

Welcome to the Palo Alto Addictions Research Center (PAARC)

Overview of PAARC: PAARC is a multi-disciplinary team who focuses on substance use and other addictive behaviors in younger populations. Dr. Haas' main areas of research are examining high risk drinking and drug use practices in adolescents and emerging adults, and identifying how risky substance use contributes to other clinical concerns (e.g., risky sexual behaviors, affective disorders, health decision making during COVID-19). Many of her studies are conducted with college students and the lab has a programmatic line of research which evaluates high-risk drinking practices like pre-gaming, drinking games, conjoint alcohol marijuana use and alcohol-energy drink use as well as how these behaviors relate to other comorbidities and risky behaviors. Recently, the lab has been extending studies to look at how alcohol and other drug use contributes to the community spread of COVID-19, including associations between substance use and young adult decision making regarding the use of public health mandates (mask wearing, social distancing) and vaccination decisions. Many of the lab projects have a public health focus and are geared towards prevention and harm reduction frameworks.

What are students in the lab researching? There are several areas that students are currently working in and are developing independent lines of research. Examples include:

- (a) developing better ways to differentiate recreational from problematic marijuana use in younger users;
- (b) alcohol-marijuana co-use patterns and consequences.
- (c) examining the link between sexual risk taking and alcohol use, including alcohol-induced blackouts;
- (d) conducting program evaluations about how changes to campus alcohol policies impact consumption and helping behaviors;
- (e) substance use behaviors in high school and college athletes;
- (f) examining how alcohol and cannabis use have changed during COVID-19, and how substance use contributes to increased risk for contracting the virus.

In addition, many studies in substance abuse rely on advanced statistical methods and students have the option to develop analytical skills using existing datasets. Examples include using receiver operating characteristics (ROC) to develop clinical cut scores for addiction assessment measures, identifying subgroups of users with latent profile analysis, either cross-sectionally (LPA) or across the year using latent class transition analysis (LCTA), and using structural equation modeling and growth curve mixture modeling in an array of studies. These are advanced approaches, though, and students can choose to get involved at this level or keep to more basic statistics they learned in the first-year statistics and methods courses. These studies often evolve in collaboration with other PAU faculty and there may be opportunities to be cross-trained in both labs for select students who express this kind of interest.

What does lab involvement entail? Students in this lab can get involved in multiple ways, ranging from developing and implementing their own studies to using archival data to develop poster presentations and assist in publications. Lab expectations and obligations include: (A) attendance and participation in bi-monthly lab meetings and (B) working collaboratively with lab members on posters/papers to be disseminated at national conferences. In addition, there are opportunities to collaborate on publications provided that students have interest and

writing/statistical skills.

How do I find more out about the lab or apply for a position?

We have already had our open meeting for Winter 2022. Interested students can reach out to Dr. Haas or lab members for additional information.

Students who wish to apply for consideration should submit the following materials to Dr. Haas via email:

1. Cover letter detailing areas of research interests, prior research experience and career aspirations
2. Current CV
3. Copy of unofficial transcripts from PAU
4. A 1-2 page writing sample that reflects your scientific writing and interest in one of the areas studied in this lab.

A subset of applicants will be invited to interview for final positions in the lab. Dr. Haas will contact those students directly after applications have been received and reviewed.

Examples of student co-authored work products (note: we had no conference presentations in 2020 due to COVID-19 travel restrictions):

Note: * Indicates student co-author

Barthel, J.M.,* Fanniff, A., Brown, L., Martini, V. *& Haas, A.L. (2019). *An experimental study evaluating differences in perceptions of risky sexual experiences associated with relationship type and alcohol-related blackout status*. Poster presented at the 2019 Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.

Cummings, C.,* Beard, C.*, Habarth, J., Weaver, C. & Haas, A. (2019). Is the sum greater than its parts? Variations in substance-related consequences by alcohol-marijuana use patterns. *Journal of Psychoactive Drugs*, 1-9.

Harmon, D.* & Haas, A.L. (2020). Experimental tasks of behavioral risk-taking in alcohol administration studies: A systematic review. *Addictive Behaviors*.

Haas, A.L., Lorkiewicz, S., & Zamboanga, B.L. (2019). Replication of factors related to blackout incidence in U.S. high school students: A brief report. *Addictive Behaviors*, 93, 104- 107.

Harmon, D.*, Reavis, J.*, Lorkiewicz, S.*, Wickham, R. & Haas, A. (2019). *A multi-faceted evaluation of risky college drinker subtypes using latent profile analysis*. Poster presented at the 2019 Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.

