María del Lucero Pacheco Blas

e-mail <u>lucero@drcmr.dk</u>

I graduated in Physics from the Science Faculty at UNAM, while I also studied half of the degree in math. During my PhD studies in the Biomedical Science Doctorate Program, I worked with time series from MRI data, as well as graph theory in order to study brain functional connectivity in teenagers with inhaled substance addiction. Neuroscientific research allowed me to work in a multidisciplinary team and enrich my social and teamwork skills. Meeting the families and teenagers with addiction and talking to them while they waited for the psychological tests, also allowed me to see different aspects of life that I would have not considered otherwise. Part of the work involved preprocessing the image data, keeping the database with the conductual and cognitive measures, and statistical exploration, some basic visualization of the results.

Publications

Pacheco-Blas, L.; González-González, G.; Ortega-Aguilar, A. Sex-Related Variations in the Brain Motor-Network Connectivity at Rest during Puberty. *Appl. Sci.* **2023**, *13*, 10006.

Hernández-Álvarez, Dailett M., et al. Default mode network efficiency is correlated with deficits in inhibition in adolescents with inhalant use disorder. *Frontiers in Psychiatry* **2020** 11 : 209.

Professional Experience

Academic reviser of course materials in science for B@UNAM-2022-2

Literary creation workshop Explorando Mesoamérica with Rocío Pacheco, for SEPI. September-December 2019.

Intermediate and basic English classes at The Anglo. September 2005 and January-July 2008.

Ayudante de Investigador Nacional Nivel III for Dr. Octavio A. Novaro Peñalosa 2008-2011.

Quantum mechanics assistant professor to Dr. Rosario Paredes, Faculty of Science, UNAM, 2011-1.

International meetings

OHBM 2017, Vancouver, presented a poster on brain development of children with early musical training.

OHBM 2018, Singapore, poster on brain differences between inhaled substance abuse teenagers and healthy controls.

Education

Programa de Doctorado en Ciencias Biomédicas. Candidate. 2014-2024. Tutor: Dr. Alicia Ortega-Aguilar

Facultad de Ciencias, Ciudad Universitaria. Bachelor degree in:

Physics, 8.6 (105.5%) 2003-2015. **Mathematics** (40%). 2010-2014.

Programming

Familiar with UNIX, Python and FSL Intermediate in R