

Substance Use & Addiction Research Open House

ADAI, CSHRB, HaRRT, & NAPE

November 8, 2023

Mandy Owens, PhD (ADAI) – mandyo@uw.edu





Welcome!

We will be recording the presentations.

• Please keep yourself on mute during presentations.

• Type questions into the chat box – we will get to as many as we can!



I would like to begin by acknowledging that as we gather today, we are on the ancestral homelands of the Indigenous Peoples who have lived on these lands since time immemorial.

Please join me in expressing our deepest respect and gratitude for our Indigenous neighbors.





Goals for Session

Inspire students to join the substance use and addiction research field

 Broaden reach to students in different majors and from varying backgrounds

Connect with UW scientists

Outline

- - What are the research opportunities at UW?
 - Center presentations:
 - Addictions, Drug and Alcohol Institute (ADAI)
 - Center for the Study of Health and Risk Behaviors (CSHRB)
 - The Harm Reduction Research and Treatment (HaRRT) Center
 - Center of Excellence in Neurobiology of Addiction, Pain, and Emotion (NAPE)
 - Breakout groups with center / topic
 - Closing and evaluation



Research Opportunities

Adapted from slides by Britney Hultgren, PhD (thank you!)



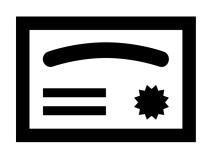


Types of Opportunities

- Credit: Psychology/Psychiatry/Other department 499 credit
- Volunteer
- Work-Study Positions
- Honor student research requirements
- Part-time and full-time positions remote and local
- Summer institutes/internships
- Fellowships (e.g., National Institutes of Health, diversity supplements)



How to Find Research Opportunities



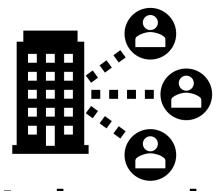
For-Credit

- https://psych.uw.ed u/undergraduate/ps ych-499
- Check with your Registrar's office for credit options!



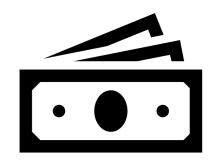
Work-Study

- https://www.Washin gton.edu/workstudy
- Check with your Financial Aid Office or job postings for options



Undergrad Research Program

- https://www.washig nton.edu/ungraduat eresearch/students/f ind/
- Summer institutes



Part- and Full-Time Positions

- https://hr.uw.edu/jo bs/
- Local organizations (Childrens, other colleges)





Why Should You Be Involved in Research?

Being an RA [research assistant] I have become more familiar with the research procedure in a more practical field as well as recognize the future career and graduate program that I'm looking forward to.

-Debbie

I was able to improve my communication skills, as well as manage my time effectively to get the tasks I was assigned done. I found this rewarding because I thought I had good communication and time management skills in the past, but after becoming an RA, I was forced to reflect on myself and my actions and apply what I've learned to improve the overall quality of my work and contribute more to the study.

-Raffa

As an RA, I have gained experience with several components involved when conducting research such as data collection, data analysis, survey creation, the use of psychometric scales, etc... I also have had the time to conduct literature reviews to strength my own personal research interests and prepare myself for graduate school.

-Victoria





Why Should You Be Involved in Research?

Learn Skills

- <u>Literature Reviews:</u> Synthesize information and use critical thinking
- <u>Participant Recruitment:</u>
 Communication and organization skills, creativity
- Data Management and Analyses
- Scientific Thinking





Explore Career Options

- Researchers
- Faculty
- Clinical Psychologists
- Social Work
- Programmers
- Public Health Local, State

Receive Career Development Mentoring

- Resume/CV writing
- Applying to graduate school
- Presenting Research





Contact the PI or Study Staff

Contacting faculty members or staff about research opportunities can be a great way to work on a project that is a good fit for you or learn a skill you are interested in.





Addictions, Drug & Alcohol Institute (ADAI)

Susan Ferguson, ADAI Director
Professor, Psychiatry & Behavioral Sciences
Principal Investigator, NAPE Center
November 7, 2023



Core Areas

Mission

To advance research, policy, and practice to improve the lives of individuals and communities affected by alcohol and drug use and addiction.

ADAI Research

Education, Outreach and Training

https://adai.uw.edu

UW Research

Small grant programs to researchers across UW

Group of ~45 faculty, staff and trainees with range of backgrounds, education and skillsets



Cannabis Education and Research Program (CERP)

Headed by Dr. Beatriz Carlini

Cannabis research

 Research efforts around current topics of interest around legalized cannabis and addiction



High-THC cannabis products: What do WA stakeholders want? (Concept mapping study to examine public health concerns of high THC cannabis)

Education and Information dissemination

- Develops policy briefs, literature reviews, trainings, fact sheets
- Learn about cannabis website: Provides science-based information for general public, including parents, teens, and consumers.
- CME trainings for medicinal cannabis and chronic pain.





Center for Community-Engaged Drug Education, Epidemiology and Research (CEDEER)

Headed by Dr. Caleb Banta-Green

Work focuses on opioids and stimulants

- Health services research/evaluation of new models of care
- Monitor and publish local drug use trends data
- Identify/disseminate current basic practices in clinical care, public health and educational strategies related to opioids and stimulants
- Educational and technical assistance, including maintaining number of websites and online informational resources
- Clinical and program development implementation support

Surveys and interviews with people who use drugs to collect community-level data

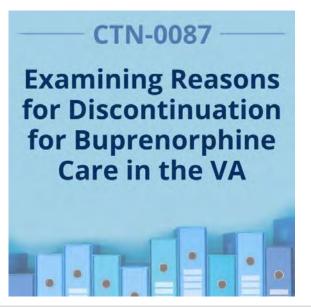


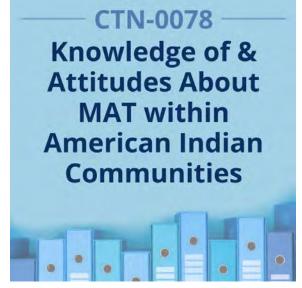


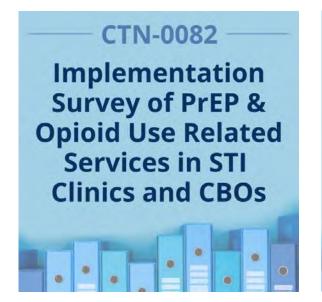
Clinical Trials Network Pacific NW Node

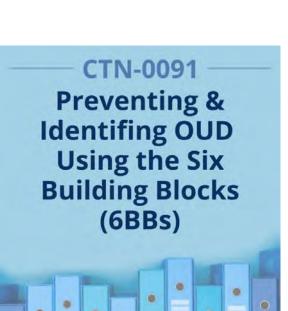
Headed by Drs. Mary Hatch (UW) and John Roll (WSU)

