# Alea Corin Skwara, M.A.

#### Ph.D. Candidate

Department of Psychology University of California, Davis

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### **EDUCATION**

2021 (expected) **Ph.D. in Psychology**, University of California, Davis

Concentration in Cognitive Neuroscience

Minor in Quantitative Psychology

Advisor: Dr. Clifford Saron

Dissertation topic: Implications for training compassion: Longitudinal EEG measures during 3-

month meditation retreats

Advanced to Candidacy 2018

2017 **M.A. in Psychology**, University of California, Davis

2009 **B.A. in Theatre**, Davidson College

#### RESEARCH TRAINING

2014-Present Graduate Student Researcher

University of California, Davis

Saron Lab, Center for Mind and Brain, Clifford Saron PI

2012-2014 *Lab Manager* 

Harvard University

Affective Neuroscience and Development Laboratory, Leah Somerville PI

2011-2012 Research Assistant

New York University

Contemplative Science Laboratory, Zoran Josipovic PI

Social Perception and Evaluation Laboratory, Jay Van Bavel PI

Social Neuroscience Laboratory, David Amodio PI

2008 Undergraduate Research Assistant

University of North Carolina – Chapel Hill Peer Relations Laboratory, Mitch Prinstein PI

## RESEARCH SUPPORT

2020 University of California, Davis Academic Senate New Research Initiatives and Interdisciplinary

Research Grant (\$25,000)

Building bridges: Narrowing the legal-scientific divide in immigration forensic assessments

Patrick Marius Koga, PI; Raquel Aldana, PI. Role: Co-I

2019	Fetzer Institute Research Partnership Support Grant (\$218,000)  Pathways for training compassion: Motivational salience of suffering and interpersonal resonance in daily life Clifford Saron, PI. Role: Co-I
2018	Compassion Institute Research Program Grant (\$108,000)  Pathways for training compassion: Motivational salience of suffering and interpersonal resonance in daily life Clifford D. Saron, PI. Role: Co-I
2013	Harvard University Mind/Brain/Behavior Graduate Student Research Award (\$10,000)  Effects of mindfulness meditation on moral cognition  Co-Awardees: Julia Lee; Oliver Hauser; Alek Chakroff; Gordon Kraft-Todd; and Adrian Ward Francesca Gino, Faculty Sponsor. Role: Co-I

#### **PUBLICATIONS**

### Articles in Peer Reviewed Journals

- Zanesco AP, **Skwara AC**, King BG, Powers CE, Wineberg KR, & Saron CD (2021). Meditation training modulates brain electric microstates and felt states of awareness. *Human Brain Mapping*.
- Shields GS, **Skwara AC**, King BG, Zanesco AP, & Saron CD (2020). Deconstructing the effects of concentration meditation practice on interference control: The roles of controlled attention and inflammatory activity. *Brain, Behavior, and Immunity, 89*, 256-267. https://doi.org/10.1016/j.bbi.2020.06.034
- Zanesco AP, King BG, **Skwara AC**, & Saron CD (2020). Within and between-person correlates of the temporal dynamics of resting EEG microstates. *NeuroImage*, 211, 116631. https://doi.org/10.1016/j.neuroimage.2020.116631
- Somerville LH, Haddara N, Sasse SF, **Skwara AC**, Moran JM, & Figner B (2018). Dissecting "peer presence" and "decisions" to deepen understanding of peer influence on adolescent risky choice. *Child Development*, 90(6), 2086-2103. https://doi.org/10.1111/cdev.13081
- Somerville LH, van den Bulk BG, & **Skwara AC** (2014). Response to: The triadic model perspective for the study of adolescent motivated behavior. *Brain and Cognition*, 89, 112-113. https://doi.org/10.1016/j.bandc.2014.01.003

### **Book Chapters**

**Skwara AC**, King BG & Saron CD (2017). Studies of training compassion: What have we learned, what remains unknown? In E.M. Seppala, E. Simon-Thomas, S.L. Brown, M.C. Worline, C.D. Cameron, & J.R. Doty (Eds.), *The Oxford Handbook of Compassion Science* (pp. 219-236). New York: Oxford University Press.