Ruderian, K.*, Martini, V.*, Yalch, M. & Haas, A. (2019). *Associations between intra-individual risk factors, pre-gaming, recent blackout activity and sexual risk taking in college students: A structural equation model*. Poster presented at the 2019 Annual Meeting of

- the Research Society on Alcoholism, Minneapolis, MN.
- Martini, V.*, Yalch, M., Ruderian, K.*, Barthel, J.* & Haas, A. (2019). *Analysis of the influence of protective motives on pregame activities and negative alcohol-related consequences*. Poster presented at the 2019 Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.
- Harmon, D.* , Zamboanga, B.L*., Hyke, T.* , Martin, J. & Haas, A.L. (2019). *Differences in reasons for targeting players during drinking games: An exploratory factor analysis*. Poster presented at the 2019 Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.
- Lorkiewicz, S.,* Reavis, J.*, Harmon, D.*, Wickham, R. & Haas, A. (2019). *Identifying alcohol related blackout typologies in a college sample: A latent profile analysis*. Poster presented at the 2019 Annual Meeting of the Research Society on Alcoholism, Minneapolis, MN.
- Peterkin, A.* , Lorkiewicz, S.* & Haas, A. (2019). *Alcohol mixed with energy drinks as a predictor of alcohol-related blackout*. Poster presented at the 2019 Association for Psychological Science Convention, Washington, DC.
- Peterkin, A.* , Hatch, S.* & Haas, A. (2019). *Impact of stimulant and marijuana use separately and conjointly on GPA*. Poster presented at the 2019 Association for Psychological Science Convention, Washington, DC.
- Peterkin, A.* & Haas, A. (2019). *Differences in stimulant misuse motives between educational level*. Poster presented at the Annual Meeting of the College of Problems on Drug Dependence, San Antonio, TX.
- Reavis, J. V., Beard, C. L., & Haas, A. L. (2019). *The mediating effect of sleep disruption on hours played gaming and Internet Gaming Disorder*. Poster presented at the 40th Annual Meeting and Scientific Sessions of the Society of Behavioral Medicine, Washington, DC.
- Haas, A., Hyke, T.*, & Borsari, B. (2018). *Simultaneous alcohol and marijuana use while pregame: Examining the co-occurrence in entering college students*. Paper presented as part of the symposium "Simultaneous alcohol and marijuana use among adolescents and emerging adults: From brain to behavior" (organizer: Helene White, Ph.D.), Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
- Burton, J.C.*, Wickham, R.E., & Haas, A.L. (2018). *Evaluation of a university alcohol policy change: A pre-post design*. Poster presented at the Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
- Harmon, D.* & Haas, A. (2018). *Are all alcohol consequences seen as negative for college drinkers?* Poster presented at the Annual Meeting of the Research Society on Alcoholism, San Diego, CA.
- Haas, A.L. & Welter, N.C. (2018). Impact of a University Alcohol Policy Change on Bystander Responses to Alcohol-Related Medical Emergencies. *Journal of Drug Education*, 48(3),

103-117.

Haas, A.L., McKenna, K.R.*, Morimoto, E.*, Wickham, R.E. & Brown, L. (2018). Evaluating the effectiveness of a medical amnesty policy change on college students' alcohol consumption, physiological consequences, and helping behaviors. *Journal of Studies on Alcohol and Drugs*, 79(4), 523-531.

Haas, A.L., Wickham, R.E. & Zamboanga, B.L., Read, J.P. & Borsari, B. (2018). Identification of pre-gaming subtypes in a multiethnic college sample. *Alcoholism: Clinical and Experimental Research*, 42(7), 1217-1227.

Haas, A.L., Zamboanga, B.L., Bersamin, M., & Hyke, T*. (2018). Perceived Access and Parental Monitoring as Moderators of Impulsivity and Marijuana Use among Adolescents. *Journal of Primary Prevention*, 39(2), 155-169.

Hatch, S.M.*, Hyke, T.*, Lorkiewicz, S.* & Haas, A. (2018). *Simultaneous alcohol and marijuana use moderates the relationship between heavy episodic drinking frequency and alcohol related physiological consequences*. Poster presented at the Annual Meeting of the Research Society on Alcoholism, San Diego, CA.

Lorkiewicz, S.*, Zamboanga, B., Hatch, S.*, Harmon, D.* & Haas, A. (2018). *Correlates of alcohol related blackouts: Replication and extension in a community dwelling high school sample*. Poster presented at the Annual Meeting of the Research Society on Alcoholism, San Diego, CA.

Shields, M.*, Wickham, R., Weaver, C., Reed, D.* & Haas, A. (2018). Trends Conjoint Alcohol and Marijuana Use of Incoming College Freshman. Poster presented at the 2018 American Psychological Association Convention, San Francisco, CA

King, J.*, Haas, A., Habarth, J., Wickham, R. & Beard, C.* (2018). The relationship between social anxiety and alcohol use in lesbian and bisexual women. Poster presented at the 2018 American Psychological Association Convention, San Francisco, CA

Hyke, T., Katz, K., Hatch S., & Haas, A. (2018). *Depression's moderating effects on marijuana use, consequences, and coping motives among freshman University Students*. Poster presented at the 51st Annual Convention of the Association for Behavioral and Cognitive Therapies, San Diego, CA.