

EDUCATION

- 2022-present **University of Wisconsin-Madison**, Madison, WI
Ph.D. Student in Psychology, Clinical Research Specialization Track
Research Mentors: Richard Davidson, Ph.D., Melissa Rosenkranz, Ph.D.
Certificate in Leadership in Behavioral Data Science
- 2024 **Master of Science in Psychology** (Research-Oriented)
- 2016-2020 **The University of Chicago**, Chicago, IL
B.A. Psychology with Honors, B.A. Comparative Human Development, *summa cum laude*
GPA: 4.0/4.0
Honors Thesis: *Just Breathe: Effects of Mindfulness-Based Stress Reduction on Airway Inflammation in Individuals with Asthma*
Advisors: Melissa Rosenkranz, Ph.D., Greg Norman, Ph.D.

RESEARCH EXPERIENCE

- 2022-present **Graduate Research Assistant**
University of Wisconsin-Madison, Madison, WI
Psychology Ph.D. Program, Individualized Graduate Major
Research Mentors: Richard Davidson, Ph.D., Melissa Rosenkranz, Ph.D.
- Projects:
 - *Microglia Activation in Asthma*, an NIA-funded R01 assessing relationships between inflammation, microglial activation, and long-term brain health risk in asthma
 - *Wisconsin Center for the Neuroscience and Psychophysiology of Meditation*, a multi-wave NCCIH-funded study including 215 healthy and asthmatic adults
 - *Asthmatic Inflammation and Neurocircuitry Activation*, an NHLBI-funded investigation of bidirectional brain-lung communication
 - *Neural Substrates of Affective Style and Emotion Regulation*, an NIMH-funded R01 examining time courses of emotional processing and their connection to wellbeing
 - *Plasticity of Well-Being Research Network*, an NCCIH-funded U24 research network with the goal of refining concepts and developing measures of well-being
 - Responsibilities:
 - Process and analyze neuroimaging data using Advanced Normalization Tools, FMRIB Software Library tools, and R Studio to examine mechanisms underlying affective, neural, and immune connections
 - Collaborate with scientists across projects and disciplines
 - Use neural, biological, and behavioral data to evaluate the impact of mindfulness-based stress reduction interventions in randomized controlled trials
 - Mentor undergraduate students on independent research projects
 - Contribute to drafting, reviewing, and revising manuscripts and presentations
 - Administer cognitive testing to study participants and assist with PET/MR collection
- 2020-2022 **Research Intern**
Center for Healthy Minds
University of Wisconsin-Madison, Madison, WI
Research Advisor: Melissa Rosenkranz, Ph.D. | *Director:* Richard Davidson, Ph.D.
- Projects:
 - *Wisconsin Center for the Neuroscience and Psychophysiology of Meditation*
 - *Asthmatic Inflammation and Neurocircuitry Activation*

- Responsibilities:
 - o Analyzed bidirectional influences of psychological stress and inflammation using linear mixed effects models
 - o Interpreted and summarized literature to inform studies and in-progress manuscripts
 - o Transformed and prepared datasets for analysis
 - o Wrote and adapted source code

2019

Summer Undergraduate Research Intern

Center for Healthy Minds

University of Wisconsin-Madison, Madison, WI

Research Advisor: Melissa Rosenkranz, Ph.D. | Director: Richard Davidson, Ph.D.

- Projects:
 - o *Wisconsin Center for the Neuroscience and Psychophysiology of Meditation*
- Responsibilities:
 - o Worked with data from multi-wave studies to investigate psychoneuroimmunology and other brain-body interactions in healthy and clinical populations
 - o Learned research methods and data analysis with self-report, biological, behavioral, and neuroimaging data
 - o Assisted in preparing study participants and running fMRI and PET scans
 - o Reviewed literature and generated study-specific hypotheses

2018-2020

Undergraduate Research Assistant

Social Psychophysiology & Neuroendocrinology Lab

The University of Chicago, Department of Psychology, Chicago, IL

Graduate Student Supervisor: Frederica Rockwood | Director: Greg Norman, Ph.D.

