# L. Forest Gruss Rosenfeld

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#### ACADEMIC POSITIONS

2022 – present	Assistant Professor of Psychology Department of Psychology University of Tampa, Tampa, Florida
2021 – 2022	Visiting Professor of Psychology Eckerd College, St. Petersburg, Florida
2019 – 2020	Postdoctoral Scholar in Psycho-Oncology University of South Florida, College of Nursing, Tampa, Florida
2017 – 2019	Postdoctoral Scholar in Psychology Vanderbilt University, Nashville, Tennessee
2010 – 2012	<b>Postbaccalaureate Researcher</b> University of Florida, Center for the Study of Emotion and Attention (CSEA) Gainesville, Florida

#### **EDUCATION**

2017 University of Florida, Gainesville, Florida

Ph.D. in Psychology, Concentration: Behavioral and Cognitive Neuroscience

Advisor: Dr. Andreas Keil, at the Center for the Study of Emotion and Attention (CSEA) Dissertation: 'Deconstructing expectancy in human aversive learning: evidence from neurophysiological and behavioural dynamics.'

2014 University of Florida, Gainesville, Florida

**M.S.** (2014) and **B.S.** in Psychology (2010)

Master's thesis: 'Fear memories in visual cortex: Inter-individual differences related to the COMT val158met polymorphism and reflex physiology.'

# PEER-REVIEWED PUBLICATIONS

- [17] **Rosenfeld**, L. F. G. (in prep for special issue). Attention control mechanisms underlying mindfulness meditation: a review of EEG methodological investigations.
- [16] **Rosenfeld**, L. F. G., & Keil (in prep). Rapid threat anticipation as evidenced by simultaneous ssVEP responses and alpha suppression during Pavlovian conditioning.
- [15] **Gruss, L. F.**, Lengacher, C. A., Reich, R. R., Moscoso, M. S., Gordillo-Casero, L., Joshi, A., Hamilton, L., Chauca, K. (under review). Mindfulness-based stress reduction for breast cancer survivors MBSR(BC) improves self-reported optimism.
- [14] Lengacher, C. A., Kip, K. E., Reich, R. R., Rodriguez, C., Meng, H., Donovan, K., **Gruss, L. F.**, Nguyen, A. T., Moscoso, M. S., Goodman, M., Chauca, K., Joshi, A., Gordillo-Casero, L., Hamilton, L., Park, J. Y. (under review). Mindfulness-based stress reduction trial for cognitive impairment in breast cancer survivors: the design and an analysis plan of a 3-armed randomized controlled trial.
- [13] **Gruss, L. F.** (re-submission). Interactions of transient and oscillatory evoked potentials during visual search: revisiting the classical superposition theory with steady state visual evoked

potentials.

