Ana Bravo

DATA SCIENTIST I

University of Miami, Miller School of Medicine

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Specialized in cleaning, modeling, and visualizing data using advanced programming languages such as R, SAS, and STATA.

Education

Florida International University	*Florida, USA*
MPH - BIOSTATISTICS	*2023*
Florida International University	*Florida, USA*
BA - PSYCHOLOGY	*2018*
Miami Dade College	*Florida, USA*
AA - PSYCHOLOGY	*2016*

Research Experience

University of Miami Miller School of Medicine — *Department of Public Health*

DATA SCIENTIST I, PRIMARY INVESTIGATOR: MARIANO KANAMORI, PH.D. — *Aug 2023 - Present*

- Utilize R for data wrangling, manipulation, cleaning, statistical analysis, and visualizations to extract insight from social network data.
- Develop and deploy custom R scripts and functions to automate data import, summarization, and transformation to streamline processes.
- Skilled in visualizing ego-centric (personal network) data using a variaty of different R packages such as egoR, igraph, and SNA to analyze different patterns of communication within a network.
- Skilled in creating dynamic and static reproducible reports using Quarto and Shiny to create informative visualizations to show survey respond trends in Likert scale data.
- Utilize ggplot2, ggstatplot, and Plotly to create health-related visualizations on Pre-exposure prophylaxis (PrEP) use among a Latino sample in South Florida.
- Proficient in Tidygraph principles such as adding graphs, edge, and centrality measures to provide tidy API for network manipulation.

Center for Research on U.S. Latino HIV/AIDS and Drug Abuse — *Florida International University*

DATA ANALYST INTERN, PRIMARY SUPERVISORS: WEIZE WANG, MPH AND PATRIA ROJAS, PH.D., MPH, MSW — *Dec 2022 - Jun 2023*

- Analytical skills and proficiency in SAS, STATA, SQL and R Programming language to analyze longitudinal, repeated measures, and cohort data.
- Performs various data analytics manipulation tools such as cleaning, transforming, pivoting and visualizing data for optimal data use.
- Performed statistical analysis using a variety of statistical models such as parametric, non-parametric hypothesis testing, linear regression, logistic regression, survival analysis, and longitudinal data modeling using GEE and mixed effects model methods.
- Experienced in cleaning and merging big data using pivotting techniques in R, SAS, and SQL.
- Skilled in using a wide variety of data analytical methodologies to address issues such as data missingness and trouble shooting technical difficulties.
- Interpreted data analysis results to investigators with and without statistical subject matter knowledge

Substance Use Neuropsychology Lab — *Florida International University*

SENIOR RESEARCH ASSISTANT, PRIMARY INVESTIGATOR: RAUL GONZALEZ, PH.D. — *Feb 2020 - Jul 2023*

- Conduct assessment for the longitudinal Adolescent Brain Cognitive Development (ABCD) Study under the direct supervision of Dr. Raul Gonzalez.
- Administer clinical interviews (e.g., KSADS, PPS, Substance use questionnaires, Alcohol, Nicotine and Marijuana TLFB measurements to school aged children for a ten-year longitudinal study.
- Administer and score neuropsychological and neuro-behavioral tasks (RAVL-T, NIH Tool Box, Emotional Stroop Task) with ABCD participants.
- Conduct suicide-risk assessment under the supervision of an onsite clinician during protocol visits and conduct suicidality follow up with parents.
- Conduct Time Line Follow Back Interview (TLFB) to obtain youth estimates of past year marijuana, cigarette and other substance use.
- Collection of different biological specimen samples from a variety of different domains such as hair, urine, saliva, blood, DNA saliva sample, and Drager breathalyzer.

Child Anxiety and Phobia Program

Florida International University

RESEARCH ASSISTANT, PRIMARY INVESTIGATOR: JEREMY PETTIT, PH.D.

Apr 2017 - Feb 2020

- Assisted during the administration of evidence based asessment e.g., exposure therapy and treatment to chldren and adolescents with anxiety and depression threshhold and sub-threshold disorders.
- Organization of clinical case files for youth and adolescents that come into phobia center for anxiety and depression treatment.
- Conduct intake phone interviews on potential participants to determine treatment plan for anxitey and depressive disorders (GAD, MDD, SAD etc.)
- Assisted in the completion of psychosocial questionnaires during clinical interview as well as administer computer based tasks such as Flanket test for executive functions.
- Participated in data capture for diagnostic code of children and parents with anxiety dirsorder that meet criteria for DSM-5 related disorders for different time points (pre, post, and follow-up.)
- Assist, recruit, and schedule participansts for incoming projects such as Attention Training (AT-RCT) for social anxiety study that included EEG assessment for participants.

Assess Behavior, Cognition, and Emotion Regulation in Children and Adolescents Lab

Florida International University

RESEARCH ASSISTANT, PRIMARY INVESTIGATOR: ERICA D. MUSSER, PH.D.

May 2017 - May 2019

- Participate in FIU's Summer Treatment Program (STP) in collboration with ABCDERICA Lab to collect physiological data (e.g., heart rate electro-dermal activity) from school ages children with ADHD and comorbid disorders.
- Set up Mindware/BioLab electrodes on youth during assessment of ADHD and Emo meds protocol
- Run and conduct ADHD protocol task such as: resting baseline, neutral picture assessment, COIN, BARTLG to compare control vs. ADHD diagnosis group.
- Perform video transcripts of youth during Emotional and Parenting in Childhood (EPIC) Study conducted by Rachel Tenenbaum, Doctoral student.
- Conduct data cleaning procedures on heart rate variability (HRV) cardiac impedance (IMP) and electrodermal activity (EDA) measurements on Mindware software using participant data.