- Projects:
 - o Physiological mechanisms underlying emotion contagion and physiological resonance
- Responsibilities:
 - o Coded and analyzed high-frequency heart rate variability from electrocardiography using MindWare Technologies, to evaluate parasympathetic nervous system activity
 - o Engaged with graduate students to shape study design
 - o Examined the relation between internal self-perception (interoception) and stress physiology through experiments and literature discussion
 - o Guided human participants through experimental procedures, including monitoring impedance electrocardiography while participants observed Trier Social Stress Tests

2017

Intern

Council on Ethical and Judicial Affairs

American Medical Association, Chicago, IL

Advisors: Rick Weinmeyer, J.D., M.A., MPhil, Danielle Chaet, M.S.

- Co-authored Journal of Ethics articles to inform and diversify perspectives about medical ethics and health law
- Contributed research and writing to in-progress papers, bylaws, and code amendments to advance human rights in public health and medicine
- Conducted literature reviews on topics including compassionate use, clean water access, and female genital mutilation

PUBLICATIONS

- Higgins, E. T.**, Busse, W. W., Esnault, S., Christian, B. T., Klaus, D. R., Bach, J. C., Frye, C. J., Rosenkranz, M. A. Fueling the fire in the lung-brain axis: the salience network connects allergen-provoked TH17 responses to psychological stress in asthma. *Brain, Behavior, & Immunity*, 128, 276-288.
<https://doi.org/10.1016/j.bbi.2025.04.004>
- Abercrombie, H., Barnes, A., Nord, E., Finley, A., **Higgins, E.T.**, Grupe, D., Rosenkranz, M. A., Davidson, R. J., Schaefer, S. M. (2023). Inverse association between stress induced cortisol elevations and negative emotional reactivity to stress in humans. *Stress*, 26(1), 2174780.
<https://doi.org/10.1080/10253890.2023.2174780>
- Higgins, E. T.**, Davidson, R. J., Busse, W. W., Klaus, D. R., Bednarek, G. T., Goldman, R. I., Sachs, J., & Rosenkranz, M. A. (2022). Clinically relevant effects of Mindfulness-Based Stress Reduction in individuals with asthma. *Brain, Behavior, & Immunity - Health*, 25, 100509.
<https://doi.org/10.1016/j.bbih.2022.100509>
- Higgins, E. T.**, Busse, W. W., Davidson, R. J., Norman, G., & Rosenkranz, M. A. (2020). Effects of Mindfulness-Based Stress Reduction on Airway Inflammation in Individuals with Asthma. *Chicago Area Undergraduate Research Symposium x Northwestern Undergraduate Research Journal Special Edition*, 1. <https://doi.org/10.21985/n2-tyw3-g174>
- Weinmeyer, R., Norling, A., Kawarski, M., & **Higgins, E. T.** (2017). The Safe Drinking Water Act of 1974 and Its Role in Providing Access to Safe Drinking Water in the United States. *AMA Journal of Ethics*, 19(10), 1018-1026. <https://doi.org/10.1001/journalofethics.2017.19.10.hlaw1-1710>

INVITED TALKS AND PRESENTATIONS

Speaker for European Psychoneuroimmunology Network Journal Club. November, 2024.

- Higgins, E. T.**, Busse, W. W., Esnault, S., Klaus, D. R., Frye, C. J., & Rosenkranz, M. A. *Brain and cortisol responses to psychosocial stress are associated with provoked airway inflammation in Th17-related pathways in asthma.* Oral presentation at the 2024 Psychoneuroimmunology Research Society Annual Meeting. June, 2024; Halifax, Nova Scotia, Canada.
- Higgins, E. T.**, Busse, W. W., Esnault, S., Klaus, D. R., & Rosenkranz, M. A. *Stress Neurocircuitry & Airway Inflammation in Asthma.* Presentation at the 2023 Plasticity of Well-being Summer Workshop. June, 2023; Madison, WI.
- Higgins, E. T.**, Busse, W. W., Esnault, S., Klaus, D., & Rosenkranz, M. A. *Stress neurocircuitry and airway inflammation in asthma.* Presentation at the Psychoneuroimmunology Research Society Virtual Trainee Event. February, 2023.
- Higgins, E. T.**, Davidson, R. J., & Rosenkranz, M. A. *Brain functional changes associated with mindfulness training in asthma.* Presentation at the Autumn School Mini Congress. September, 2022; Castle Rausholzhausen, Ebsdorfergrund, Germany.