- Researchers at UW and WSU work with community partners in WA, ID, MT, AK, northern CA to develop, validate, refine, deliver and evaluate new treatment options
- Goal: Use research to improve quality and outcomes of drug addiction treatments













Center for Advancing Addiction Health Services

Headed by Dr. Bryan Hartzler

Health Services Research: Test implementation strategies for dissemination of clinical practices

Peer Engagement in Methamphetamine Harm Reduction with Contingency Management, NIDA R01DA057670

Implementing Contingency Management in Opioid Treatment Centers Across New England: A Hybrid Type 3 Trial, NIDA R01DA046941

Northwest Addiction Technology Transfer Center: Provides range of technical assistance/training to support addiction workforce

Opioid Response Network: Provides technical assistance related to opioid or stimulant use disorder prevention, treatment and recovery





Fetal Alcohol Drug Unit (FADU)

Headed by Dr. Susan Stoner

FASD Research

 Understand impacts of fetal alcohol exposure across the life span Multi-site study examining mental health, cognition, social behaviors and immune function in adult



Parent-Child Assistance Program (PCAP)

- Intervention for pregnant and parenting mothers who used substances during pregnancy and are poorly connected to social services
- Aims to help clients achieve/maintain recovery, build healthy family lives, prevent future fetal drug exposure

Research conducted using program data



Research Assistant Openings



CSHRB

CENTER FOR THE STUDY OF HEALTH AND RISK BEHAVIORS

UNIVERSITY of WASHINGTON

What do we do at CSHRB?

WE AIM TO



Accessing effective treatments

Investing in healthy relationships

Embracing cultural identity

"Avoiding avoiding"

Using harm reduction strategies

What do we do at CSHRB?

WE AIM



risk behaviors

Risky alcohol use

Trauma-related avoidance

Risky drug use Driving under the influence

We consider people in context.

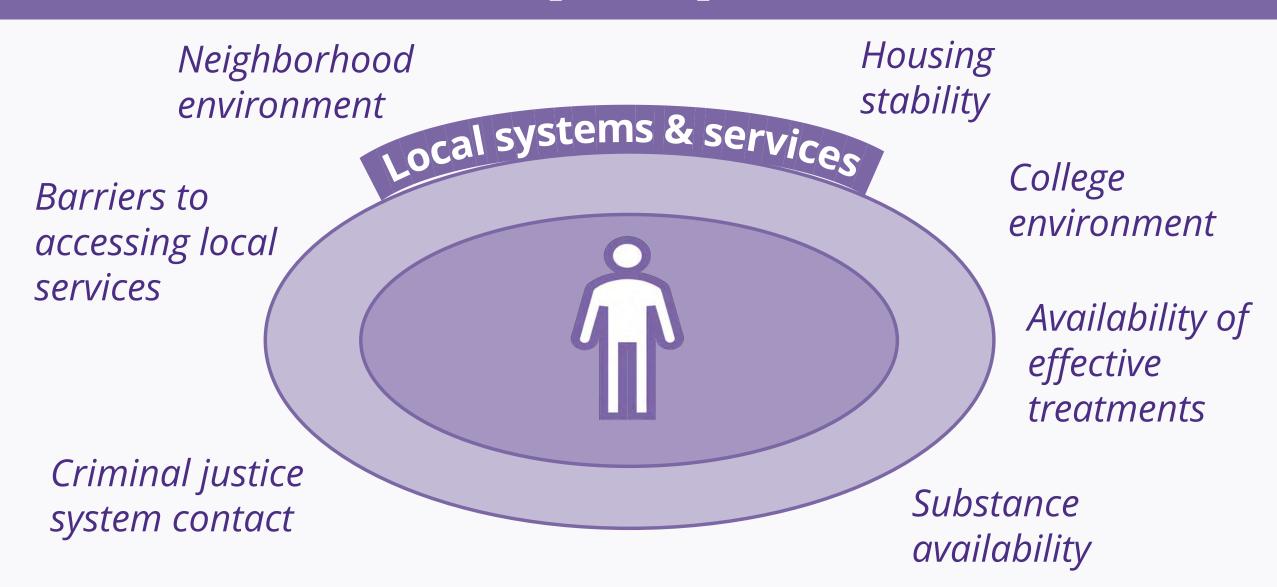
Social support quality Social relationships

Situations where health and risk behaviors occur

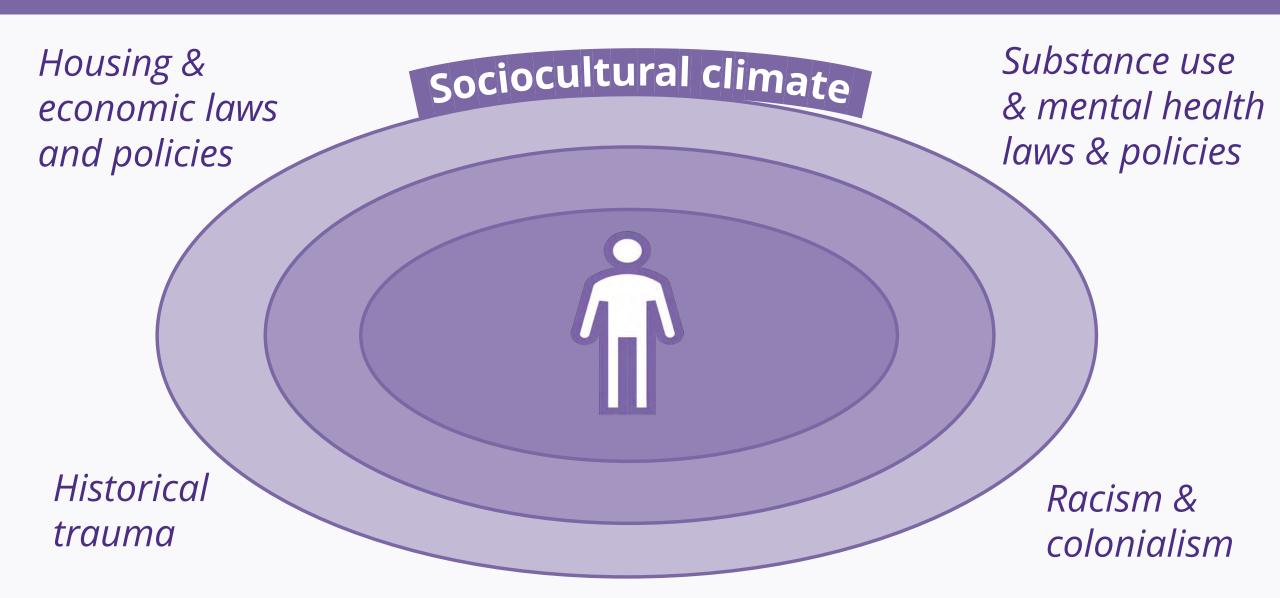
Friends' health and risk behaviors

Social norms about health and risk behaviors

We consider people in context.