### **Submitted Manuscripts**

**Skwara AC**, King BG, Zanesco AP, & Saron CD (*under review*). Changing baselines: Longitudinal reductions in EEG oscillatory beta power characterize resting brain activity in meditators.

## Manuscripts in Preparation for Peer Review

**Skwara AC**, Zanesco AP, King BG, & Saron CD (in prep). Widening the circle of care: Microstate correlates of compassion training.

- Aldana RE, Koga PM, O'Donnell TW, Perris, C., & **Skwara AC** (*in prep*). Trauma as exclusion, trauma as inclusion: Examining the role of trauma in the US immigration system.
- King BG, Zanesco AP, **Skwara AC**, & Saron CD (*in prep*). Cultivating concern for others' well-being: Meditation training and the motivation to engage with human suffering.

#### **CONFERENCE PRESENTATIONS**

#### **Invited Talks**

- **Skwara AC** (2021, April). "Compassion is a skill that can be learned." Global Learning Conference, UC Davis, Davis CA.
- Aldana RE, Howard SP, Koga PM, O'Donnell TW, Perris C, **Skwara AC**, & Velazquez C (2021, April). "Bridging the Legal Scientific Divide in Immigration Forensic Assessments." Global Migration Center Faculty Seminar, UC Davis, Davis, CA.
- **Skwara AC** (2019, October). "Trauma and memory in the brain: Relevance neuroscience of neuroscience research in the case of refugees and asylum seekers". Second UC Davis Refugee Forum, UC Davis Medical Center, Sacramento, CA.
- **Skwara AC** (2018, May). "From the self to the social: Contemplative practice as a path to compassion." Invited talk presented at The Historical Trauma and Transformation Studies Research Festival, Stellenbosch University, Stellenbosch, South Africa.

## Talks and Papers

- Aldana RE, Koga PM, O'Donnell TW, & **Skwara AC** (2021, October). "Trauma as exclusion: Trauma as inclusion." Panel presentation at the Latina and Latino Critical Legal Theory Biennial Conference, Online.
- **Skwara AC**, Shields GS, King BG, Zanesco AP, & Saron, CD (2020, November). "Calm abiding meditation, inflammation, and attention: A computational modeling approach to understanding the effects of meditation retreat on attentional subprocesses." Talk presented at the Contemplative Research Conference, Online.
- **Skwara AC** (2016, November). "Resting theta/beta ratio predicts emotional responses to suffering in the context of an intensive meditation retreat." Talk presented at the International Symposium for Contemplative Studies, San Diego, CA.
- Somerville LH, Kastman, EK, Sasse SF, & **Skwara AC** (2014, May). "Sustained affective processes: Neural mechanisms and developmental trajectories." In *Biological Psychiatry*, 75, 9, 163S-163S, New York, NY.

### **Poster Presentations**

#### First Author Presentations

- **Skwara AC,** King BG, Zanesco AP, Powers CE, Wineberg KR, & Saron CD (2018, November). "Retreat-related reductions in EEG beta band power observed during mindfulness of breathing practice are maintained at rest." International Symposium for Contemplative Research, Phoenix, AZ.
- **Skwara AC**, King BG, Zanesco AP, Powers CD, Wineberg KR, Saggar M, Aichele SR, Bridwell DA, Jacobs TL, MacLean KA, Sahdra BK, Ferrer E, Wallace A, & Saron CD (2015, October). "Resting theta/beta ratios

- increase reliably over the course of intensive three month meditation retreats." Presentation at the Society for Neuroscience annual meeting, Chicago, IL.
- **Skwara AC**, King BG, Zanesco AP, Powers CD, Wineberg KR, Saggar M, Aichele SR, Bridwell DA, Jacobs TL, MacLean KA, Sahdra BK, Ferrer E, Wallace A, & Saron CD (2015, August). "Resting theta/beta ratios increase reliably over the course of intensive three month meditation retreats." Presentation at the Mind and Life Europe Summer Research Institute, Chiemsee, Germany.
- **Skwara AC**, Kastman EK, Sasse SF, & Somerville LH. (2014, April). "Diffuse shifts in whole-brain functional connectivity during temporal uncertainty." Presentation at the Cognitive Neuroscience Society annual meeting, Boston, MA.

