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POSITIONS HELD AND EDUCATION

Rutgers University, NJ
> Assistant Research Professor, Cardiac Neuroscience Laboratory, June 2021-Present
> Guest Lecturer in Research methods, March-May 2021, March 2022-May 2022
> Assistant Field Editor for Journal of Studies on Alcohol and Drugs, 2021-Present
> Post-doctoral Fellow, September 2018-2021

University of Sussex, UK
> Ph.D. in Cognitive psychology, 2015-2018
> Leading 10-week Matlab and Psychtoolbox coding module for grad. students, 2017-2018
> Teaching Assistant in Social Research Methods and Cognitive Psychology 2015-2018

Jagiellonian University, Krakow, Poland
> Research Internship, Institute of Neurobiology, 2014-2015

Universidad de Valencia, Spain
> Research Assistant on addiction and cognitive psychology, Faculty of Psychology, 2011-2015
> BSc. in Psychology 2010-2015
> Social Work internship in addiction recovery facility, 2010
> BA Degree. in Social Work, 2007-2010

RESEARCH INTERESTS

Addiction (alcohol, cognitive processes, psychopharmacology)
Interoception (resonance breathing, emotion, cognition, psychophysiology, bodily signals and addiction)
Implicit processing (reward and aversive learning, consciousness, Bayesian statistics)

TEACHING EXPERIENCE

Courses Taught
> Research Methods, Honors seminar in exercise science, Rutgers University – 2021, 2022
> Matlab and Psychtoolbox for Grad Students, Module development, University of Sussex - 2018
> Social Research Methods, M.Sc. and B.Sc., University of Sussex – 2016-2018
> Cognitive psychology, B.Sc., University of Sussex – 2016-2018
> Introduction to Statistics I & II, B.Sc. University of Sussex – 2016-2018

INTERNATIONAL COLLABORATIONS

Laureate Institute of Brain Research – Interoception and mental health: Collaborating with Sahib Khalsa on investigating the cardiovascular mechanisms of interoception in mental health

Universitee Catholique de Louvain – Binge drinkers: Collaborating with Pierre Maurage on the interoceptive processes underlying emotional deficits in binge drinkers.

University of Sussex – Implicit learning: Leading initiatives with Zoltan Dienes, Theodora Duka and Ryan Scott on study of implicit learning using advanced Bayesian analyses

Rutgers University – Autism and interoception: Leading a research project with Vanessa Bal to study the relationship between cardiac signals and emotional deficits in autism spectrum disorder

Aarhus University – Cardiac interoception: Collaborating with Micah Allen and Nicolas Legrand on novel methodologies for the study of cardiac interoceptive awareness.

University of Sussex – Cardiac signaling and alcohol: Working with Charlotte Rae on designing novel methods to study the role of cardiac signaling in alcohol cognitive biases and inhibitory control

Universidad de Mallorca – Cardiac signaling, cognition and emotion: Working with Alex Galvez-Pol on the different modalities of cardiac signaling and interoception.

PUBLICATIONS

1. **Leganes-Fonteneau, M.,** Bates, M., Islam, S., & Buckman, J. (2022). Changes in interoception after alcohol administration correlate with expectancies and subjective effects. *Addiction Biology*

2. Bates, M.E., Price, J., **Leganes-Fonteneau, M.** *et al.* The Process of Heart Rate Variability, Resonance at 0.1 hz, and the Three Baroreflex Loops: A Tribute to Evgeny Vaschillo. *Appl Psychophysiol Biofeedback* (2022).

3. **Leganes-Fonteneau, M.,** Buckman, J., Islam, S., Pawlak, A., Vaschillo, B., Vaschillo, E. & Bates, M. (2021). The Cardiovascular Mechanisms of Interoceptive Awareness: Effects of Resonance Breathing. *International Journal of Psychophysiology*.

4. **Leganes-Fonteneau, M**., Bates, M. E., Pawlak, A., & Buckman, J. F. (2021). Does alcohol affect emotional face processing via interoceptive pathways?. *Drug and Alcohol Dependence*, *226*, 108845.

5. **Leganes-Fonteneau,** M., Bates, M. E., Vaschillo, E. G., & Buckman, J. F. (2021). An interoceptive basis for alcohol priming effects. *Psychopharmacology, 1-11.*

6. **Leganes-Fonteneau, M**., Scott, R., Duka, T., Dienes, Z. (2021). Avoiding pitfalls: Bayes factors can be a reliable tool for post hoc data selection in implicit learning. *Psychonomic Bulletin and review*

7. **Leganes-Fonteneau, M.,** Buckman, J., Pawlak, A., Vaschillo, B., Vaschillo, E. & Bates, M. (2020). Interoceptive mechanisms of alcohol cognitive biases: Alliesthetic components and role of family history. *Addiction Biology*