We consider people in context.





SEVEN DIRECTIONS

A CENTER FOR INDIGENOUS PUBLIC HEALTH



Lab focus: Multiple projects supporting tribal and urban Indian public health efforts, including opioid overdose prevention

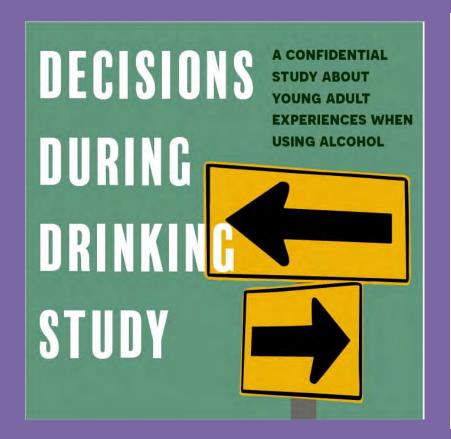
Types of opportunities: 499 & work study

Lab website: indigenousphi.org

How to get involved: Email

seattleo@uw.edu

Decisions During Drinking (D3 Study)



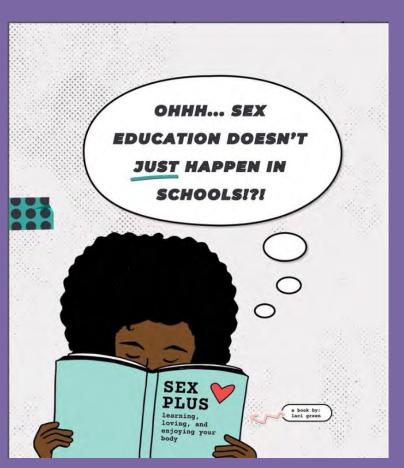
Focus: The project that aims to understand young adults' decisions while they drink and develop an electronic program for young adults to have more positive outcomes if they decide to drink.

Opportunities: 499 Research Assistant, Volunteer

Involvement: Qualitative coding of interviews, participant recruitment, and aiding in creation of program elements like graphics and videos.

Contact: Dr. Brittney Hultgren (Hultgren@uw.edu)

HEY – Health Education for Youth



Focus: This study is developing a sex positive STI/HIV prevention program for young women ages 15-18.

Opportunities: 499 Research Assistant, Volunteer

Involvement: Develop personalized training goals and get experiences with participant recruitment, transcription, coding, data management, and tasks related to professional development (i.e., article reviews, leadership roles, working with topics such as alcohol and sexual assault).

Contact: Dr. Jessica Blayney (jab24@uw.edu)

Increasing Resilience from Alcohol-Related Harms



Focus: Identifying themes for ways to improve alcohol screening, prevention, and interventions with transgender and non-binary community members.

Opportunities: 499 Research Assistant, Volunteer

Involvement: RAs will assist with participant recruitment & retention, developing study materials, transcribing and coding focus group data, and running participants

Contact: Dr. Jessica Canning (jrcannin@uw.edu)

Project RELATE



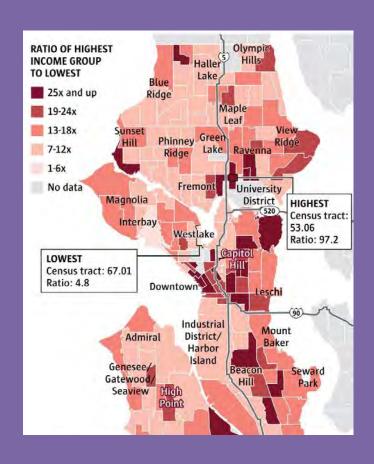
Focus: This project will recruit 75 young adult couples to participate in a research study on daily-level associations between alcohol and cannabis use and relationship functioning.

Opportunities: 499 Research Assistant, Volunteer

Involvement: programming and testing online surveys, conducting virtual training sessions with participants, creating online ads, distributing study flyers in the community, literature reviews, and other related study tasks

Contact: Dr. Katherine Walukevich-Dienst (kwd1@uw.edu)

The Neighborhood Health Disparities Survey



Focus: This study aims to understand the relationship between neighborhood characteristics, and the role of drinking motives, on alcohol consumption and consequences among Black adults (18-34).

Opportunities: 499 Research Assistant, Volunteer

Involvement: RAs will assist with screening and scheduling participants, performing literature reviews, piloting materials, analyzing qualitative findings, developing research protocols, manuscript preparation

Contact: Chelsea Mackey (mackeycd@uw.edu)

YEAH – Young Adult Education on Alcohol & Health



Focus: This study is testing a sex positive program to reduce alcohol and sexual risk for young women ages 18-24.

Opportunities: 499 Research Assistant, Volunteer

Involvement: Develop personalized training goals and get experiences with participant recruitment, coding, data management, and tasks related to professional development (i.e., article reviews, leadership roles, working with topics such as alcohol and sexual assault).

Contact: Dr. Jessica Blayney (jab24@uw.edu)

Project SELF



Focus: The objective of this project is to investigate potential cognitive mechanisms underlying hazardous drinking in young adults during the transition out of high school.

Opportunities: 499 Research Assistant

Involvement: Measurement testing, interacting with participants, data management and analysis.

Contact: Vyoma Shah (vyomas@uw.edu)

Exploring Social Norms of Hazing, Bystander Intervention, and Health-Risk Behaviors of Fraternity Men



Interfraternity Council

Project focus: Survey-based study to examine the most salient influences on fraternity members' perceived social norms regarding hazing, bystander intervention, and related health behaviors.

Types of opportunities: Volunteer & 499

Potential tasks: RA's will assist the Research Coordinator with participant engagement, data collection, and dissemination tasks.

How to get involved: Email Dr. Scott Graupensperger (Graups@uw.edu).

Microdosing Hallucinogens/ Psychedelics: Trends and Practices Among College Students

How to get involved: Contact Victoria Szydlowski (<u>vicszy11@uw.edu</u>) to learn more

Project Focus: understand microdosing (i.e., taking a very low dose) hallucinogens/ psychedelics (e.g., LSD, psilocybin, etc.) trends and practices among college students

1 Develop Codebook

Systematically interpret content of interview transcript text through identifying themes and codes to categorize and describe them

Types of opportunities: 499 & Volunteer

Apply Codebook

Meetings to discuss and revise codes and definitions, reconcile differences Inter-coder agreement will be calculated

Potential tasks: Qualitative Content Analysis for 19 hour-long

interviews

3 Analyze Findings

Qualitative analysis of interview text Mixed methods analysis using triangulation design



Interested in opportunities to help with new and exciting psychology and health research?



