

# CARLOS I. RODRIGUEZ, PhD

Postdoctoral Fellow | The Mind Research Network | crodriguez@mrn.org

## EDUCATION

- 2018 **Doctor of Philosophy**, Psychology – Cognition, Brain and Behavior.  
University of New Mexico  
Dissertation: *The effects of prenatal alcohol exposure on resting state functional connectivity in a sample of adolescents with fetal alcohol spectrum disorder.*
- 2015 **Master of Science, with Distinction**, Psychology – Cognition, Brain and Behavior.  
University of New Mexico  
Thesis: *The effects of moderate prenatal alcohol exposure on resting state functional connectivity and behavior.*
- 2006 **Bachelor of Arts**, Psychology – Concentration in Biopsychology; Biology Minor  
Western Colorado University

## REFEREED PUBLICATIONS

7. Rodriguez, C.I., Vergara, V., Davies, S., Calhoun, V., Savage, D.D., Hamilton, D.A. Detection of Prenatal Alcohol Exposure Using Machine Learning Classification and Resting-State Functional Network Connectivity Data. *Alcohol*. 2021;93, 25-34.
6. Donaldson, T., Barto, D., Bird, C., Magcalas, C., Rodriguez, C., Fink, B., Hamilton, D.A. Social Order: Using the sequential structure of social interaction to discriminate abnormal social behavior in the rat. *Learning and Motivation*. 2018;61, 41-51.
5. Bird, C.W., Barto, D., Magcalas, C.M., Rodriguez, C.I., Donaldson, T., Davies, S., Savage, D.D., Hamilton, D.A. Ifenprodil infusion in agranular insular cortex alters social behavior and vocalizations in rats exposed to moderate levels of ethanol during prenatal development. *Behavioural Brain Research*. 2017; 320, 1-11.
4. Rodriguez, C.I., Davies, S., Calhoun, V., Savage, D.D., Hamilton, D.A. Moderate prenatal alcohol exposure alters functional connectivity in the adult rat brain. *Alcoholism: Clinical & Experimental Research*. 2016; 40, 10.
3. Rodriguez, C.I., Magcalas, C.M., Barto D, Fink, B.C., Rice, J.P., Bird, C.W., Davies, S., Pentkowski, N., Savage, D.D., Hamilton, D.A. Effects of sex and housing on social, spatial, and motor behavior in adult rats exposed to moderate levels of alcohol during prenatal development. *Behavioural Brain Research*. 2016; 313, 233-243.
2. Hamilton, D.A., Barto, D., Rodriguez, C.I., Magcalas, C., Fink, B.C., Rice, J.P., Bird, C.W., Davies, S., Savage, D.D. Effects of moderate prenatal ethanol exposure and age on social behavior, spatial response perseveration errors and motor behavior. *Behavioural Brain Research*. 2014; 269, 44-54.
1. Hamilton, D.A., Magcalas, C.M., Barto, D., Bird, C.W., Rodriguez, C.I., Fink, B.C., Pellis, S.M., Davies, S., Savage, D.D. Moderate Prenatal Alcohol Exposure and Quantification of Social Behavior in Adult Rats. *Journal of Visualized Experiments*. 2014;94.

## PUBLICATIONS UNDER REVIEW

1. Rodriguez, C.I., Vergara, V., Calhoun, V., Savage, D.D., Hamilton, D.A., Tesche, C., Stephen, J.M. Disruptions in global network segregation and integration in adolescents and young adults with Fetal Alcohol Spectrum Disorder. (*Alcoholism Clinical and Experimental Research*)

## ORAL RESEARCH PRESENTATIONS

- 2018 National Hispanic Science Network. Rockville, MD. Invited presenter and panelist.
- 2018 Department of Psychology, The University of Texas at El Paso. Invited talk.
- 2018 Department of Psychology, The University of Texas at El Paso. Invited talk.
- 2016 National Enhancement of Under-Represented Academic Leadership (NEURAL) Conference. Research presentation.
- 2015 Summer Program In Neuroscience Ethics and Survival (SPINES). The Marine Biological Laboratory, Woods Hole, MA. Research presentation.

## RESEARCH SUPPORT

- 2017 **The Ford Foundation**  
Dissertation Fellowship Award
- 2013 **National Institutes of Health**, The National Institute of Alcohol Abuse & Alcoholism  
Diversity Supplement Grant 13-0447; P.I.: Derek Hamilton, Ph.D.

## HONORS & AWARDS

- 2018 National Hispanic Science Network, Invited Panelist & Travel Award
- 2017 The Society for Neuroscience; Neuroscience Scholars Program, Fellow
- 2017 University of New Mexico, Career Services; Student Conference Award Program
- 2016 University of New Mexico, El Centro de la Raza; El Puente Research Fellowship Program
- 2016 University of New Mexico, Career Services; Student Conference Award Program
- 2015 University of New Mexico, El Centro de la Raza; El Puente Research Fellowship Program
- 2016 University of Alabama, Birmingham; N.E.U.R.A.L. Conference Travel Award
- 2016 University of Alabama, N.E.U.R.A.L. Conference; Best Oral Presentation
- 2016 Research Society on Alcoholism; Student Merit Travel Award
- 2015 SPINES Symposium Travel Award
- 2015 The Marine Biological Laboratory; Summer Program in Neuroscience Ethics and Survival (SPINES)
- 2014 International Society of Biomedical Research on Alcoholism; Student Merit Travel Award
- 2013 Research Society on Alcoholism Meeting; Student Merit Travel Award
- 2012 University of New Mexico, El Centro de la Raza; Latino Graduate & Professional Student Fellowship Award