### Other Presentations

- Zanesco AP, **Skwara AC**, King BG, & Saron CD (2019, June). "Meditation training modulates the strength and temporal dynamics of brain electric microstates." Presentation at the Mind and Life Summer Research Institute, Garrison, NY.
- Rodman AM, Insel C, **Skwara AC**, Kastman EK, Sasse SF, & Somerville, LH (2015, May). "Reduced cognitive interference by temporal uncertainty in adolescence." Presentation at the Association for Psychological Science Annual Convention, New York, NY.
- Shermohammed M, **Skwara AC**, Ezie C, Rabinowitz AG, & Somerville LH (2015, May). "Attenuation of physiological arousal to uncertainty during the adolescent transition." Presentation at the Association for Psychological Science Annual Convention, New York, NY.
- Insel C, Rodman AM, **Skwara AC**, Kastman EK, Sasse SF, & Somerville LH (2014, September). "Adolescents show unique behavioral and neural responses to unpredictable positive cues." Presentation at Flux Developmental Neuroscience Society, Hollywood, CA.
- Rodman AM, Insel C, **Skwara AC**, Kastman EK, Sasse SF, & Somerville LH (2014, September). "Temporal uncertainty differentially impacts concurrent task performance across development." Presentation at Flux Developmental Neuroscience Society, Hollywood, CA.
- Somerville LH, Kastman EK, Sasse SF, & **Skwara AC**. (2014, May). "Sustained affective processes: Neural mechanisms and developmental trajectories". Talk at the Society for Biological Psychiatry, New York, NY.
- Insel C, **Skwara AC**, Sasse SF, Kastman EK, & Somerville LH. (2014, April). "Heightened influence of unpredictability on emotional interference and striatal response to positive stimuli in adolescents." Presentation at the Social and Affective Neuroscience Society, New York, NY.

### TEACHING AND MENTORSHIP

### **Course Instruction**

## Teaching practicum in Cognitive Neuroscience – Spring, 2019

Responsible for 20% of course instruction, including course development, lecture preparation and presentation, exam development, and grading. Successful completion will certify me to sole instruct Cognitive Neuroscience in the UC Davis Department of Psychology.

## **Laboratory Instruction**

### Statistical Analysis of Psychological Data - Fall 2016; Winter 2018

Prepare lectures and provide instruction on implementing basic statistical analyses in R

## Applied Psychometrics – Winter 2017

Provide instruction on conducting factor analysis in R package lavaan

## **Teaching Assistantships**

Applied Psychometrics – Winter 2017

Cognitive Neuroscience – Spring 2017; Fall 2017; Fall 2018; Spring 2019

Cognitive Psychology – Winter 2019

Introduction to Psychology – Summer 2017

Language and Cognition – Spring 2018

Personality Psychology – Summer 2017

Statistical Analysis of Psychological Data – Fall 2016; Winter 2018

#### **Guest Lectures**

"Consciousness, Mindfulness, and Meditation" for Introduction to Psychology – Summer 2017

### Mentorship

I have mentored groups of undergraduates at both Harvard University and University of California Davis. This includes running group laboratory meetings and journal clubs, and one-on-one instruction and support.