CSHRB invites you to our virtual Research Open House.

Tuesday, November 14th, 2023 From 6:00 to 7:30 pm PST **RSVP HERE**

All are welcome. No research experience required.

https://sites.uw.edu/cshrb/









Dr. Tessa Frohe

(she/her)



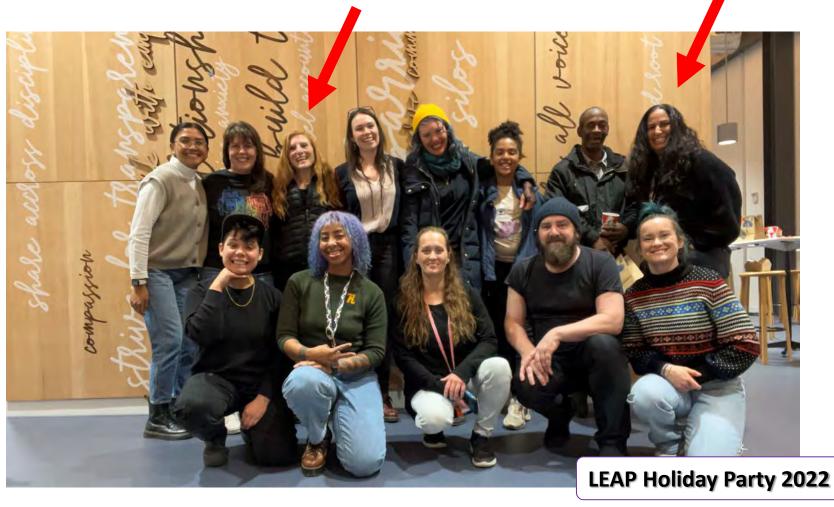






Harm Reduction Research & Treatment (HaRRT) Center









Chronic homelessness & substance use

Chronic homelessness is:

- Unhoused for at least 1 year (or 4 episodes in the last 3 years)
- While struggling with a serious mental illness, substance use disorder (SUD), and/or physical disability

People experiencing chronic homelessness are

· Disproportionately affected by substance-related morbidity and mortality

Traditionally, people who use drugs & were experiencing homelessness:

- First required to attend treatment and achieve abstinence before obtaining housing
- This served as barriers to housing attainment for individuals



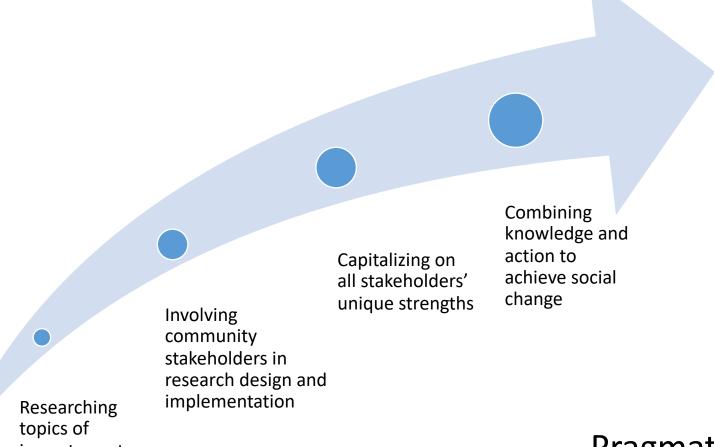




Housing First: Downtown Emergency Service Center (DESC)



Community Based Participatory Research (CBPR)



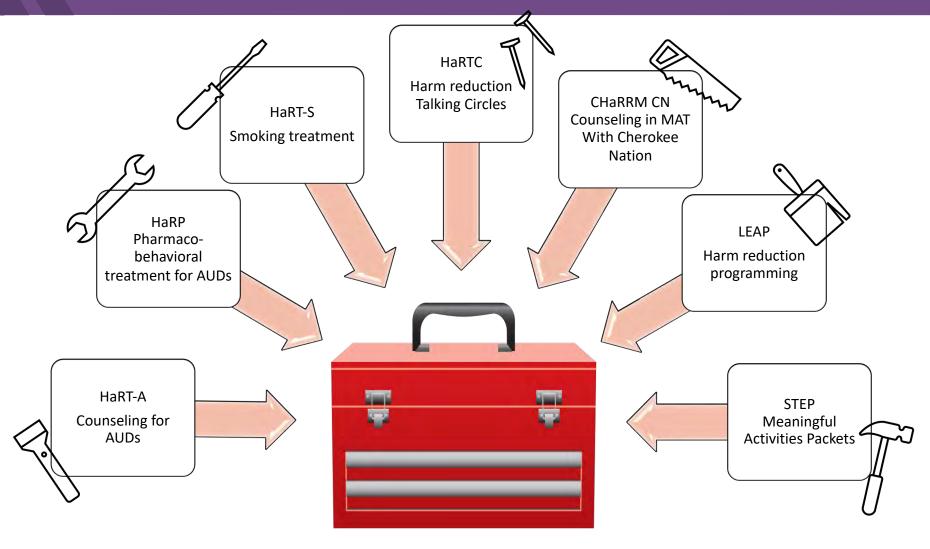
importance to the community

Pragmatic in practice, transformative in spirit.





HaRRT Center Research Mission





Together with affected individuals and their communities, we aim to collaboratively assemble a toolbox of interventions that reduce substance-related harm and improve quality of life.



Harm reduction approaches provide alternate pathways to recovery

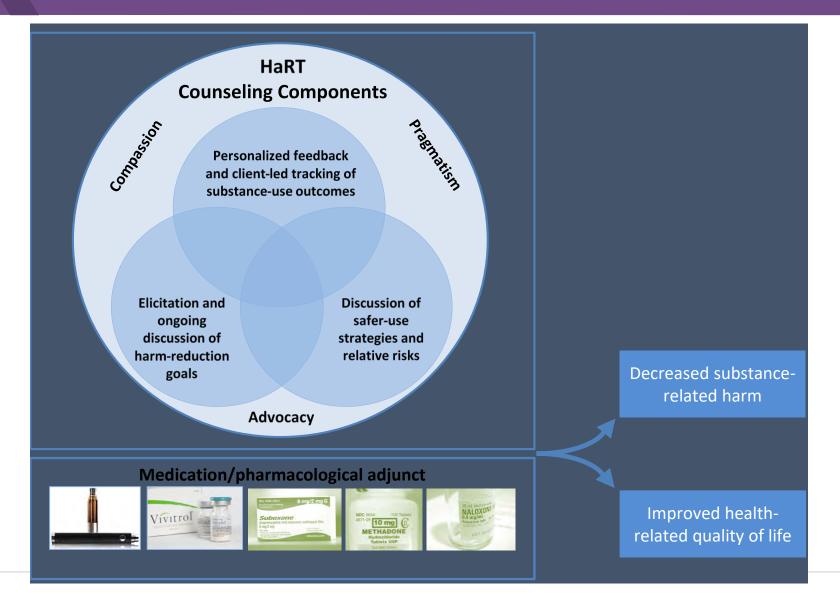


Harm reduction refers to a low-threshold and "user-driven" set of compassionate and pragmatic approaches to reduce substance-related harm and improve quality of life for affected individuals and their communities without requiring abstinence or use reduction.