## POSTER PRESENTATIONS

- 2018 Rodriguez, C., Vergara, V., Davies, S., Calhoun, V., Savage, D.D., Hamilton, D.A. Detection of Prenatal Alcohol Exposure Using Machine Learning Classification and Resting-State Functional Network Connectivity Data. Society for Neuroscience.
- 2017 Rodriguez CI, Rice JP, Candelaria-Cook FT, Yang Y, Purvis R, Sillerud L, Abbot CC, Bustillo J, Perrone-Bizzozero N, Calhoun VD, Hamilton DA. The Effects of Chronic Olanzapine Exposure on Functional Network Connectivity in the Anesthetized Rat. Society for Neuroscience.
- 2016 Rodriguez CI, Lieberman G, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Microstructural Connectivity of Male and Female Rats. Research Society on Alcoholism.
- 2016 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Microstructural Connectivity of Male and Female Rats. Poster presented at the N.E.U.R.A.L.
- 2015 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. Moderate Prenatal Alcohol Exposure Alters Hippocampal Functional Connectivity and Social Behavior in Adult Long Evans Rats Society for Neuroscience.
- 2014 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Resting State and Functional Connectivity of Male and Female Rats. Society for Neuroscience.
- 2014 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Resting State Functional Connectivity of Male and Female Rats. Research Society on Alcoholism.
- 2013 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Resting State Networks and Functional Connectivity of the Anesthetized Rat Brain. Society for Neuroscience.
- 2013 Rodriguez CI, Davies S, Calhoun V, Savage D, Hamilton D. The Effects of Prenatal Ethanol Exposure on Resting State Networks and Functional Connectivity of the Anesthetized Rat Brain. Research Society on Alcoholism.

## PROFESSIONAL EXPERIENCE

- 2020 The Mind Research Network, Postdoctoral Fellow - March 2020- Present
- 2019 University of New Mexico, Program Specialist, Center for Academic Program Support. March 2019- March 2020
- 2018 University of Texas at El Paso, Postdoctoral Fellow, Department of Psychology. June 2018 – February 2019
- 2009 University of New Mexico, Senior Student Program Advisor. October 2009 – July 2012
- 2007 Western Colorado University, Admissions Counselor. August 2007 – July 2009.

## **TEACHING**

- 2018 University of New Mexico, Introduction to Brain & Behavior (26 students, summer, online)
- 2018 University of New Mexico, Introduction to Brain & Behavior (100+ students, fall, face-to-face)
- 2017 University of New Mexico, Introduction to Brain & Behavior (24 students, summer, online)
- 2017 University of New Mexico, Introduction to Brain & Behavior (70 students, spring, face-to-face)
- 2016 University of New Mexico, Introduction to Brain & Behavior (100+ students, fall, face-to-face)
- 2016 University of New Mexico, Introduction to Brain & Behavior (22 students, summer, face-to-face)
- 2010 Instructor of Record, University College, Student Success Seminar (18 students, face-to-face)

## **ADDITIONAL TRAINING**

- 2021 Statistics Fundamentals with R. Datacamp.
- 2020 Grant Writing Workshop. Center on Alcohol, Substance Use, & Addictions. University of New Mexico
- 2019 Introduction to R. SAGE Campus.
- 2018 Recognizing and Addressing Power Dynamics in Academia.  
Led by Drs. Keith Trujillo, Andrea Giuffrida, Erika Marín-Spiotta; & Jean King. Society for Neuroscience.
- 2017 Neuroethics and Public Engagement: Why, How, and Best Practices.  
Led by Emily Cloyd, Drs. Laura Cabrera & Martha Farrah. Society for Neuroscience.
- 2017 Introduction to Teaching Online. UNM Extended Learning/Faculty Services & Online Course Development.
- 2015 fMRI Acquisition and Analysis course. Led by Drs. Vince Calhoun, Kent Kiehl, & Tor Wager. The Mind Research Network.

## **MENTORING**

- 2020 Neuroscience Scholars Program Associate Mentor, Society for Neuroscience, August 2020 - Present
- 2017 UNM, El Centro de La Raza, El Puente Graduate Student Mentor, December 2015 – May 2017

## **PEER REVIEW**

- 2020 Brain Connectivity, original manuscript review
- 2018 Plos One, original manuscript review
- 2017 McMillan Learning, textbook chapter review. Intro to Brain and Behavior, 5<sup>th</sup> ed. by Kolb, Whishaw, and Teskey.
  - Chapter 6: How do drugs and hormones influence brain and behavior?
  - Chapter 12: What causes emotional and motivated behavior?

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

1. Society for Neuroscience (SfN)
2. Research Society on Alcoholism (RSA)
3. Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

## **COMMUNITY & PROFESSIONAL SERVICE**

- 2021 Research Presentation Judge, Society for Advancement of Chicanos/Hispanics and Native Americans in Science
- 2019 Research Presentation Consultant, Oak Ridge Institute for Science and Education and the Defense Threat Reduction Agency's Joint Science and Technology Institute
- 2017 Science Fair Judge, Longfellow Elementary School; Albuquerque, NM
- 2016 Presenter, Science, Technology, Engineering, Art, Math and Health (STEAMH) Career Exploration Program; UNM Health Sciences Center; Albuquerque, NM