- [12] Rosenfeld, J. A., Kamalapurkar, R., **Gruss, L. F.**, & Johnson, T. T. (2021). On the occupation kernels, Liouville operators, and dynamic mode decomposition. *In 2021 American Control Conference (ACC)*, IEEE.
- [11] Lengacher, C. A., **Gruss, L. F.**, Kip, K. E., Reich, R. R., Chauca, K. G., Moscoso, M., Joshi, A., Tinsley, S., Shani, P. B., Cousin, L., Khan, C. P., Goodman, M., & Park, J. Y. (2021). Mindfulness-based stress reduction for breast cancer survivors (MBSR(BC)): evaluating mediators of psychological and physical outcomes in a large randomized controlled trial. *Journal of Behavioral Medicine*, 44(5), 591-604.
- [10] Rosenfeld, J. A., Kamalapurkar, R., **Gruss, L. F.**, & Johnson, T. T. (2021). Dynamic mode decomposition for continuous time systems with the Liouville operator. *Journal of Nonlinear Science*, 32(1), 1-30.
- [9] **Gruss, L. F.**, & Keil, A. (2019). Sympathetic responding to unconditioned stimuli predicts subsequent threat expectancy, orienting, and visuocortical bias in human aversive Pavlovian conditioning. *Biological Psychology*, 140, 64-74.
- [8] Campagnoli, R. R., Wieser, M. J., **Gruss, L. F.**, Boylan, M. R., McTeague, L. M., & Keil, A. (2019). How the visual brain detects emotional changes in facial expressions: Evidence from driven and intrinsic brain oscillations. *Cortex*, 111, 35-50.
- [7] Thigpen, N. N., **Gruss, L. F.**, Garcia, S., Herring, D., & Keil, A. (2018). What does the dot-probe task measure? A reverse correlation analysis of electrocortical activity. *Psychophysiology*, 55(6), e13058.
- [6] Blessing, A., Studer, A., Gross, A., **Gruss, L. F.**, Schneider, R., & Dammann, G. (2017). Disclosure of diagnosis in early recognition of psychosis. *Journal of Nervous & Mental Disease*, 205(10), 757-761.
- [5] Petro, N. M., **Gruss, L. F.**, Yin, S., Huang, H., Miskovic, V., Ding, M., & Keil, A. (2017). Multimodal imaging evidence for a fronto-cortical modulation of visual cortex during the selective processing of conditioned threat. *Journal of Cognitive Neuroscience*, 29(6), 953-967.
- [4] **Gruss, L. F.,** Langaee, T., & Keil, A. (2016). The role of the COMT val158met polymorphism in mediating aversive learning in visual cortex. *Neuroimage*, 125, 633-642.
- [3] McTeague, L. M., **Gruss, L. F.**, & Keil, A. (2015). Aversive learning shapes neuronal orientation tuning in human visual cortex. *Nature Communications*, 6, 7823.
- [2] **Gruss, L. F.**, Wieser, M. J., Schweinberger, S. R., & Keil, A. (2012). Face-evoked steady-state visual potentials: effects of presentation rate and face inversion. *Frontiers in Human Neuroscience*, *6*, 316.
- [1] Blessing, A., Keil, A., **Gruss, L. F.**, Zollig, J., Dammann, G., & Martin, M. (2012). Affective learning and psychophysiological reactivity in dementia patients. *International Journal of Alzheimer's Disease* vol. 2012.

## RESEARCH SUPPORT

University of Tampa **URI** grant (Undergraduate Research and Inquiry)
(awarded April 2024) – Assessing cancer-related threat anticipation in young breast cancer survivors: a psychophysiological pilot study of fear of cancer recurrence; funds requested for participant compensation, to acquire EMG system to record fear-potentiated startle response and for student travel.

Total funds awarded: \$6,950

University of Tampa RISE grant (Research Innovation and Scholarly Excellence) (awarded April 2024) – Heart rate changes during emotional learning and mindful breathing; funds requested to acquire an EKG system to record heart rate.

Total funds awarded: \$9,997

NSF MRI (Major Research Instrumentation; submitted November 15<sup>th</sup> 2023, pending 4/5/24) 2023 (NSF 23-519) – Equipment: MRI: Track 1 Acquisition of an electroencephalography (EEG) system to investigate cognitive control processes before and after mindfulness meditation

practice

Role: Principal Investigator (Rosenfeld)

Total funds requested: \$90,908

NIH/NCI K99/R00 (submitted June 12<sup>th</sup>, 2020; not awarded October, 2020) 2020

(PA-20-188) – Neurobiological Mechanisms of Fear Underlying Fear of Recurrence and

Cancer-Related Post-Traumatic Stress among Young Breast Cancer Survivors

Role: Principal Investigator (Rosenfeld) Total funds requested: \$1,016,253

2019 NIH/NIMH NRSA T32 (turned down due to relocation)

Training Grant at Vanderbilt University – Clinical neuroscience methodology to investigate

developmental psychopathology: threat learning across the anxiety spectrum

2017 NIH/NEI T32 (not awarded)

> Training Grant at the VVRC (Vanderbilt Vision Research Center) - Cortical interactions of visual cognitive processing underlying expectancy, error evaluation and prediction in human

and non-human primates

2016 American Psychological Foundation's (APF) 2016 F. J. McGuigan Dissertation Award – supporting dissertation research that advances the unified brain-behavior conceptualization of

the human mind through empirical and/or theoretical research; \$2,000 for genotyping costs