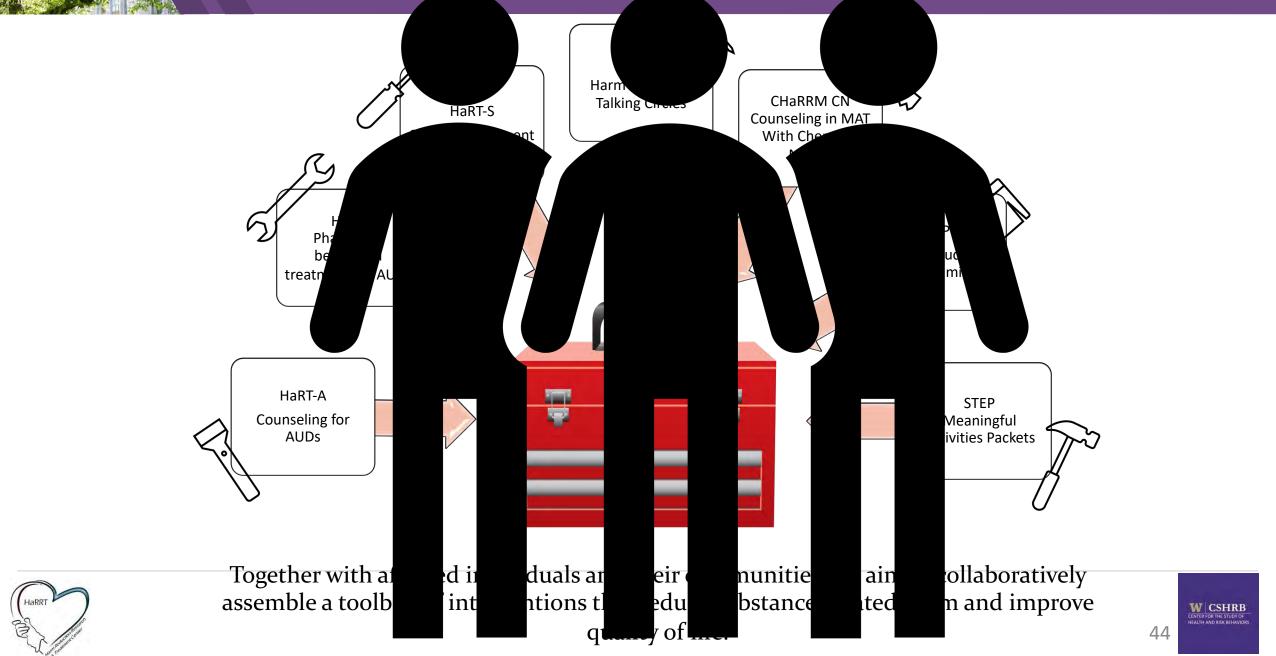
How harm reduction treatment (HaRT) helps