8. **Leganes-Fonteneau, M.,** Buckman, J., Pawlak, A., Suzuki, K., & Bates, M. (2020). More than meets the heart: Systolic amplification of different emotional faces is task dependent. *Cognition and Emotion 1-9*

9. **Leganes-Fonteneau, M.,** Pi-Ruano, M., & Tejero, P. (2019). Early Signs of emotional Recognition Deficits in Adolescent high-binge Drinkers*. Substance use and Misuse.*

10. **Leganes-Fonteneau, M.,** Cheang, Y., Lam, Y., Garfinkel, S., & Duka, T. (2019). Interoceptive awareness is associated with acute alcohol-induced changes in subjective effects*. Pharmacology Biochemistry and Behavior.*

11. **Leganes-Fonteneau, M.,** Nikolaou, K., Scott, R., & Duka, T. (2019). Knowledge about the predictive value of reward conditioned stimuli modulates their interference with cognitive processes*. Learning & Memory, 26(3).*

12. **Leganes-Fonteneau, M.,** Scott, R., & Duka, T. (2018). Attentional responses to stimuli associated with a reward can occur in the absence of knowledge of their predictive values. *Behavioural brain research, 341, 26-36.*

MANUSCRIPTS UNDER REVIEW/REVISION:

1. **Leganes-Fonteneau, M.,** Muzumdar, N., Bates, M., Buckman J. Effects of resonance breathing on cognitive performance.

2. **Leganes-Fonteneau, M.,** Rae, C.L., Cardiac signals and the interference of reward on attention and inhibitory control. https://psyarxiv.com/wcagj/

3. **Leganes-Fonteneau, M.,** Cseh, D., & Duka, T. Reliable evidence for implicit aversive learning. https://psyarxiv.com/47ngr/

MANUSCRIPTS IN PREPARATION:

1. **Leganes-Fonteneau, M.,** Bates, M., Buckman J., Legran, N., Allen, M., Towards interoceptive inference through pharmacological manipulation of heart-rate discrimination.

2. Muzumdar, N., **Leganes-Fonteneau, M.,** N., Bates, M., Buckman J. Differences between cannabis users and binge drinkers in cardiovascular reactivity to stress.

3. Galvez-Pol, A., **Leganes-Fonteneau, M.** Cardiac signalling, human behavior and cognition: a literature review

4. **Leganes-Fonteneau, M.,** Implicit and explicit aversive learning is supported by cardiac signals.

5. **Leganes-Fonteneau, M.,** […] Khalsa, S. Isoprotelenol effects on cardiovascular regulation and brain processing

GRANTS AND AWARDS

European Society for Biomedical Research on Alcoholism – *Early Career Researcher Award 2022*
Center for Alcohol and Substance Use Studies -$20,000 – *PI, Interoception, Trauma and hangover 2021*
NJ Institute for Food, Nutrition & Health - $2,500 – *PI,* Alcohol, emotion and interoception *2021*
Biomedical Sciences Master's program - $11,000 – *Student supervision funds 2018-2021*
Center of Alcohol Studies, Rutgers University - $1000 – *Helene White travel award 2020*
Aresty Research Fellowships, Rutgers University - $2,000 2018-2019
Center of Alcohol Studies – Award for best research poster
Sussex University Research Led Initiative Funding – *MatLab Module* 2,000£ *2017*
Sussex Neuroscience Travel Grant – 2,000£ *2018*
Guarantors of Brain Travel Grant – *2017*
Erasmus Plus Research Grant - *2014-2015*
Erasmus Study Grant – 2012-2013

AD HOC REVIEWER

Neuropharmacology, Addiction, Pharmacology Biochemistry and Behavior, JSAD, ACER, Psychophysiology, International Journal of Psychophysiology, Psychological Research, Frontiers in Human Neuroscience, Psychopathology and Behavioral Assesment, Journal of Experimental Psychology

MENTORED STUDENTS

Name	Date	Role and project
Rutgers University – Graduate and Masters Students		
Neel Muzumdar	2021-present	Ph.D. Student, co-supervisor – Cannabis use and psychophysiology
Nandita Shankar	2022-present	Paid Research Assistant – Interoception, Trauma and hangover
Kelly Sun	2021-present	Capstone Student – Alcohol, emotional face processing and interoception
Adam Perez	2021-present	Capstone Student – Autism, emotional face processing and interoception
Elias Zamoud	2021-present	Capstone Student – Cannabis, alcohol and cardiovascular reactivity to stress
Amanda Colangelo	2020-2021	Capstone Student – Autism, emotional face processing and interoception
Emanuel Chavez	2020-2021	Capstone Student – ADHD and substance use disorders
Mario Pinzas	2020-2021	Capstone Student – Cardiac signalling and implicit aversive learning
Anisha Prasad	2019-2020	Capstone Student – Cardiac signalling and emotional face processing
Sneha Dontha	2019-2020	Capstone Student – Effects of resonance breathing on cognitive processing
Sim Berlene Mariano	2018-2019	Capstone Student – Cardiac signalling and emotional face processing
Rutgers University – Undergraduate Students		
Sam Zhang	2021-present	Lab Research – Resonance breathing and emotional face processing
Rohit Amarnath	2021-present	Computer Science – Design of Bodily Maps app for smartphone
Shrikant Nayak	2020-2021	Aresty Student – Cardiac signalling and implicit emotional processing
Shariar Islam	2018-2020	Aresty Student – Alcohol and interoception, Resonance breathing
Sussex University – Undergraduate Students		
Daniel Cseh	2017-2018	Capstone UG Student – Implicit aversive learning
Giorgia Caradonna	2016-2017	Capstone UG Student – Alcohol craving and attentional biases
Yun Cheang	2015-2016	Capstone UG Student – Alcohol effects on interoception

