#### ALEC BODOLAY

# www.linkedin.com/in/alecbodolay/

#### **EDUCATION**

• University of Southern California, Los Angeles, CA

August 2024 - May 2025

M.S.: Neuroimaging and Informatics - GPA 3.86

• University of California Santa Barbara, Santa Barbara, CA

January 2021 - September 2022

B.S.: Behavioral Neuroscience - GPA: 3.61

• Santa Monica College, Los Angeles, CA

August 2017 - June 2020

A.A.: General Science - GPA: 3.64

#### **EXPERIENCE**

# • Programmer - Massachusetts General Hospital, Boston, MA

October 2022 - July 2024

Randomized Clinical Trial of Varenicline for Smoking Cessation

- Data pipelines: Designed and implemented data pipeline under Git to clean incoming data and oversee the development and integrity of clinical trial study data;
- Dataset harmonization: Harmonized datasets of different formats (JSON and CSV) and types (subject-level and event-level) for exploratory and primary analysis;
- Recovery of missing data: Maintained study validity and statistical power by creating scripts to detect any
  gaps in timeline data and provide the path to the corresponding missing source files in local or cloud file
  servers;
- O Statistical planning and analysis: Collaborated with biostatisticians in implementing the statistical analysis plan to analyze bio-verified vaping abstinence data using linear regression models;
- Data quality assurance and control: Managed electronic data capture database and advised on quality control, ensuring data quality and reliability.

School-Wide Screening for Substance Use and Risk Factors (SURF)

- o *R Shiny apps*: Developed R Shiny applications to automate both data visualization and monitoring, and to expedite data processing tasks, reducing processing time by 94%;
- Data management: Maintained and optimized project pipeline under Git, managed the preparation of large datasets for analysis and review, and trained staff in R programming, code reproducibility, statistical tests, software development, and privacy regulations.
- Report design and automation: Designed an annual epidemiological report for over 60 regional schools, automatically generated through Markdown, and with code capable of sustaining an increasing number of enrolled schools (over 200 for the following year);
- Data visualization: Prepared figures, tables, and ad hoc reports for presentations, written publication and grant submissions;

# • Research Intern - Bar-Ilan University, Tel Aviv, Israel

August 2020 - December 2020

Neural and Gaze Pattern Coordination

 Data cleaning and analysis: Processed, cleaned, and analysed eye-tracking data to measure EEG and gaze coordination patterns using repeated measures ANOVA.

## PROGRAMMING SKILLS

- Advanced: Over 3 years of experience in R, Unix shell (Bash);
- Intermediate: Over 1 year of experience in Python, MATLAB (Including analysis of MRI data using FSL, SPM);
- *Beginner*: Over 6 months of experience in VBA.

## **GRADUATE COURSES**

- *Physics & Medical imaging*: Neuroimaging Data Acquisition with MRI (NIIN530); Fundamentals of Human Neuroimaging (NIIN 510); Experimental Design for Neuroimaging (NIIN 520);
- Data science & machine learning: Neuroimaging Data Processing Methods (NIIN 540); Computational Modeling in Neuroimaging (NIIN 550); Data Science in Neuroimaging (NIIN 580);
- *Neuroscience & research*: Neuroimaging and Systems Neuroscience (NIIN 500); Neuroimaging Genetics (NIIN 570); Current Topics in Neuroimaging Informatics (NIIN 597); Science Communications (NIIN 600);

## **PUBLICATIONS**

- [1] Costello M. A., Pascale M. P., Potter, K., Knoll, S. J., **Bodolay, A.**, Kaur, J., Du, R., Greenspan, L., Gray, C. A., McIntyre, J., & Schuster, R. M. (forthcoming, 2025). Understanding Adolescent Mental Health Symptom Progression in School-Based Settings: The Substance Use and Risk Factors (SURF) Survey. *School Psychology*.
- [2] Pachas, G. N., Reeder, H. T., Evins, A. E., Casottana, K., Borrego, M. M., **Bodolay, A.**, Gray, C. A., Potter, K. W., Keuroghlian, A. S., & Schuster, R. M. (2025). Substance use, suicidal behaviors, and other mental health outcomes among youth with intersectional sexual and gender diverse identities. *Journal of the American Academy of Child & Adolescent Psychiatry Open*. In Press.
- [3] Liu, J., Knoll, S. J., Pascale, M. P., Gray, C. A., **Bodolay, A.**, Potter, K. W., Gilman, J., Evins, A. E., & Schuster, R. M. (2024). Intention to quit or reduce e-cigarettes, cannabis, and their co-use among a school-based sample of adolescents. *Addictive Behaviors*, 157, 108101
- [4] Gray, C. A., Iroegbulem, V., Deming, B., Butler, R., Howell, D., Pascale, M. P., **Bodolay, A.**, Potter, K., Turncliff, A., Lynch, S., Whittaker, J., Ward, J., Maximus, D., Pachas, G. N., & Schuster, R. M. (2023). Pragmatic Clinical Effectiveness Trial of a Novel Alternative to Punishment for School-Based Substance Use Infractions: Study Protocol for the iDECIDE Curriculum. *Frontiers in Public Health*, 11, 1203558

## **PRESENTATIONS**

[1] Tervo-Clemmens, B., Evohr, B. N., Kraus, E. N., Talukder, F. F., Potter, K., Knoll, S. K., **Bodolay, A.**, Pascale, M. P., Gray, C. A., Gilman, J. M., Evins, A. E., & Schuster, R. M. (2023). Dose-Dependent Associations between Substance Use and Psychiatric Comorbidities among High School Students in Massachusetts. *Presented at the 11th Annual MGH Public and Community Psychiatry Symposium, Boston, MA*.

## LANGUAGES

• Fluent: English and Portuguese (native)

*Intermediate*: French *Beginner*: Spanish

## AWARDS AND ACHIEVEMENTS

- Peer mentor, Transfer Edge, 2021: Mentored incoming transfer and international students part of the Transfer Edge program, providing support and resources for student success and well-being;
- Academic Scholarships, 2020: Recipient of academic scholarships including Associated Student Government
  (ASG) Leadership scholarship, Dr. Harry L. & May P. Bauer Memorial scholarship, and AS Scholarship for
  Student Success for undergraduate studies;
- President Ambassador, 2019: 1 of 13 students selected for the Ambassador program aimed to guide prospective and current students in their pursuit of higher education;
- Executive Secretary, International Honor Society, 2019: Acted as executive secretary for Phi Theta Kappa International Honor Society raising funds, and promoted academic excellence and student well-being;
- Sustainability Workshop Leader, 2018: 1 of 2 students selected as sustainability workshop leaders.