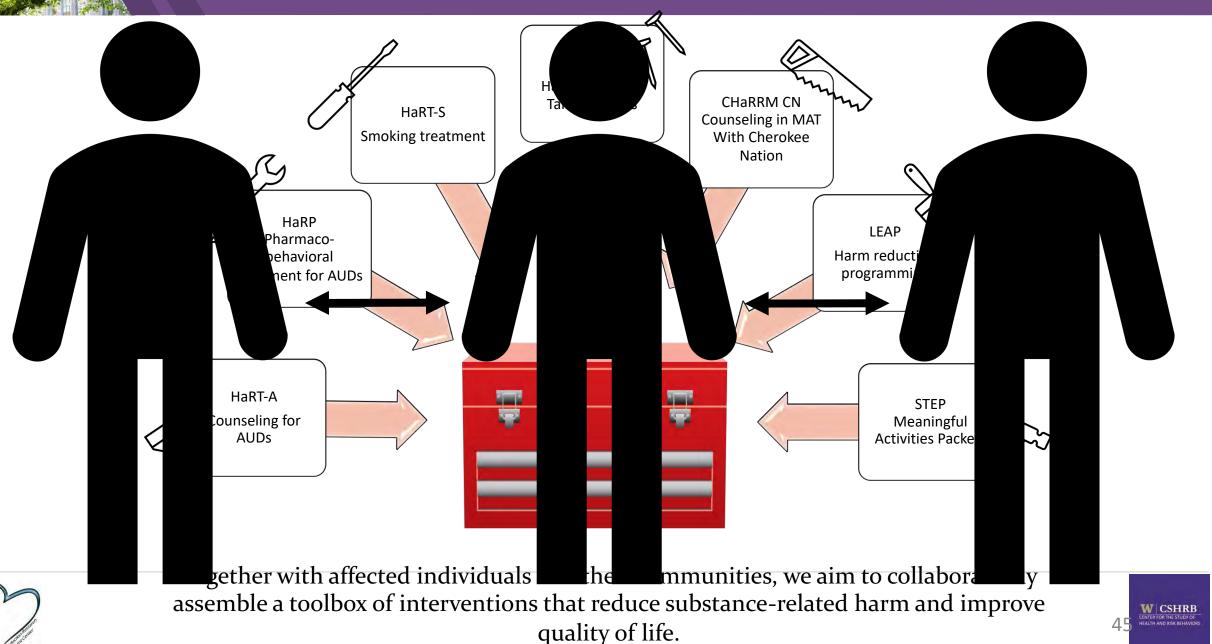




HaRRT Center Research Mission



HaRRT Center Research Mission





Digital Technology Barriers



Lack of ready means for remote communication

-No access to building-wide computers, telephones, wifi or hotspots

-Inconsistent funds for landline/cell phone or internet services



All current forms of communication come with associated barriers

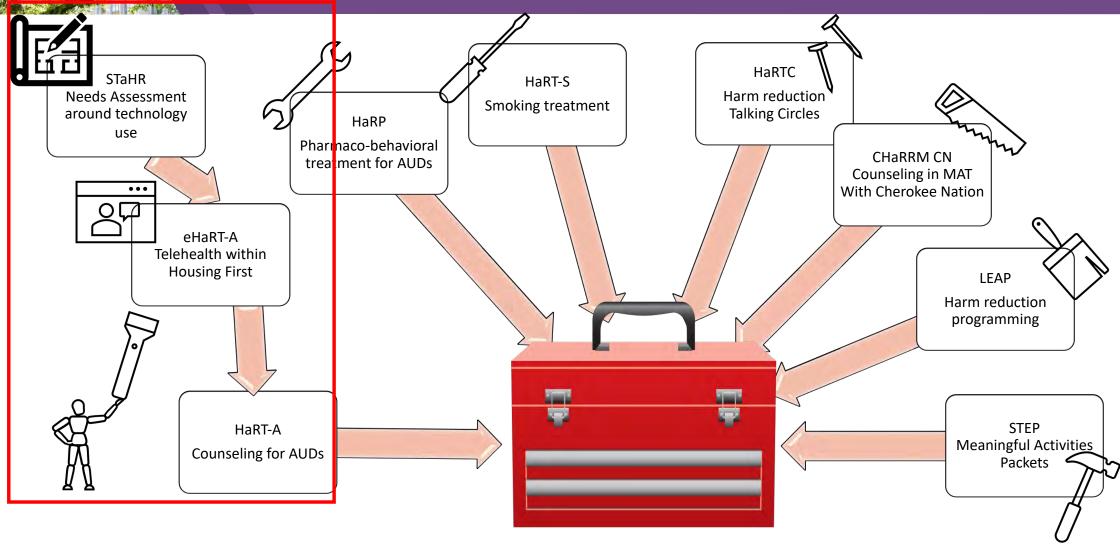
-Lost Mail

-Phone plans end early in the month/ numbers change frequently

-Video conferencing & direct online survey technology literacy low



HaRRT Center Research Mission

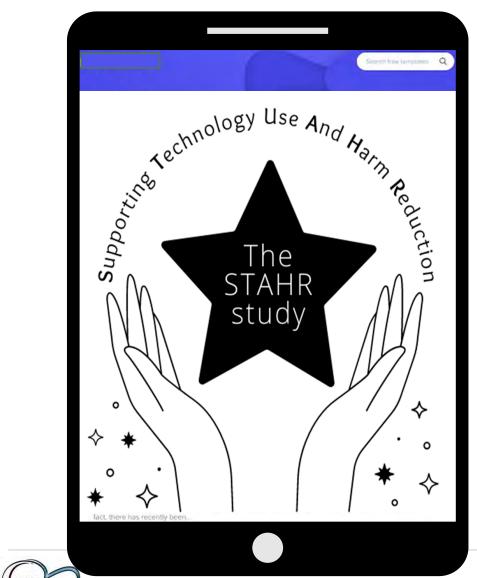




Begin assembling a skillset for adapting and integrating digital harm reduction health programming into our partnering agencies



Supporting Technology [use] and Harm Reduction



STAHR

- •Qualitatively exploring HF residents' digital literacy levels and their perspectives on barriers and facilitators to using technology and accessing online harm-reduction services
- Aims to optimize implementation strategies for technology use uptake among HF residents



Electronic Harm Reduction Treatment for Alcohol Use

eHaRT-A

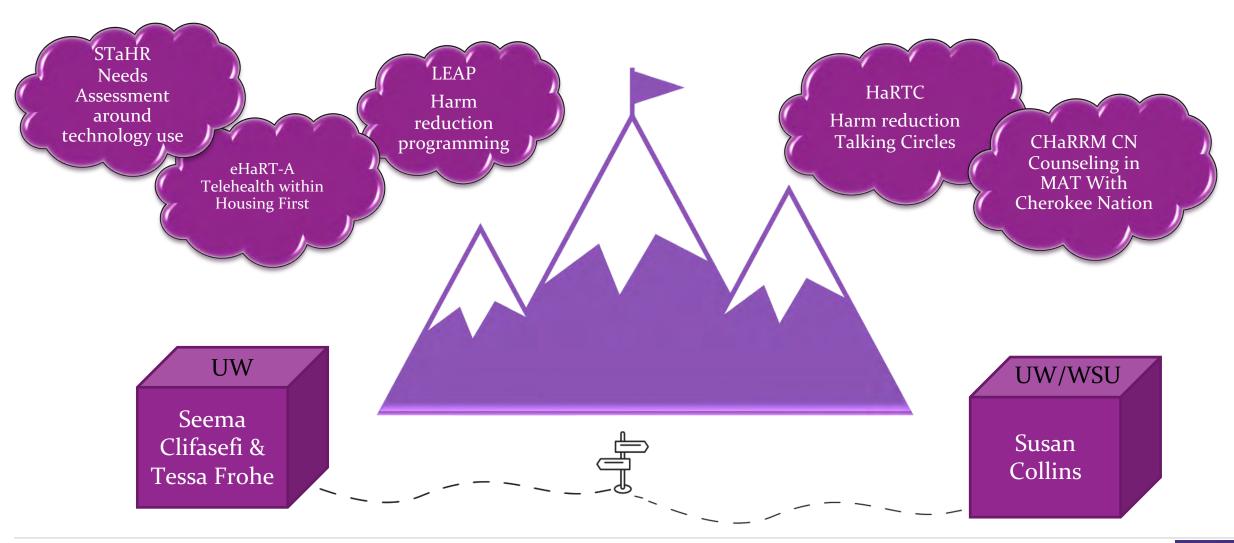
- Adapting an evidence-based, in-person harm reduction treatment into a virtual care telehealth intervention
- Codeveloped with & for people living in DESC housing







Ongoing Studies at HaRRT







Ongoing Studies

Susan Collins

HaRTC (Co-PIs: Collins and Nelson): This is a 5-year NIH-funded grant to integrate harm-reduction treatment with the Native tradition of talking circles to provide more culturally appropriate and community-developed treatment for alcohol use disorder for American Indian and Alaska Native people.

