

Augustin C Hennings, PhD

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PROFESSIONAL APPOINTMENTS

2022 – Current **Princeton University**
Postdoctoral Research Fellow, Princeton Neuroscience Institute
Laboratory of Dr. Ken Norman

EDUCATION

2022 **The University of Texas at Austin**
PhD, Institute for Neuroscience
Advisors: Dr. Joey Dunsmaur & Dr. Jarrod Lewis-Peacock
Dissertation: *Contextual processes in Pavlovian conditioning and extinction: insights from episodic memory*

2016 **The College of William and Mary**
BS, Neuroscience, Departmental Honors
Major in Hispanic Studies

PEER-REVIEWED PUBLICATIONS

11. Laing PAF, **Hennings AC**, Cooper SE, & Dunsmaur JE. (2026). Emotional learning selectively distorts the temporal organization of memory: a quantitative synthesis. *Cognition*.
<https://doi.org/10.1016/j.cognition.2025.106382>
10. **Hennings AC**, Bibb SA, Lewis-Peacock JA, & Dunsmaur JE (*In press*). Neural reinstatement of encoding context mediates the switch between fear and extinction recall. *Journal of Cognitive Neuroscience*. <https://doi.org/10.1162/jocn.a.93>
9. Cooper SE, **Hennings AC**, Bibb SA, Lewis-Peacock JA, & Dunsmaur JE (2024). Semantic structures facilitate threat memory integration throughout the medial temporal lobe and medial prefrontal cortex. *Current Biology*. <https://doi.org/10.1016/j.cub.2024.06.071>
8. **Hennings AC**, Cooper SE, Lewis-Peacock JA, & Dunsmaur JE (2022). Pattern analysis of neuroimaging data reveals novel insights on threat learning and extinction in humans. *Neuroscience & Biobehavioral Reviews*. <https://doi.org/10.1016/j.neubiorev.2022.104918>
7. Keller NE, **Hennings AC**, Leiker EK, Lewis-Peacock JA, & Dunsmaur JE (2022). Rewarded extinction increases amygdalar connectivity and stabilizes long-term memory traces in the vmPFC. *Journal of Neuroscience*. <https://doi.org/10.1523/JNEUROSCI.0075-22.2022>
6. **Hennings AC**, McClay M, Lewis-Peacock JA, & Dunsmaur JE (2022). Neural reinstatement reveals divided organization of fear and extinction memories in the human brain. *Current Biology*. <https://doi.org/10.1016/j.cub.2021.11.004>
5. **Hennings AC**, Lewis-Peacock JA, & Dunsmaur JE (2021). Emotional learning retroactively enhances item memory but distorts source attribution. *Learning & Memory*.
<https://doi.org/10.1101/lm.053371.120>

4. **Hennings AC**, Bibb SA, Lewis-Peacock JA, Dunsmoor JE (2021). The effect of top-down thought suppression on fear extinction generalization. *Behavioural Brain Research*.
<https://doi.org/10.1016/j.bbr.2020.112931>
3. McClay M, **Hennings AC**, Reidel A, & Dunsmoor JE (2020). Generalization of conditioned fear along a dimension of increasing positive valence. *Neuropsychologia*.
<https://doi.org/10.1016/j.neuropsychologia.2020.107653>
2. **Hennings AC**, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2020). Contextual reinstatement promotes extinction generalization in healthy adults but not PTSD. *Neuropsychologia*.
<https://doi.org/10.1016/j.neuropsychologia.2020.107573>
1. Keller NE, **Hennings AC**, & Dunsmoor JE (2020). Behavioral and neural processes in counterconditioning: past and future directions. *Behaviour Research and Therapy*.
<https://doi.org/10.1016/j.brat.2019.103532>

IN-PROGRESS MANUSCRIPTS

Brooks PP*, **Hennings AC***, Guzman BA, Norman KA^, & Ritchey M^*. (*submitted*). Eye movements reveal the cognitive dynamics supporting successful memory suppression. *^denotes equal contribution.
https://doi.org/10.31234/osf.io/mdrh4_v1

Cooper SE, Keller NE, Bauer EA, Lambert SR, **Hennings AC**, Azar AA, Bibb SA, Nemeroff CB, Cisler JM, Lewis-Peacock JA, & Dunsmoor JE. (*submitted*). Augmenting extinction with counterconditioning strengthens and sustains neural safety representations in PTSD.
https://doi.org/10.31234/osf.io/3b82c_v1

Hennings AC & Norman KA. (*in prep*). Enhancing inhibitory control of memory via real-time fMRI neurofeedback.

