

*Curriculum Vitae*  
**Moriel Zelikowsky, Ph.D**  
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## EDUCATION

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- 2006-2011**      **Graduate Studies:** University of California, Los Angeles  
Ph.D. in Psychology (*Learning & Behavior, Behavioral Neuroscience*)
- 2001-2005**      **Undergraduate Studies:** University of California, Los Angeles  
B.A. in Philosophy. Graduated *Cum Laude*
- 1997-2001**      **High School:** Los Angeles Center for Enriched Studies, Los Angeles (Math  
and Sciences Magnet). Graduated *High Honors*

## POSITIONS

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- 2019-Present**    Assistant Professor, Dept. of Neurobiology, **University of Utah**
- 2014**            Course Instructor, Dept. of Biology and Biological Engineering, **Caltech**
- 2012-2019**      Postdoctoral Fellow, Dept. of Biology and Biological Engineering, **Caltech**  
(*David J. Anderson Lab*)
- 2006-2011**      Graduate Researcher, Dept. of Psychology, **UCLA** (*Michael Fanselow Lab*)

## FELLOWSHIPS/AWARDS

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- 2020**            Whitehall Foundation Grant
- 2020**            Klingenstein-Simons Fellowship Award
- 2020**            Alfred P. Sloan Research Fellow *in Neuroscience*
- 2019**            Ann Kelley Memorial Travel Fellow Award, Winter Conference on Brain Research
- 2016**            NIMH K99/RO1 Pathway to Independence Award (2016-2023)
- 2016**            LOREAL for Women in Science Award
- 2016**            NARSAD Young Investigator Award (2016-2018)
- 2013**            National Science Foundation, Postdoctoral Research Fellowship (2013-2015)
- 2012**            James McKeen Cattell Award for Best Dissertation, *New York Academy of Sciences*
- 2012**            Gengerelli Distinguished Dissertation Award for Best Dissertation in Psychology
- 2012**            Top-10 Most Cited Articles Award, *Behavior Research and Therapy*
- 2012**            International Behavioral Neuroscience Society Travel Award
- 2011**            American Psychological Association (APA) Dissertation Research Award
- 2011**            Society for Neuroscience, Graduate Student Travel Award
- 2011**            Gordon Research Conference on the Amygdala Travel Award
- 2011**            Brain Research Institute, UCLA - SfN Travel Award
- 2010**            Dissertation Year Fellowship Award, Psychology Department, UCLA
- 2010**            Charles F. Scott Endowed Graduate Fellowship, UCLA
- 2010**            Best Basic Science Poster Award, Center for Neurobiology of Stress, UCLA
- 2009**            Best Poster Award, Pavlovian Society Annual Meeting, Burlington, Vermont
- 2009**            Research Mentorship Award, Department of Psychology, UCLA
- 2009**            Graduate Summer Research Mentorship Award, Graduate Division, UCLA
- 2009**            National Science Foundation (NSF) EAPSI Graduate Fellowship, co-sponsored  
by the Australian Academy of Science
- 2009**            Extramural Incentive Award, Department of Psychology, UCLA
- 2007**            Research Mentorship Award, Graduate Division, UCLA

**2007** Extramural Incentive Award, Department of Psychology, UCLA  
**2006** Distinguished Achievement Fellowship, Graduate Division, UCLA  
**2006** Eugene Cota-Robles Graduate Fellowship, Graduate Division, UCLA  
**2006** National Deans List

## **PUBLICATIONS**

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Segalin C, Williams J, Karigo T, Hui M, **Zelikowsky M**, Sun JJ, Perona P, Anderson DJ, Kennedy A. The Mouse Action. Recognition System (MARS): a software pipeline for automated analysis of social behaviors in mice. *ELife* (2021).

Torres ERS, Stanojlovic M, **Zelikowsky M**, Bonsberger J, Hean S, Mulligan C, Baldauf L, Fleming S, Masliah E, Chesselet MF, Fanselow MS, Richter F. Alpha-synuclein pathology, microgliosis, and parvalbumin neuron loss in the amygdala associated with enhanced fear in the Thy1-aSyn model of Parkinson's disease. *Neurobiology of Disease* (2021).

Marvar PJ, Andero R, Hurlmann R, Lago TR, **Zelikowsky M**, Dabrowska J. Limbic Neuropeptidergic Modulators of Emotion and Their Therapeutic Potential for Anxiety and Post-traumatic Stress Disorder. *Journal of Neuroscience* (2021).

Love J & **Zelikowsky, M**. Stress Varies Along the Social Density Continuum. *Frontiers in Systems Neuroscience* (2020).

**Zelikowsky M**, Ding K, Anderson DJ. Neuropeptidergic control of an internal brain state produced by prolonged social isolation stress. *Cold Spring Harb Symp Quant Biol* (2019).