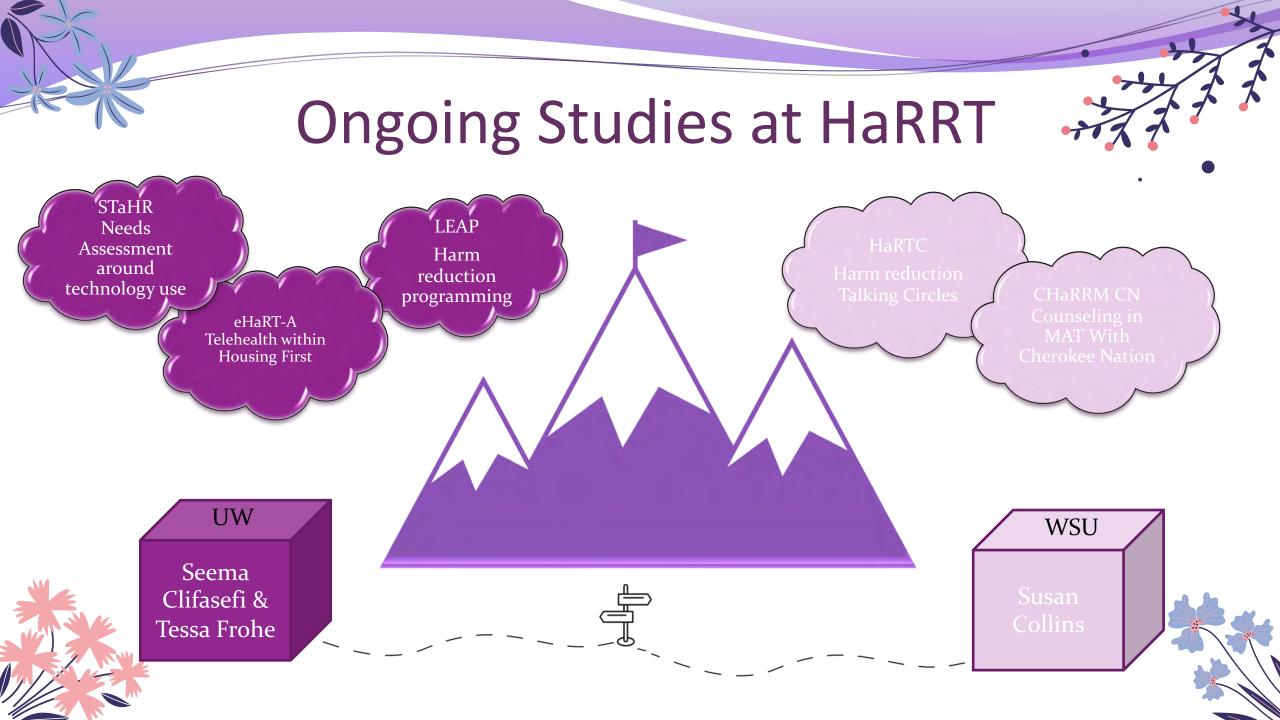
CHaRRM CN

HaRTC

CHarry Control (Co-PIs: Collins and Nelson): This is a 5-year NIH-funded grant aims to make medication for opioid use disorder (MOUD) more culturally aligned and harm-reduction oriented to improve program retention and reduce substance-related harm among MOUD patients at Cherokee Nation Health Services.









Ongoing studies

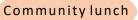


LEAP project (PI: Clifasefi): The Life Enhancing Alcoholmanagement Program (LEAP) is a partnership between the UW HaRRT Center and Housing First residents, staff, and management of the Downtown Emergency Service Center (DESC). The current study is a 10-site, cluster-randomized controlled trial to assess LEAPs impact on substance use, health, cost and service utilization, as well as quality of life outcomes over a 1-year period.





















Art hours





Cottage Grove House Art Wall





Community Zines



HaRRT staff member Griffin playing some original songs



zine #1





Acknowledgements

Thanks to all the community members, I'm honored to work with and learn from them!

Mentors & Colleagues	Community Collaborators	HaRRT Center Team	Funders
 Seema Clifasefi Susan Collins Mary Larimer Kevin Hallgren Jenna vanDraanen Callan Fockele 	 Downtown Emergency Service Center: Noah Fay, Daniel Malone, Del Lausa, Marisa Connell Community Advisory Board Members 	 Sterling Kolde Aaron Davis Emily Taylor Priyal Bhambu Tiffany Childs Grover "Will" Williams Michelle Johnson-Covello 	 NIAAA K01AA030053 (PI: Frohe) Society of Addiction Researchers- Division 50-Early Career Psychology Award



All of you for attending!







Email: frohe06@uw.edu



Thank you!



Rapid Appearance of Negative Emotion During Oral Fentanyl Self-Administration in Male and Female Rats