Chandrasekhar D, **Hennings AC**, Niv Y, & Berwian I. (*in prep*). Selective maintenance of adverse events may explain conditioning phenomena attributed to fear generalization.

FELLOWSHIPS, HONORS, & AWARDS

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|-------------|----------------------------------------------------------------------|
| 2025 – 2027 | Individual NIH Postdoctoral Fellowship (NRSA) – F32 MH140486 |
| 2020 – 2022 | Individual NIH Predoctoral Fellowship (NRSA) – F31 MH124360 |
| 2020 | Graduate School Summer Fellowship, UT Austin |
| 2019 | Big Data in Neuroscience Workshop Trainee Travel Award, UM Ann Arbor |
| 2019 | Wisconsin Symposium on Emotion Trainee Travel Award, UW Madison |
| 2018 | Office of Graduate Studies Professional Development Award, UT Austin |
| 2015 | Charles Center Summer Scholarship, W&M |
| 2013 | HHMI Freshman Research Award, W&M |

SELECTED PRESENTATIONS AND INVITED TALKS

Includes only items for which I was the presenting author.

Brooks PP*, **Hennings AC***, Guzman BA, Norman KA^, & Ritchey M^*. (2025). *Eye movements reveal the cognitive dynamics supporting successful memory suppression*. Talk presented at the Episodic Memory in Psychopathology workshop at the University of Oregon. *^denotes equal contribution.

Hennings AC. (2025). *Cognitive and neural processes supporting successful memory suppression*. Invited talk presented at the Rutgers-Princeton Center for Computational Cognitive Neuro-Psychiatry Seminar. Recording: https://mediacentral.princeton.edu/media/Augustin+C.+Hennings/1_7fggbani

Hennings AC, Scotti PS, Kempner RP, Nguyen A, McDevitt E, Wallace G, Li K, Turk-Browne NB, Cohen JD, & Norman KA. (2024) *RT-Cloud: Cloud-Based Software Framework to Simplify and Standardize Real-time fMRI*. Poster presented at the Real-time Functional Imaging and Neurofeedback Meeting. Heidelberg, Germany.

Hennings AC, Bibb SA, Lewis-Peacock JA, & Dunsmoor JE (2024) *Contextual reinstatement of threat and safety resolves threat ambiguity in humans*. Poster presented at the Society for Biological Psychiatry. Austin, TX.

Brooks PP*, **Hennings AC***, Guzman BA, Norman KA^, Ritchey M^ (2024) *Eye movements reveal the dynamics of memory reactivation supporting successful memory suppression*. Talk presented at the Manhattan Area Memory Meeting. New Haven, CT.

Hennings AC, Scotti PS, Kempner RP, Nguyen A, McDevitt E, Wallace G, Li K, Turk-Browne NB, Cohen JD, & Norman KA (2024) *Cloud-based software framework to simplify and standardize real-time fMRI*. Poster presented at the NIH BRAIN initiative conference. Bethesda, MD.

Brooks PP*, **Hennings AC***, Guzman BA, Norman KA^, Ritchey M^ (2024) *Eye movements reveal the dynamics of memory reactivation supporting successful memory suppression*. Poster presented at the Context and Episodic Memory Symposium. Philadelphia, PA.

Scotti PS*, **Hennings AC***, Wallace G, Polcyn S, Brooks PP, Mennen A, Michelmann S, Li K, Turk-Browne NB, Cohen JD, & Norman KA (2023) *Cloud-based software framework to simplify and standardize real-time fMRI*. Poster presented at the NIH BRAIN initiative conference. Bethesda, MD.