**E. Porter Horne Memorial Scholarship** – for Best graduate work in sensory processes, perception, and/or cognitive psychology - \$1,000

2015 - 2016Travel awards (\$500) via the Department of Psychology for annual conference meetings

2012 - 2016Four-year Fellowship through the Graduate School Fellowship (GSF) Awards program -

\$5,000 per academic year

#### TEACHING EXPERIENCE

## University of Tampa

2024/2025	Fall/Spring	Sensation and Perception	(PSY 318, Assistant Professor)
2022 - present	Fall/Spring	Fundamentals of Biopsychology and Learning	(PSY 220, Assistant Professor)
_		Statistics and Experimental Methods I	(PSY 211, Assistant Professor)
		Behavioral Neuroscience	(PSY 420, Assistant Professor)

#### **Eckerd College**

2021/2022 Fall/Spring Introduction to Psychology (PS 101S, Visiting Professor)

Biopsychology (PS 309, Visiting Professor)

Winter Term PTSD and the Brain (WT 5S, Special Topics course, Visiting Professor)

# University of Florida

2017	Spring	Psychobiology of Abnormal Behavior	(PSB 4240, Teaching Assistant)
2016	Fall	Physiological Psychology	(PSB 3002, Instructor of Record)
	Spring	Psychobiology of Abnormal Behavior	(PSB 4240, Teaching Assistant)
2015	Fall	Laboratory in Cognitive Neuroscience	(PSB 4343C, Teaching Assistant)
	Spring	Psychobiology of Abnormal Behavior	(PSB 4240, Teaching Assistant)
2014	Fall	Sensory Processes Laboratory	(EXP 4174C, Teaching Assistant)

## **ACADEMIC SERVICES**

2023 – 2026	Public Relations Committee Member, SPR (Society for Psychophysiological Research) Advocacy and Outreach subcommittee member
2024 – present 2020	Research Committee Member, APOS (American Psychosocial Oncology Society) Associate Member
2012 – present	<b>Reviewer</b> for academic journals: Biological Psychology, NeuroImage, Neuropsychologia, Psychoneuroendocrinology, Psychophysiology, Social Cognitive and Affective Neuroscience, Human Brain Mapping, Journal of Cognitive Neuroscience, Plos One, International Journal of Behavioral Medicine
2016	<b>K-12 Outreach Volunteer</b> as part of the Brain Awareness Week hosted by the local North Central Florida Chapter of Society of Neuroscience (SfN) in Gainesville, FL, March 14 <sup>th</sup> -19 <sup>th</sup>
2014 – 2016	<b>Behavioral and Cognitive Neuroscience Representative</b> of the Psychology Graduate Student Organization (PGSO) at the University of Florida

## CONFERENCES / TALKS / WORKSHOPS

2024 Moffitt Career Talks at the Moffitt Cancer Center, Tampa, FL

Organized by the Office of Postdoctoral Affairs

Invited talk on April 19th, 2024

Guest speaker on transitioning from a postdoctoral position to a permanent position in academia

The Science of Mindfulness Webinar by Biopac systems, inc.; February 29<sup>th</sup>, 2024

Psychology Research Exchange Forum at the University of Tampa, research seminar

Talk given on Feb 2<sup>nd</sup>, 2024:

'Attention control during mindful breathing – an EEG study'

2023 Mindfulness Mechanisms & Methods Meeting (M4) Conference

Washington University in St. Louis, St. Louis, MO, Oct 5<sup>th</sup> – 6<sup>th</sup>, 2023