**Zelikowsky M**, Hui M, Karigo T, Yang B, Blanco M, Beadle K, Gradinaru V, Deverman BE, Anderson DJ. The neuropeptide Tac2 controls a distributed brain state induced by chronic social isolation stress. *Cell* (2018).

\*Reviewed in *Nature (News and Views)*: Zilkha N, Kimchi T. A molecular signature for social isolation identified in the brain. *Nature* (2018).

\*Highlighted in *Cell (Preview)*: Rodriguez-Romaguera J, Stuber GD. Social Isolation Co-opts Fear and Aggression Circuits. *Cell* (2018).

Remedios R\*, Kennedy A\*, **Zelikowsky M**, Grewe B, Schnitzer M, Anderson DJ. Social behaviour shapes hypothalamic neural ensemble representations of conspecific sex. *Nature* (2017).

Kunwar P, **Zelikowsky M**, Remedios R, Cai H, Yilmaz M, Meister M, Anderson DJ. Ventromedial hypothalamic neurons control a defensive emotion state. *eLife* (2015).

Hong W, Kennedy A, Burgos-Artizzu XP, **Zelikowsky M**, Navonne SG, Perona P, Anderson DJ. Automated Measurement of Mouse Social Behaviors Using Depth Sensing, Video Tracking, and Machine Learning. *Proceedings of the National Academy of Sciences* (2015).

**Zelikowsky M**, Chawla M, Hersman S, Barnes CA, Fanselow MS. Neuronal ensembles in amygdala, hippocampus and prefrontal cortex track differential components of contextual fear. *Journal of Neuroscience* (2014).

Fanselow MS, **Zelikowsky M**, Perusini J, Rodriguez-Barrera V, & Hersman S. Isomorphisms between psychological processes and neural mechanisms: from stimulus elements to genetic markers of activity. *Neurobiology of Learning and Memory* (2014).

**Zelikowsky M**, Bissiere S, Hast TA, Bennett RZ, Abdipranato A, Vissel B & Fanselow MS. Prefrontal microcircuit underlies contextual learning after hippocampal loss. *Proceedings of the National Academy of Sciences* (2013).

**Zelikowsky M**, Hast TA, Bennett RZ, Merjanian M, Nocera, NA, Ponnusamy R, Fanselow MS. Cholinergic blockade frees fear extinction from its contextual dependency. *Biological Psychiatry* (2013).

**Zelikowsky M**, Bissiere S, Fanselow, MS. Contextual fear memories formed in the absence of the dorsal hippocampus decay across time. *Journal of Neuroscience* (2012).

Halladay L, **Zelikowsky M**, Blair HT, Fanselow MS. Reinstatement of extinguished fear by an unextinguished conditional stimulus. *Frontiers in Behavioral Neuroscience* (2012).

**Zelikowsky M**, Pham, D, Fanselow, MS. Temporal factors control hippocampal contribution to fear renewal. *Hippocampus* (2012).

Bissiere S, **Zelikowsky M**, Ponnusamy R, Jacobs NS, Blair HT, Fanselow MS. Electrical synapses control hippocampal contributions to fear learning and memory. *Science* (2011).

Krasne, F, Fanselow, MS, **Zelikowsky M**. Design of a neurally plausible fear learning model. *Frontiers in Behavioral Neuroscience* (2011).

**Zelikowsky M** & Fanselow MS. Conditional analgesia, negative feedback & error correction. *Associative Learning and Conditioning: Human and Animal Applications* (eds Schachtman TR & Reilly SS). **Oxford University Press** (2011).

**Zelikowsky M** & Fanselow MS. Opioid regulation of Pavlovian overshadowing in fear conditioning. *Behavioral Neuroscience* (2010).

Craske MG, Kircanski K, **Zelikowsky M**, Mystkowski J, Chowdhury N, Baker A. Optimizing inhibitory learning during exposure therapy. *Behavioral Research and Therapy* (2008).

### **INVITED TALKS (Selected)**

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**Dec 2021** ACNP, Symposium Speaker, Puerto Rico  
**Nov 2021** Society for Neuroscience, Symposium Speaker (*Virtual*)  
**June 2021** International Behavioral Neuroscience Society, Annual Meeting (*Virtual*)  
**Jan 2021** Global Connectome, Society for Neuroscience (*Virtual*)  
**Dec 2020** Vitae, University of Utah (*Virtual*)  
**Oct 2020** Bioscience Symposium, University of Utah (*Virtual*)  
**Jan 2020** Winter Conference on Brain Research, Big Sky, Montana  
**Jan 2020** Winter Conference on Learning and Memory, Park City, UT  
**Oct 2019** Pavlovian Society Meeting, Vancouver, B.C., Canada