Harvard UC Davis

Riddhi Barbhaiya (2019-Present) ThanhThanh Vo (2019-Present) Kasia Shebloski (2018-2020) Rani Shah (2018-2020) Kelsey Davinson (2018-2019)

Katherine Stein (2018-2019) Alison Kwok (2015-2016)

Chiemeka Ezie (2013-2014) Kristen Osborne (2013-2014) Zuzanna Wojcieszak (2012-2014) Ariel Rabinowitz (2012-2013)

#### MEDIA AND PUBLIC OUTREACH

2021	UC Davis Grad Slam – Describe your dissertation in 3 minutes or less
2021	"On Consciousness with Bernard Baars" Podcast – Recurring guest and student interviewer
2020	Public comment on Proposed Rule RIN 1125 AA94: Procedure for Asylum and Withholding of
	Removal; Credible Fear and Reasonable Fear Review
2019	"Angry: All about feelings, pt. 3," Brains On! Podcast, American Public Media.
2017	"Grads, grilled," UC Davis Institute for Social Sciences, Davis CA
	https://socialscience.ucdavis.edu/iss-journal/grads-grilled/26-alea-skwara
2014-2015	"The adolescent brain," Brain Awareness Week, Cambridge, MA
2014-2015	"The adolescent brain," Harvard Affective Neuroscience and Development Laboratory youth
	educational workshops, Cambridge, MA
2013	"The adolescent brain," PBS Nova Science Café, Cambridge MA
2012	"The feeling brain," MedNeuro "VisualCME" series, Geld, N (producer), New York, NY
2011-2012	Early stage development and communications, MedNeuro, New York, NY

#### LEADERSHIP AND SERVICE

2020-Present	Mentor-Mentee Program in Humanities, Arts, Cultural Studies, and Social Sciences, Mentor
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Review Editor, "Blockchain for Good," specialty section of Frontiers in Blockchain 2018-Present

2018-2020 N Street Cohousing Mediation Committee, Co-chair

2018 2017 2016-2017 2015-2016 2012 2011-2013	UC Davis Psychology Graduate Orientation, Invited TA Panelist International Rescue Committee, Sacramento, Refugee Resettlement Volunteer UC Davis Psychology Student Association, Treasurer UC Davis Psychology Student Association, Graduate Student Representative Social Brain Sciences Symposium (New England Area Meeting), Assistant Organizer Society for Mind Brain Science, Communications and Media Strategist		
TRAININGS AND WORKSHOPS			
2019	Compassion Cultivation Training, Online, Student		
2019	Cortana Friends Todi Week, Todi Italy, Research Fellow		
2018	Mind and Life Europe Summer Research Institute, Chiemsee Germany, New Investigator		
2018	Varela Symposium, Santa Fe NM, Research Fellow		
2016	Mind and Life Summer Research Institute, Garrison NY New Investigator		
2015	Mind and Life Europe Summer Research Institute, Chiemsee Germany, New Investigator		
2015	NIMH/UC Davis ERP Boot Camp, Davis CA, Trainee		
2013	Stanford Center for Compassion and Altruism Research and Education Summer Research		
	Institute, Telluride CO, Research Fellow		
2013	Leadership for New Emergence, Boston MA, Trainee		
2012	Mind and Life Summer Research Institute, Garrison NY, New Investigator		
SCHOLARSHIPS, FELLOWSHIPS, AND AWARDS			
2021	UC Davis Grad Slam Dissertation Competition, 3 <sup>rd</sup> Place		
2019	Todi Week Student Travel Scholarship, Cortana Friends (\$2,100)		
2019	UC Davis Psychology Professional Development Award (\$400)		
2018	International Symposium for Contemplative Research Student Scholarship (\$300)		
2016	UC Davis Psychology Department Summer Research Fellowship (\$5,000)		
2016	International Symposium for Contemplative Studies Student Scholarship (\$315)		
2006-2008	Davidson College Harper Scholarship for Vocal Performance, Awardee		

### **PROFESSIONAL SKILLS**

Fluent in English, conversational in French, basic Spanish; Proficient in Matlab, Python, and R; Statistical analysis including multilevel modeling, structural equation modeling, and longitudinal data analysis; EEG; fMRI; Psychophysiology; Psychological instrument development; Introductory meditation instruction; University level course instruction; Grant writing; Project and team management; Public speaking