POSTERS & SYMPOSIA

- Higgins, E. T.**, Busse, W. W., & Rosenkranz, M. A. (2025). Functional cerebellar subnuclei are associated with stress-related responses to acute psychosocial stress in asthma. Poster presentation at the Psychoneuroimmunology Research Society Annual Meeting: June, 2025; Bordeaux, France.

- Higgins, E. T.,** Recchio, J., Nord, E., Barnes, A., Gresham, L., Rosenkranz, M. A., Davidson, R. J., Slavich, G. M., & Schaefer, S. M. (2025). Inflammation and lifetime stressor severity are associated with blunted cortisol but not skin conductance responses to acute psychosocial stress. Citation poster presentation at the Society for Biopsychosocial Science and Medicine Annual Meeting; March, 2025; Seattle, WA.
- Morris, J., Poster, C., **Higgins, E. T.,** Sankaran, K., Mroczek, D., Schaefer, S. M. (2025). The time course of negative emotion and associations with time spent on work. Poster presentation at the Society for Affective Science Conference; March, 2025; Portland, OR.
- Haeffner, C., **Higgins, E. T.,** Laubacher, C., Gresham, L., Nord, E. C., Barnes, A., Abercrombie, H., Rosenkranz, M. A., Davidson, R. J., Slavich, G. M., & Schaefer, S. M. (2023). Associations among lifetime stressor exposure, amygdala and hippocampal volume, and the acute stress response. Poster presentation at Society for Neuroscience Conference; October, 2023; Washington, DC.
- Higgins, E. T.,** Davidson, R. J., Busse, W. W., & Rosenkranz, M. A. *Brain functional changes associated with mindfulness training-related improvement in asthma control.* Featured poster presentation at American Academy of Asthma, Allergy, & Inflammation (AAAAI) Annual Meeting; February, 2022; Phoenix, AZ
- Higgins, E. T.,** Busse, W. W., Davidson, R. J., Norman, G., & Rosenkranz, M. A. (2020). Just Breathe: Effects of Mindfulness-Based Stress Reduction on Airway Inflammation in Individuals with Asthma. Poster presented at University of Chicago Psychology Department Virtual Honors Day Symposium; May, 2020.

GRANTS, HONORS, & FELLOWSHIPS

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| 2024; 2025 | NIMH Training Program in Emotion Research pre-doctoral trainee
<i>Nominated specialized, non-degree training in emotion research, supported by NIMH grant 5T32MHO18931</i> |
| 2024 | Psychoneuroimmunology Research Society (PNIRS) Trainee Scholar Travel Awardee
<i>Merit-based travel award to support annual meeting attendance</i> |
| 2023 | Mindfulness Mechanisms & Methods Meeting (M4) Travel Awardee
<i>Funded travel and accommodations at the M4 and invited small-group workshop, St. Louis, MS</i> |
| 2022 | European Psychoneuroimmunology Autumn School Awardee
<i>Funded attendance at "The Lung-Brain Axis in Health and Disease," Castle Rauischholzhausen, Ebsdorfergrund, Germany</i> |
| 2022 | University of Wisconsin-Madison Academic Year Graduate School Fellowship
<i>Full tuition, fees, and stipend for two academic years provided by the Graduate School</i> |
| 2020 | University of Chicago Gary Becker Scholar in the Social Sciences Collegiate Division
<i>Divisional honor for students in the top 5% of their major over a 5-year period</i> |
| 2020 | Kimpton Fellowship
<i>Competitive employer-paid fellowship program</i> |
| 2019; 2020 | Phi Beta Kappa
<i>Junior and senior year nominations</i> |
| 2018 | University of Chicago Swift Scholar
<i>Named fund awarded on the basis of exceptional academic ability</i> |
| 2017; 2019 | Jeff Metcalf Fellowship Grant Recipient
<i>Funding for a substantive project-based summer internship</i> |
| 2017-2020 | University of Chicago Dean's List
<i>Cumulative GPA in the top 20% of students</i> |
| 2016-2020 | University of Chicago Odyssey Scholar
<i>Scholarship awarded to hard-working students with financial need</i> |