Society for Psychophysiological Research (SPR), 63<sup>rd</sup> Annual Meeting

New Orleans, LA, September 27<sup>th</sup> - October 1<sup>st</sup>, 2023

2022 **NSF Virtual Grants Conference** 

## PTSD and the Brain, Special Topics seminar

Eckerd College Winter Term, invited guest lecturers during January 24-28th, 2022

- Dr. Sara Hofmann, Clinical Psychologist (PTSD), Eckerd College
- Dr. Lisa McTeague, Clinical Psychologist (PTSD) and Researcher, MUSC
- Southeastern Guide Dogs, Teaching Demo with Service Dogs trained for Veterans with PTSD

# Society for Psychophysiological Research (SPR), 2020 Virtual Annual Meeting Virtual Meeting, October 5-9<sup>th</sup>, 2020

<u>Poster</u> (1<sup>st</sup> author, accepted): 'Interactions of transient and oscillatory evoked potentials during visual search: revisiting the classical superposition theory with steady state visual evoked potentials (ssVEPs)'

# Society for Neuroscience (SfN) Webinar, July 29th, 2020

COVID-19, the Brain, and Mental Health: Weighing the Direct and Indirect Effects (attended)

**New Knowledge & Innovation Conference, 2020 SMHCS** (Sarasota Memorial Health Care System), hosted by Sarasota Memorial Hospital – Converted to virtual due to COVID-19 Pandemic; Sarasota, FL, May 1<sup>st</sup>, 2020

<u>Poster</u> (3<sup>rd</sup> author): 'A pilot study evaluating the effect of mindfulness-based stress reduction on cardiovascular functioning among breast cancer survivors (BCS)'

# American Psychosocial Oncology Society (APOS), 17<sup>th</sup> Annual Meeting

Portland, OR, March 11-13<sup>th</sup>, 2020 – Converted to virtual due to COVID-19 Pandemic

<u>Poster</u> (3<sup>rd</sup> author): 'A pilot study evaluating the effect of mindfulness-based stress reduction on cardiovascular functioning among breast cancer survivors (BCS)'

**JMP Pro Workshop**, hosted by the USF Graduate and Professional Student Council (attended) Tampa, FL, January 31<sup>st</sup>, 2020

# Society for Psychophysiological Research (SPR), 59th Annual Meeting

Washington, DC, September 25-29<sup>th</sup>, 2019

2019

<u>Invited Symposium</u> – Faces of the Future Flash Talk: 'Neuronal orientation tuning under changing threat contingencies: Oscillatory specificity of safety learning during fear generalization'

## **USF Postdoctoral Research Symposium**

University of South Florida, Tampa, September 20th, 2019

Research Lightning Talk: 'To fear or not to fear: safety learning in human visual cortex'

# Vision Sciences Society (VSS), 18th Annual Meeting

St. Petersburg, FL, May 18-23<sup>rd</sup>, 2018

<u>Poster</u> (5th author): 'Oscillatory dynamics in widespread cortical networks during feature-based attention: coupling across and between frequencies.'

# 2017 **Society for Psychophysiological Research (SPR)**, 57<sup>th</sup> Annual Meeting

Minneapolis, MN, September 21-25th, 2017

<u>Poster</u> (2<sup>nd</sup> author): 'Tagging the neurophysiological mechanisms of competing spatially overlapping visual stimuli using simultaneously recorded electrocortical and hemodynamic signals'

<u>Poster</u> (2<sup>nd</sup> author): 'The neural signature of viewing dynamic emotional faces: complementary contributions of evoked versus induced oscillatory brain activity'

<u>Poster</u> (5<sup>th</sup> author): *'Selective attention to targets is accompanied by cortical synchrony in the theta-band and increases in gamma power in frontal and temporal regions'* 

# 2016 Society for Neuroscience (SfN), 46<sup>th</sup> Annual Meeting

San Diego, CA, November 12-16<sup>th</sup>, 2016

<u>Dynamic Poster</u> (1<sup>st</sup> author): 'Deconstructing expectancy in human aversive learning: evidence from visuocortical, physiological and behavioural dynamics'

# Society for Psychophysiological Research (SPR), 55<sup>th</sup> Annual Meeting

Seattle, WA, September 30<sup>th</sup> – October 4<sup>th</sup>, 2015

<u>Poster</u> (1<sup>st</sup> author): 'Visuocortical changes during discriminant aversive conditioning: effects of inter-individual differences in contingency awareness and autonomic engagement'