<b>Sep 2019</b>	Dept. of Neurobiology and Anatomy Retreat, University of Utah
<b>Mar 2019</b>	Institute of Advanced Studies, City University of Hong Kong, Hong Kong, China
<b>Nov 2017</b>	World Congress of Science and Factual Producers, San Francisco, CA
<b>Nov 2017</b>	Cedars-Sinai Alumni Association Monthly Lecture Series, Los Angeles
<b>Oct 2017</b>	Pavlovian Society Meeting, Philadelphia, PA * <i>Speaker &amp; Symposium Organizer</i>
<b>Aug 2017</b>	Amygdala GRS, Stonehill College, MA * <i>Conference Co-Chair</i>
<b>May 2017</b>	Canadian Microscopy & Cytometry Symposium, Montreal, Canada
<b>Feb 2017</b>	Winter Conference on Brain Research, Big Sky, Montana
<b>Aug 2015</b>	Gordon Research Conference – Amygdala in Health and Disease, Boston, MA
<b>May 2015</b>	NIMH Seminar Series: New Discoveries in Mental Health Research, NIMH, Bethesda, Maryland
<b>Mar 2015</b>	Neurolunch, Caltech, Pasadena, CA
<b>June 2013</b>	6 <sup>th</sup> annual MCCA-Asia Symposium, Kyoto, Japan
<b>May 2012</b>	International Behavioral Neuroscience Society Meeting, Hawaii
<b>Sep 2011</b>	Pavlovian Society Conference, University of WI, Milwaukee
<b>Apr 2011</b>	Symposium Series Speaker, Korea University, Seoul, Korea
<b>Apr 2011</b>	Neuroscience Seminar, Seoul National University, Seoul, Korea
<b>July 2010</b>	4 <sup>th</sup> International Meeting of the Australian Learning Group, Darwin, AU
<b>June 2010</b>	World Congress of Behavioral and Cognitive Therapies, Boston, MA
<b>Apr 2010</b>	Center for the Neurobiology of Learning and Memory Meeting, UC Irvine
<b>Aug 2009</b>	Australian Learning Group, University of New South Wales, Sydney
<b>July 2009</b>	The Garvan Institute of Medical Research, Sydney, AU

## **SERVICE, DIVERSITY, OUTREACH**

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<b>2021-Present</b>	Associate Editor, <i>Oxford Open Neuroscience (Oxford University Press)</i>
<b>2021-Present</b>	University of Utah, Neuroscience Directorate Member
<b>2021-Present</b>	Rural and Underserved Utah Training Experience (Ruute), Mentor
<b>2020-Present</b>	University of Utah, Neuroscience Program PhD Admissions Committee, *Co-Chair
<b>2020-Present</b>	Editorial Board Member, <i>Frontiers in Behavioral Neuroscience</i>
<b>2020-Present</b>	Undergraduate Research Opportunity (UROP) mentor, University of Utah
<b>2019-Present</b>	Faculty Advisor, Student Career Committee, Biosciences Program, University of Utah
<b>2019-2022</b>	University of Utah, MD-PhD Admissions Committee
<b>2019-Present</b>	Utah Women in Neuroscience (UWiN), <i>Co-Founder and Organizer</i>
<b>2019</b>	Diversity & Women in Science Panel Speaker, Neurobiology & Anatomy Departmental Retreat, U Utah
<b>2017</b>	Gordon Research Seminar on the Amygdala, <i>Co-Chair</i>
<b>2017-2019</b>	Chen Women in Neuroscience Initiative, Chen Neuroscience Institute, Caltech.
<b>2016, 2017</b>	HHMI EXROP program, <i>Mentor</i>
<b>2016</b>	LOREAL for Women in Science Inner City Elementary School Outreach, NJ
<b>2014-2015</b>	Amygdala SfN Social, <i>Co-Chair</i>
<b>2014</b>	Panel Speaker at Underrepresented Graduate Students in Psychology Alumni Conference, UCLA, Los Angeles, CA
<b>2013-2017</b>	Executive Board Member, Pavlovian Society, <i>Elected Official</i>
<b>2013</b>	Guest Editor, <i>International Behavioral Neuroscience Society Newsletter</i>
<b>2013</b>	Organizer, Echo Horizon Elementary School and Echo Center for Hearing Impaired Children, Science Outreach, Caltech

Moriel Zelikowsky, Ph.D.  
Curriculum Vitae

**2012-2014** Women Mentoring Women, Caltech, *Mentor*  
**2011-Present** Women in Learning, \**Founder* and organizer ([www.womeninlearning.com](http://www.womeninlearning.com))  
**2007** Cota-Robles Panel Speaker, Broadening the Participation of Underrepresented Minorities, UCLA