff, Alberta, Canada. *Presenting author and poster teaser session oral presenter*
8. **Page CE**, Coutellier L. Adolescent stress disrupts the maturation of anxiety-related behaviors and alters the developmental trajectory of the prefrontal cortex in a sex- and age-specific manner. Interdisciplinary Graduate Programs Life Sciences Symposium, 30 May 2018, Columbus OH. *Presenting author*
7. **Page CE**, Imwalle S, Coutellier L. Age- and sex-specific effects of adolescent stress on the maturation of the mouse prefrontal cortex: Implications for heterogeneity in affective disorders. Hayes Graduate Research Forum, 2 March 2018, Columbus OH. *Presenting author*
6. Shepard R, **Page CE**, Heslin K, Coutellier L. Chronic stress-induced changes in parvalbumin cells of the prefrontal cortex contribute to increased anxiety in a sex-specific manner. Society for Neuroscience, 11-15 November 2017, Washington DC. *Presenting author*
5. **Page CE**, Alexander J, Shepard R, Coutellier L. Npas4 deficient mice lack homeostatic resilience against mild stress in adolescence and show impaired cognitive flexibility in adulthood. Society for Neuroscience, 11-15 November 2017, Washington DC. *Presenting author*
4. **Page CE**, Alexander J, Shepard R, Coutellier L. Npas4 deficient mice lack homeostatic resilience against mild stress in adolescence and show impaired cognitive flexibility in adulthood. Cell Symposia: Big Questions in Neuroscience, 9-10 November 2017, Arlington VA. *Presenting author and poster teaser session oral presenter*
3. Shepard R, Heslin K, **Page CE**, Coutellier L. Sex-specific circuitry regulating anxiety in situations of chronic stress in mice. Organization for the Study of Sex Differences; 15-18 May 2017; Montréal, QC, Canada. *Non-presenting author*
2. **Page CE**, Alexander J, Coutellier L. Npas4 deficiency interacts with adolescent stress to impair extradimensional set shifting in adulthood. Institute for Behavioral Medicine Research, Research Day, 5 April 2017, Columbus OH. *Presenting author*
1. Shepard R, **Page CE**, Coutellier L. Sensitivity of the prefrontal GABAergic system to chronic stress in male and female mice: relevance for sex differences in stress-related disorders.

Neurobiology of Stress Workshop, 12-15 April 2016, Newport Beach CA. *Non-presenting author*

PROFESSIONAL MEMBERSHIPS

2025	Organization for Human Brain Mapping (OHBM)
2025	Society of Biological Psychiatry (SOBP)
2017-2021	Society for Neuroscience (SfN)
2018	Pan American Neuroendocrine Society (PANS)

CONTINUING EDUCATION

2025	"Maximizing scientific efficacy through sustainability, reproducibility, and FAIRness": OHBM Educational Course
2025	"Practical course to understand, assess, and deal with analytical variability of brain imaging pipeline": OHBM Educational Course
2025	"Empowering Educators" and "Effective Science Communication"; National Neuroscience Curriculum Initiative (NNCI): BRAIN Conference Pre-Meeting
2025	"The Art of the Personal Essay"; The Catherine Project (competitive admission)
2024, 2025	Effective Science Communication workshop; National Neuroscience Curriculum Initiative (NNCI) (competitive admission)
2023	"Crafting the True Story: An Exploration of Creative Nonfiction"; Madeline Island School of the Arts (MISA), Tucson, Arizona
2022	Professional NIH Grant Development Workshop; Grant Training Center, NIH

Teaching and Mentorship

COURSES AND LECTURES

2024	Lecturer: Psychiatry Research Innovations (PRI) Research Readiness Series, "How to be an effective peer reviewer" (University of Colorado)
2022, 2025	Lecturer and course designer: Pathways for Physician Scientist Training in Psychiatric Research didactic on sex differences and neuroendocrinology [NIMH R25 MH125758-02] (University of Colorado) <ul style="list-style-type: none">• Content openly available on MERLOT
2020-2021	Assistant instructor: Developmental Neuroscience course (University of Pittsburgh)
2018	Guest lecturer: Behavioral Neuroscience course (OSU)
2015-2016	Course assistant: Neurological Disease, Behavioral Neuroscience, Sensation and Perception, Cognitive Neuroscience, Behavioral Genetics (OSU)

HONORS AND AWARDS

2023	Open Education Resources (OER) Champion Award, University of Colorado
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2022	Open Education Resource (OER) creation grant from the University of Colorado Anschutz Medical Campus Strauss Health Sciences Library for creating open access neuroendocrinology education material (\$2,500)
2020	Associate certification in STEM teaching from Pitt-CITRL (University of Pittsburgh Center for Integrating Research, Teaching, and Learning)

UNDERGRADUATE ADVISING AND MENTORSHIP

2018	Neuroscience major and minor declaration advisor (OSU)
2017-2018	Neuroscience major website design and maintenance (OSU)
2017-2018	Co-Organizer, Women in Neuroscience (OSU)
2016, 2017	Seminar Instructor, Life as a Graduate Student (OSU)
2016	Co-Organizer, Midwest/Great Lakes Undergraduate Research Symposium (mGluRs)

Service

FIELD

Community reviewer	<i>Frontiers in Molecular Neuroscience</i> , Frontiers Media
Ad hoc editor	<i>Frontiers in Psychiatry</i> , Frontiers Media
Ad hoc reviewer	<i>OBM Neurobiology</i> , LIDSEN Publishing
	<i>Physiology & Behavior</i> , Elsevier
	<i>Frontiers in Cellular Neuroscience</i> , Frontiers Media
	<i>Translational Psychiatry</i> , Nature Publishing Group
	<i>Neurotoxicity Research</i> , Springer Nature
	<i>Bioengineered</i> , Taylor & Francis
	<i>Research in Veterinary Science</i> , Elsevier
	<i>Journal of Psychiatric Research</i> , Elsevier

INSTITUTION

2024-present	Diversity, Equity, and Inclusion Committee member, Culture Subcommittee (University of Colorado Department of Psychiatry)
2024	Guest panelist, Behavioral Neuroscience seminar on careers after graduate school (OSU)
2024	Judge, 39 th Annual Research Forum (University of Colorado)
2023	Judge, 38 th Annual Research Forum (University of Colorado)
2022	Judge, 37 th Annual Research Forum (University of Colorado)
2022-present	Diversity, Equity, and Inclusion Committee member, Education Subcommittee (University of Colorado Department of Psychiatry)
2020-2021	Senate committee member, Gender & Racial Equity Subcommittee (University of Pittsburgh)
2020-2021	Senate committee member, Tenure & Academic Freedom Committee (University of Pittsburgh)

2017 Panelist, 47th Annual Graduate and Professional Student Recruitment Initiative, Office of Diversity and Inclusion (OSU)
2017 Judge, Undergraduate Fall Research Forum (OSU)
2016-2018 Alternate Delegate, Council of Graduate Studies Neuroscience Representative (OSU)
2016-2018 Judge, Denman Undergraduate Research Forum (OSU)
2016 Judge, Undergraduate Spring Research Expo (OSU)

COMMUNITY

2018 Volunteer, Explorations in Neuroscience summer camp, Columbus OH
2016 Volunteer, Kids' Tech University, Granville OH
2014-2019 Volunteer, Brain Awareness Week, Columbus OH
2014-2016 Volunteer, N.E.U.R.O. (Neuroscience Education, Urban and Rural Outreach), Columbus OH
2014 Volunteer, Stonewall Columbus Pride Parade and Festival, Columbus OH