Yan Lam   2015-2016   Capstone UG Student – Alcohol effects on interoception

INVITED TALKS AND COLLOQUIA
Interoceptive components of drug approach behaviors and clinical avenues
        IBB Institute Colloquium, *Muenster, DE - 2021*
        Univesity of Sussex, UK - 2021
        Universitee Catholique de Louvain, *BE - 2021*
        Kinesiology and Health Brown-Bag, *Rutgers University, NJ - 2021*
        Laureate Institute of Brain Research, *Tulsa, OK - 2021*
        Division of Substance Abuse seminar, *Yale, CT - 2021*
        Recovery Research Institute seminar*, MGH-Harvard, MA - 2021*
        Embodied Computation Group seminar*, Aarhus University, DK - 2021*
        Alcohol research center seminar, *Uconn, CT - 2021*
        University of New South Wales psychology brownbag, *Sydney, AUS - 2020*

Bayesian awareness categorization tool for post hoc selection in implicit learning
        Princeton/Rutgers Center for Computational Cognitive Neuropsychiatry, NJ – 2020

CONFERENCE SYMPOSIA

International Society for Biomedical Research on Alcoholism – Symposium organizer – *Krakow, PL - 2022*
Chair and speaker: *Interoceptive mechanisms of addiction - Interoception: Implications for substance and alcohol use symposium w/Martin Paulus, Pierre Maurage, Andrzej Jakubczyk*

College on Problems of Drug Dependence – Symposium presenter – *Minneapolis, MI* - 2022
Speaker: *Interoceptive mechanisms of addiction - Through the Looking Glass symposium*

Canadian Association for Neuroscience – Symposium presenter – *Toronto, CA* - 2022
Speaker: *Interoceptive mechanisms of addiction - Cueing factors in Addiction symposium*

Research Society on Alcoholism – Symposium presenter – *Orlando, FL* - 2022
Speaker: *Interoceptive mechanisms of addiction - Neural and behavioral representations of alcohol-related risk and resilience phenomena among emerging adults symposium*

Collaborative Perspectives on Addiction Annual meeting - Symposium presenter- *Online - 2020*
Speaker: Interoceptive correlates of alcohol administration - MIND BODY BRAIN seminar

CONFERENCE TALKS AND POSTERS
Implicit learning Seminar – *Graz, AUT* – 2022
Speaker: *Bayes factors as a reliable tool for awareness categorization*

Collaborative Perspectives in Addiction – Specially selected talk – *Portland, OR* – 2022
Speaker: *Interoceptive mechanisms of addiction* – Novel Approaches in Addiction Psychology session

Society for Affective Psychology – Interoception preconference – *Online* – 2022
Poster: *Resonance breathing can improve interoceptive awareness*

Expectation Perception and Cognition – *Online* – 2021
Poster: Reliable evidence for implicit aversive learning

Society for Psychophysiological Research Annual meeting – *Online - 2021*
Speaker: *Resonance breathing can improve interoceptive awareness*

ASSC Conference – *Online* – 2021
Consciousness Salon Speaker: Bayes factors as a reliable tool for awareness categorization

European Meeting of Human Fear conditioning – *Online - 2021*
Speaker: Reliable evidence for implicit aversive learning

Experimental Psychology Society – *Online - 2020*
Poster: *The Effect of interoceptive cardiac signals on emotion detection is task dependent*

Research Society on Alcoholism – *Minneapolis, USA - 2019*
Poster: Alcohol administration influences physiological and behavioral responses towards emotional stimuli.

ASSC Conference – *Krakow, Poland* - 2018
Poster: *Interoception and Pavlovian conditioning*.

Implicit learning seminar - *Cluj Napoca, Romania - 2018*
Speaker: *Implicit correlates of Pavlovian conditioning.*

SSA Conference - *Newcastle, UK - 2017*
Speaker: *Implicit correlates of Pavlovian conditioning.*

ASSC Conference - *Beijing, China - 2017*
Poster*: Implicit Conditioning Modifies Attention.*

SSA Conference - *York, UK - 2016*
Poster*: Acute alcohol administration and Interoception.*