

## 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 Dunsmoor & 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

- Cooper SE, **Hennings AC**, Bibb SA, Lewis-Peacock JA, & Dunsmoor JE (2024). Semantic structures facilitate threat memory integration throughout the medial temporal lobe and medial prefrontal cortex. *Current Biology*.
- Hennings AC**, Cooper SE, Lewis-Peacock JA, & Dunsmoor JE (2022). Pattern analysis of neuroimaging data reveals novel insights on threat learning and extinction in humans. *Neuroscience & Biobehavioral Reviews*.
- Keller NE, **Hennings AC**, Leiker EK, Lewis-Peacock JA, & Dunsmoor JE (2022). Rewarded extinction increases amygdalar connectivity and stabilizes long-term memory traces in the vmPFC. *Journal of Neuroscience*.
- Hennings AC**, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2022). Neural reinstatement reveals divided organization of fear and extinction memories in the human brain. *Current Biology*.
- Hennings AC**, Lewis-Peacock JA, & Dunsmoor JE (2021). Emotional learning retroactively enhances item memory but distorts source attribution. *Learning & Memory*.
- Hennings AC**, Bibb SA, Lewis-Peacock JA, Dunsmoor JE (2021). The effect of top-down thought suppression on fear extinction generalization. *Behavioural Brain Research*.
- McClay M, **Hennings AC**, Reidel A, & Dunsmoor JE (2020). The features that shape fear: How emotional intensity and threat relevance interact to guide fear learning. *Neuropsychologia*.
- Hennings AC**, McClay M, Lewis-Peacock JA, & Dunsmoor JE (2020). Contextual reinstatement promotes extinction generalization in healthy adults but not PTSD. *Neuropsychologia*.

Keller NE, **Hennings AC**, & Dunsmoor JE (2020). Behavioral and neural processes in counterconditioning: past and future directions. *Behaviour Research and Therapy*.

## **IN-PROGRESS MANUSCRIPTS**

**Hennings AC**, Bibb SA, Lewis-Peacock JA, & Dunsmoor JE (*submitted*). Neural reinstatement of encoding context mediates the switch between fear and extinction recall. *Preprint available on PsyRxiv*.

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.

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

Brooks PP\*, **Hennings AC\***, Guzman BA, Norman KA<sup>^</sup>, & Ritchey M<sup>^</sup>. Eye movements reveal the cognitive dynamics supporting successful memory suppression. <sup>^</sup>*denotes equal contribution*. *In prep*.

## **FELLOWSHIPS, HONORS, & AWARDS**

2025 –	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.

**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<sup>^</sup>, Ritchey M<sup>^</sup> (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<sup>^</sup>, Ritchey M<sup>^</sup> (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

2022- Undergraduate research assistant supervisor, Princeton University

Senior thesis advisees: Ahlanna Olson, Shirley Xue  
Trainees: Angel Toasakul

- 2022, Fall      NEU 511 *Current Issues in Neuroscience and Behavior*  
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 *Programming & Data Analysis for Modern Neuroscience*  
Instructor: Dr. Marcel Goldschen-Ohm
- 2017 – 2020      Mentor for Neuroscience Undergraduate Research Program, UT Austin  
Trainees include: 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