

Salvador Valencia Sanchez

Hawthorn Place #1775, Boulder, Colorado

phone number: 720 557 2757. E mail: salvador.valenciasanchez@colorado.edu

Professional experience

Postdoctoral fellowship

October 2024 to this date

University of Colorado Boulder, Department of Psychology and Neuroscience. Working under the supervision of Dr. Michael V. Baratta. Project funded by award NIMH / RMH050479H from the National Institute of Mental Health. Stressor controllability.

Postdoctoral fellowship

September 2020 to October 2024

University of Colorado Boulder, Institute of Integrative Physiology. Working under the supervision of Dr. Mark Opp. Project funded by award 1RF1AG064465 from the National Institute on Aging of the National Institutes of Health. Alzheimer's disease and sleep disruption.

Academic formation

PhD in Biomedical science

October 2020

Instituto de Fisiología Celular, Universidad nacional Autónoma de México (UNAM), México city, México. Project: Effects of exercise on the immune system: implication of the cannabinergic system, directed by Dr. Rene Drucker Colin.

Master's degree in Neuroethology

September 2011

Instituto de Neuroetología, Universidad Veracruzana, Xalapa, Veracruz, México. Grade average 95.64. *Summa Cum Laude*. Project: C-FOS expression in the cerebellar vermis of sexually inexperienced male rats exposed to olfactory cues from female rats.

Bachelor's degree in Biology

August 2007

Facultad de Biología, Universidad Veracruzana, Xalapa, Veracruz. Grade Average 8.1. Title of dissertation Project: Cerebellum participation in the learning and performance of stereotyped sexual behavior of male rats.

Additional training

Scientific workshop on laboratory animals care and handling

2013

Academic unit in the *bioterium*, of Instituto de Fisiologia Celular. Responsible person; Dr. Julio Moran Andrade and MVZ. Claudia V Rivera Cerecedo.

Scientific workshop on hygiene and safety in laboratories workspace 2013

Instituto de Fisiologia Celular, Universidad Nacional Autónoma de Mexico (UNAM). Responsible person: Dra. Marta Hriart Urdanivia, Dra. Elvira Galarraga Palacios and Dr. Jorge Ramirez Salcedo.

Capacitation for the use of Flow cytometers (Attune Nxt and Attune Azul/Rojo) and flow cytometry analysis 2014

Laboratorio Nacional de Citometria de Flujo, Instituto de Investigaciones Biomedicas, UNAM. Responsable: M. en C. Carlos Castellanos Barba.

Training: Working with mice in research setting 2023

Collaborative Institutional Training initiative (CITI).

Course: Reducing pain and distress in laboratory mice and rats 2023

Collaborative Institutional Training Initiative (CITI).

Course: General Biosafety Training. BioRAFT. 2023

Course: Lab safety and hazardous waste generator training. BioRAFT.

Scientific presentations

Speaker: Sex differences in impaired cognition after sleep disruption in a subclinical Alzheimer's disease model. Society for Neuroscience (SFN), 2023. Washington DC, USA. 2023

Poster presentation: PKR regulates sleep-wake behavior and its homeostatic response to sleep deprivation and LPS administration in mice. Annual meeting of the Psycho-Neuro-Immunology Research society. Boulder, Colorado. 2023

Poster presentation: Effects of chronic exercise on the immune system: implication of the cannabinergic system. FALAN second meeting. Buenos Aires, Argentina. 2016

Poster presentation: Aerobic exercise modifies cannabinoid receptors CB1 and CB2 in subpopulations of peripheral immune cells. International Brain Research Organization (IBRO), 9th meeting. Rio de Janeiro, Brazil. 2015

Speaker: Effects of chronic exercise on cell populations of the immune system and the implication of the cannabinoid system. 9th international meeting of the society for neuroimmunomodulation (ISNIM). Liege, Belgium. 2014

Publications

S. Valencia-Sanchez, J. Lawrence, R. Rowe, C. Hoeffler, C. Link, and M. R. Opp. Sleep responses to systemic lipopolysaccharide in a preclinical model of Alzheimer's disease. In preparation (Jan-2025).

S. Valencia-Sanchez, J. Lawrence, C. Hoeffler, C. Link, and M. R. Opp. Sleep dysfunction and responses to sleep deprivation in a preclinical model of Alzheimer's disease. Under revision, submitted to the journal of Brain, Behavior and Immunity, January 2025.

S. Valencia-Sanchez, M. Davis, J. Martensen, C. Hoeffler, C. Link and M. R. Opp. Sleep-wake behavior and responses to sleep deprivation and immune challenge of protein kinase RNA-activated knockout mice. Brain, Behavior and immunity. Vol. 121, 2024. DOI: 10.1016/j.bbi.2024.07.027

Salvador Valencia-Sánchez, Karen Elizabeth Nava-Castro, Claudia Angelica Garay-Canales, Victor Hugo Del Río-Araiza, y Jorge Morales-Montor. Impact of chronic moderate exercise on immune cells and cytokine levels in rats: focus on the endocannabinergic pathway. Journal of Interferon and Cytokine Research. 2023. DOI: 10.1089/jir2023.0120 2023

Salvador Valencia-Sánchez, René Drucker-Colín, Omar Collazo Navarrete, Oscar Prospero-García, Jorge Morales-Montor. "Effects of Exercise upon Immunoregulation: Facts and a Modern View of its Molecular Mechanisms". Advances in Neuroimmune Biology. Vol. 7 (3-4):1-12, DOI:10.3233/NIB-190161

Salvador Valencia-Sánchez, Karen Nava-Castro, María I. Palacios Arreola, Oscar Prospero-García, Jorge Morales-Montor, René Drucker-Colín. "Chronic exercise modulates the cellular immunity and its cannabinoid receptors expression" PLoS ONE 14(11): e0220542. <https://doi.org/10.1371/journal.pone.0220542>, 2019

Book chapter: “Neurodinámica: el lenguaje eléctrico del sistema nervioso”, Chapter 3
“Neurofisiología de la conducta” Published by Universidad Veracruzana. ISBN 978-607-502-412-7
2012

Other academic experience

Supervisor of Tyree Ware during his stage at the Institute of Integrative Physiology, University of Colorado, Boulder. Award NIH R25 summer student, 2023.

Supervisor of Mackenzie Davis during her internship to get credits for the program of Integrative Physiology, University of Colorado, Boulder. 2022

Supervisor of Jaqueline Martensen’s internship to get credits for the program of Integrative physiology, University of Colorado boulder, 2021

Speaker at workshop: Physiologic stress and its implications. Instituto de Neuroetologia, Universidad veracruzana, Coordinator: Dra. Tamara Cibrian Llanderal. 2016