Scotti PS, **Hennings AC**, & Norman KA. *Conducting studies with the realtime fMRI cloud framework (RT-cloud)* (2022). Workshop presented at the Real-time functional Imaging and neurofeedback meeting. New Haven, CT.

Hennings AC, Bibb SA, Lewis-Peacock JA, & Dunsmoor JE (2022) *Competition between contextual representations of threat and safety determines the success of extinction recall in humans*. Nanosymposium presentation given at the Society for Neuroscience Annual Meeting. San Diego, CA.

Hennings AC, Lewis-Peacock JA, & Dunsmoor JE (2021). *Emotional learning retroactively enhances item memory but distorts source attribution*. Poster presented at the Context and Episodic Memory Symposium. Philadelphia, PA.

Hennings AC, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2020). *Dissociable reinstatement of emotional memories in the human PFC*. Talk presented at the UT Institute for Neuroscience Dialogues Series. Virtual.

Hennings AC, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2020). *Dissociable reinstatement of emotional memories in the human PFC*. Poster presented at the Cognitive Neuroscience Society Meeting. Virtual.

Hennings AC, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2019). *Reinstatement of mental context resolves conflicts between fear and extinction memories*. Poster presented at the Wisconsin Symposium on Emotion, Madison, WI.

Hennings AC, Lewis-Peacock JA, & Dunsmoor JE (2019). *Reinstatement of mental context facilitates retrieval of extinction memories*. Poster presented at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Hennings AC, Lewis-Peacock JA, & Dunsmoor JE (2018). *Mental context tagging reveals deficits of extinction learning in PTSD*. Nanosymposium presentation given at the Society for Neuroscience Annual Meeting. San Diego, CA.

Hennings AC, Lewis-Peacock JA, & Dunsmoor JE (2018). *Mental context reinstatement determines successful retrieval of extinction memories*. Poster presented at the Context and Episodic Memory Symposium, Philadelphia, PA.

Hennings AC, Lewis-Peacock JA, & Dunsmoor JE (2018). *Mental context reinstatement may underlie successful retrieval of extinction memories*. Poster presented at the Cognitive Neuroscience Meeting, Boston, MA.

Hennings AC, Jeanneret S, Dutcher A, Hollenbeck M, & Lewis-Peacock JA (2017). *Competition and forgetting during context-based episodic memory retrieval*. Poster presented at the Austin Conference on Learning and Memory, Austin, TX.

Barnet RC & **Hennings AC** (2016). *Light-enhanced startle sensitivity to acute nicotine withdrawal*. Poster presented at the Society for Neuroscience annual meeting. San Diego, CA.

TEACHING, MENTORSHIP, & SERVICE

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| 2022- | Undergraduate research assistant supervisor, Princeton University Senior thesis advisees: Ahlanna Olson, Shirley Xue Trainees: Angel Toasakul, Mary Shim |
| 2022, Fall | NEU 511 <i>Current Issues in Neuroscience and Behavior</i> Graduate seminar class co-taught by post-docs |
| 2016 – 2022 | Undergraduate research assistant supervisor, UT Austin Trainees: Sophia Bibb, Stephanie Jeanneret, Swecha Ramireddy, Brandon Torio, Phillip Taboada |
| 2020, Spring | Teaching assistant, UT Austin NEU 337 <i>Programming & Data Analysis for Modern Neuroscience</i> Instructor: Dr. Marcel Goldschen-Ohm |
| 2017 – 2020 | Mentor for Neuroscience Undergraduate Research Program, UT Austin Trainees: Mahaly Baptise, Marissa Alvarez, Angelica Garcia, Alejandro Hipolito, Stephanie Root |
| 2017 – 2019 | Volunteer for Dell Medical School Health Sciences Summer Camp |
| 2014 – 2016 | Undergraduate research assistant supervisor, W&M |

EDITORIAL DUTIES AND PEER REVIEW

Ad hoc reviewer: *Nature Human Behaviour; Emotion; Biological Psychiatry; Psychological Science; Journal of Neuroscience; Social Cognitive and Affective Neuroscience; Psychonomic Bulletin & Review; Behaviour Research and Therapy*