# Vision Sciences Society (VSS), 15th Annual Meeting

St. Petersburg, FL, May 15-20th, 2015

<u>Poster</u> (1<sup>st</sup> author): 'Visuocortical changes during discriminant aversive conditioning: effects of inter-individual differences in contingency awareness and autonomic engagement'

## 2014 Florida Genetics 2014 Symposium

University of Florida Cancer & Genetics Research Complex, Gainesville, FL, October 29-30<sup>th</sup>

<u>Poster</u> (1<sup>st</sup> author): 'The role of the COMT vall 58met polymorphism in mediating aversive learning in visual cortex and concurrent heart rate responding'

# Society for Psychophysiological Research (SPR), 54th Annual Meeting

Atlanta, GA, September 10-14th, 2014

<u>Poster</u> (1<sup>st</sup> author): 'The role of the COMT val158met polymorphism in mediating aversive learning in visual cortex and concurrent heart rate responding'

# Vision Sciences Society (VSS), 14th Annual Meeting

St. Petersburg, FL, May 16-21st, 2014

<u>Poster</u> (1<sup>st</sup> author): 'Fear memories in visual cortex: inter-individual differences related to reflex physiology and genetic variants'

<u>Poster</u> (2<sup>nd</sup> author): 'Characterizing the in-vivo neurophysiology of visual aversive conditioning using concurrent EEG-fMRI recordings'

# 2013 Society for Psychophysiological Research (SPR), 53<sup>rd</sup> Annual Meeting

Florence, Italy, October 2-6<sup>th</sup>, 2013

<u>Poster</u> (1<sup>st</sup> author): 'Fear memories in visual cortex: inter-individual differences related to reflex physiology and genetic variants'

# Society for Neuroscience (SfN), 3rd Annual North Central Florida Chapter

Gainesville, FL, March 14th, 2013

<u>Poster</u> (1<sup>st</sup> author): 'Fear memories in visual cortex: inter-individual differences and reflex physiology'

## 2012 Society for Psychophysiological Research (SPR), 52<sup>nd</sup> Annual Meeting

New Orleans, LA, September 19-23<sup>rd</sup>, 2012

<u>Poster</u> (1<sup>st</sup> author): 'Oscillatory evoked dynamics in the face processing network: effects of presentation rate and face inversion'

<u>Poster</u> (2<sup>nd</sup> author): 'Visuocortical mechanisms of threat detection during fear learning: maximizing generalization or discrimination?'

## 2011 3<sup>rd</sup> International Workshop on Advances in Electrocorticography (ECoG), hosted by

Office of Continuing Medical Education of Albany Medical College

Washington, DC, November 10-11th, 2011

#### ACADEMIC TRAINING

2021 – present **FERPA** (EC)

2011 – present HIPAA; IRB01, IRB02; RCR (Responsible Conduct of Research; (UF, VU, USF, UT)

2019 – present GCP (Good Clinical Practice); COI Certification (USF)

2017 AALAS training for **IACUC** with non-human primates; USDA Ethics and Simian Herpes-B

## **ACADEMIC MEMBERSHIPS**

2012 – present	Society for Psychophysiological Research (SPR)
2020, present	American Psychosocial Oncology Society (APOS)
2014 - 2016	Vision Sciences Society (VSS)
2016 - 2020	Society for Neuroscience (SfN)
2016 - 2017	Cognitive Neuroscience Society (CNS)
2013 - 2014	Society for Neuroscience (SfN), North Central Florida Chapter
2012 - 2013	Association for Psychological Science (APS)

## **RELATED INFORMATION**

- U.S. citizen, Austrian citizen
- Full name: Laura Forest Gruss Rosenfeld
- Philips 3T Human MR Operator
- Fluent in both English and German; conversational ability in French
- Experience with EGI, Biopac and Brain Products EEG systems
- Programming experience in MATLAB