Professional Experience

Lab Instructor

Miami Dade College

MATHEMATICS DEPARTMENT

Feb 2019 - Oct 2020

- Serve as a role model to motivate students to achieve their academic needs.
    - Advisement service.
    - SMART Plan creation.
    - Advising appointments.
    - Meeting with students on repeated attempts.
    - Assist with enrollment.
    - Create, review, and modify student academic progress (MAP) for newly enrolled, transfer and transient students.
    - Assist students with academic planners such as major changes and pre-requsite requirements.
    - Participate in recruitment services such as orientation for First time in College (FTIC) students
    - Advice and guide students who were on academic probation to implement alternative courses of action to achieve graduation.

Mathematics Tutor

Miami Dade College

MATHEMATICS DEPARTMENT

Oct 2016 - Jan 2019

- Provide homework help, assist in the creation of study plans, and develop an in-depth knowledge in College Mathematics.
    - Attend instructor meetings or requires yearly training for online courses.
    - Grade and score day one diagnostics exam to identify students current mathematics background
    - Help in the Navigation of online modalities for students such as ALEKS, myMathLab, and BlackBoard
    - Create study plan for students identified as at risk based on students day one diagnostics exam.
    - Monitor online BlackBoard Retention Center and communicate weekly with professor.
    - Conduct Mastery sessions (e.g., review sessions) during tutoring service hours in preparation for exam week.

Language Skills

Programming	Software	Description
R	Github	CV automation, Github.io hosted website, cleaning, visualizing data.
Rstudio Quarto/Rmarkdown	COVID-19 Project LateX	COVID-19 projected South Florida infection and vaccination rate. Ouput html, pdf, and word, documents using Rmarkdown.
SAS	SAS 9.4	Graduate project interested in looking at 2019 YRBSS Marijuana, cigarette, and vaping use among highschool aged students.
STATA	STATA MP17 Citrix	Regression models, correlation matrix, pre-post analysis, Cox PH models.

Presentations

1. Bravo, A., Wang, W., Colon-Burgos, J., Gomez-Estern, B., Behar-Zusman, V., & Rojas, P. (2023). *Examining sociocultural factors of hispanic stress: A community based remote study among latino adolescents in south florida.* Florida International University, University of Miami; American Public Health Association 2023 Annual Meeting and Expo.

2. Rojas, P., Wang, W., Novoa, O., Colon-Burgos, J., Ravelo, G. J., Sanchez, M., Cano, M. A., Khalona, M., Bravo, A., De La Rosa, M., & Behar-Zusman, V. (2023). *A remote intervention on HIV and substance use during the COVID-19 pandemic: A community based participatory randomized clinical trial targetting adult latino men in south florida.* Florida International University, University of Miami; American Public Health Association 2023 Annual Meeting and Expo.

3. Bravo, A. (2023). *Interpreting data for public health rsearch, policy, or practice.* Florida International University, Robert Stempel College of Public Health; Social Work; PHC 6930C - Intergrative Seminar in Public Health.

Leadership, Service & Community Engagement

Advisor, Board of Directors: PLUMY
Miami-Dade County

PROTECTING LGBTQ+ UNDERSERVED MIAMI-DADE YOUTH
Apr 2023 - Apr 2025

• Director
  – Board of Directors in nonprofit 501(c)(3) organization tasked to provide resources across Miami-Dade County for unserved LGBT+ youth.
  – Assist in diversity, equity, and inclusion (DEI) informed decision making for non-profit goals.

Rentention Data Core - ABCD Student Rention Workgroup
ABCD Study Consortium

ABCD STUDY
Apr 2023 - Apr 2024

• Retention Core Member
  – Assist in the creation of retention efforts ABCD model for at risk participants.
  – Create, clean, and model passive withdraw participatants as well as identify participants at risk of study withdrawl.

Dean Student Advisory Biostatistics Respresentative
Office of Student and Alumni Affairs

ROBERT STEMPEL COLLEGE OF PUBLIC HEALTH AND SOCIAL WORK
Aug 2022 - Aug 2023

• Advisor Council Board Memeber
  – Biostatistics Department representative, make recommendation for improvement of departmental needs.
  – Provide knowledge for key decision making in Biostatistics department.

Data Science Conference 2022
FIU Kovens Conference Center

DSC US HEALTH 22
Oct 2022 - Oct 2022

• Data Science Conference Logistics Volunteer
  – Assist with logist front desk task such as check in, organization of materials.
  – Advise DSC attendees location of important events.

ABCD Study Substance Use Workgroup Member
ABCD Consortium

ABCD STUDY
Jun 2021 - Apr 2023

• Senior Research Assistant
  – Provide localized insight on the RA groudfloor for the ABCD Study.
  – Provide assistance in reformatting script language for the ABCD Semi-structured TLFB interview.

Professional Membership

American Public Health Association

MEMBER
2022 - Present

Florida Public Health Association

MEMBER
2022 - Present

Publications

Yeguez, C.E., **Bravo, A.,** Troya, S., Pettit, J.W., (In preparation). Are Individuals with ADHD at Risk for Suicide? A Systematic Review of Longitudinal Studies.

Bravo, A., Wang, W., Rojas, P., (In preparation). Examining Sociocultural Factors of Hispanic Stress: A Community Based Repeated Measures Study in South Florida among Latinx Adolescents.