WORK EXPERIENCE

- 2020 **Teaching Assistant** - The Biological Nature of Psychological Problems
The University of Chicago, Biological Sciences Collegiate Division, Chicago, IL
Professor: Benjamin Lahey, Ph.D.
- Hosted weekly office hour discussions to field questions in a 98-student class
 - Reviewed and revised 14 lectures and 3 exams to adhere to course objectives
 - Aided in adapting course content and methods for virtual instruction
 - Coordinated administrative and technology-related aspects
- 2016-present **Sailing Instructor**
Hoofer Sailing Club, Madison, WI
- Collaborate with a team of 75 instructors to coach over 1200 university students, international students, faculty, staff, and Wisconsin Union members, and over 400 youth ages 10-18
 - Teach essential and advanced sailing skills and theory, leading group and individual lessons
 - Participate in the maintenance of over 80 watercraft for recreational and competitive sailing
- 2016-2020 **Circulation Attendant**
The Joe and Rika Mansueto Library, Chicago, IL
- Assisted patrons, including university students, faculty, and professionals, providing them access to and information about volumes and the facility
 - Monitored over 3 million cross-disciplinary volumes to maintain organization
 - Balanced this part-time job with full-time course loads during the academic term

LEADERSHIP & PROFESSIONAL ACTIVITIES

- 2024-2025 **PhD Mentor for M.S. in Psychology: Data Science in Human Behavior**
- Mentor groups of 2-4 students developing theory-grounded, application-oriented questions and hypotheses
 - Guide and review data management, statistical modeling, and interpretation in partnership with Healthy Minds Innovations to analyze an app-based mindfulness intervention
- 2023 **Reviewer for APS 2024 Convention, Emotion and Personality Area Poster Abstracts**
- Read, evaluated, and scored 100 abstracts for standard poster presentations at the 2024 Association for Psychological Science Annual Convention
- 2023 **Committee Member**
Plasticity of Well-being Network Summer Workshop Planning Committee, Madison, WI
- Collaborated with scientists and trainees to develop an agenda for a week-long workshop
 - Facilitated discussion to help create an inclusive environment
- 2019-2020 **Co-President**
2018-2019 **Vice President**
UC Psych (Undergraduate Psychology Club), The University of Chicago, Chicago, IL
- Collaborated with the Board to plan events, connected with faculty, and mentored members
 - Managed external affairs and outreach including the club website, faculty correspondence, and informational and social events to broaden access and strengthen involvement
 - Founded a Mentor Program to advise and assist incoming students

RELEVANT SKILLS & CERTIFICATIONS

- Experienced:
R Programming, FMRIB Software Library tools, Microsoft Office Suite, Google Suite, Research Electronic Data Capture (REDCap)
- Familiar:
Bash programming, MindWare Technologies BioNex and Heart Rate Variability Analysis Software, SPSS
- Certifications:
Mental Health First Aid Training (2025), FMRIB Software Library Neuroimaging Course (2023), Red Cross Adult First Aid/CPR/AED (2023)
- Language:
Reading, writing, and conversational French

REFERENCES

Lyn Abramson, Ph.D.

Sigmund Freud Professor of Psychology
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Richard Davidson, Ph.D.

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Benjamin Lahey, Ph.D.

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