Kevin R. Coffey, William B. Nickelson, Aliyah J. Dawkins, and John F. Neumaier



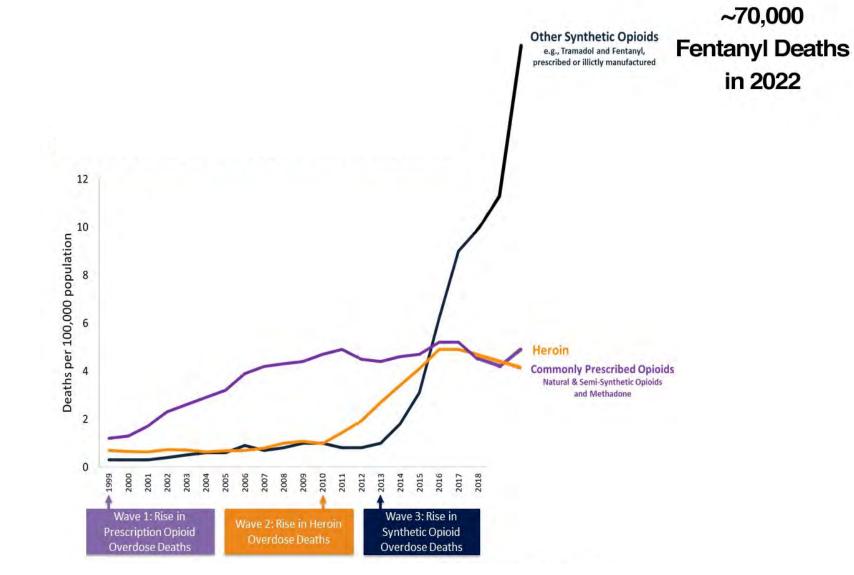




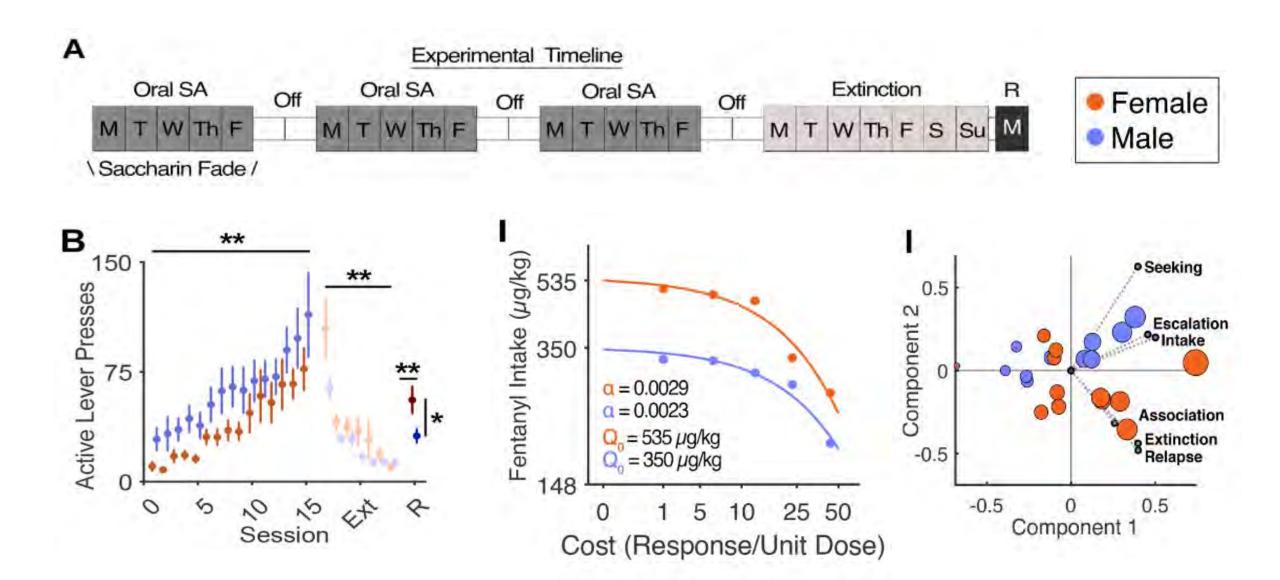
An Unprecedented Fentanyl Epidemic

- Cheap
- Readily available
- Extremely potent

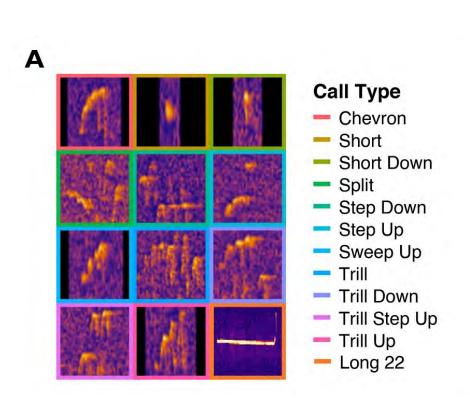


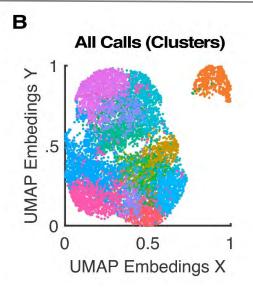


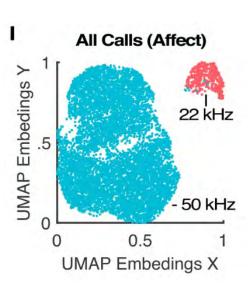
Oral Fentanyl Self-Administration (Rats)

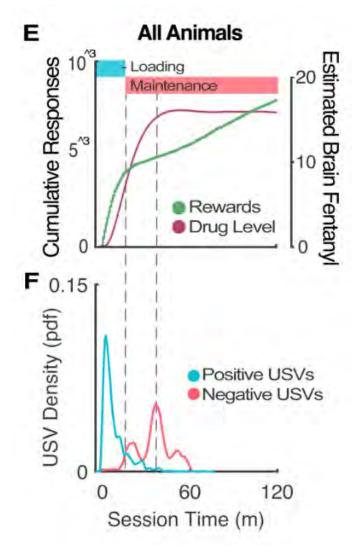


Rapid Appearance of Negative Emotion (DeepSqueak v3)









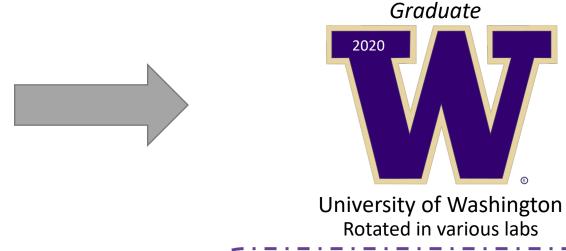
Lydia Gordon-Fennell (she/her)

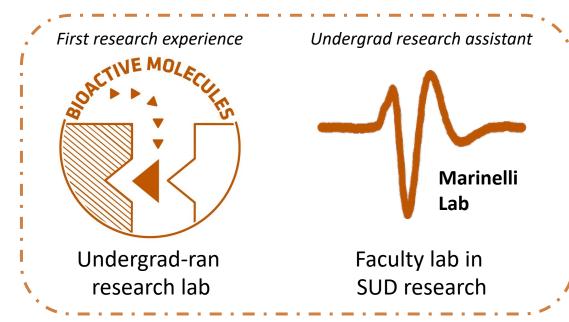
neuroscience graduate student Paul Phillips' Lab

My career path to Substance Use Disorder (SUD) research



University of Texas at Austin *Major*: Neuroscience







Thesis Project:

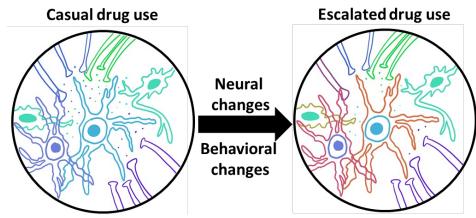
Studying neuromodulation of reward circuitry in the progression of SUD-like behaviors using rodent models

Lydia Gordon-Fennell (she/her)

neuroscience graduate student Paul Phillips' Lab

My career path to Substance Use Disorder (SUD) research

Thesis Project:



Aspects leading to choice of SUD research

- Interest in neural circuitry of behavior
- Understanding a system in both diseased and non-diseased states
- Ability to model SUD in non-human species
- Translatability and expansiveness of the field
- More accessible for outreach work and public science education



PhD student



Thesis Project:

Studying neuromodulation of reward circuitry in the progression of SUD-like behaviors using rodent models

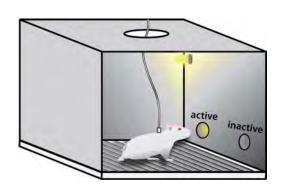
Lydia Gordon-Fennell (she/her)

neuroscience graduate student Paul Phillips' Lab

What does neuroscience SUD research look like for me?

Work with rats to model human drug use

focus on escalation of drug use

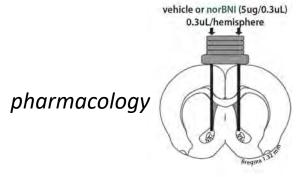


TOTAL INTAKE

120
100
80
60
40
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1 2 3 4 5 6 7 8 9 101112

Session Ahmed & Koob, 1998

Perform manipulations on neural circuits

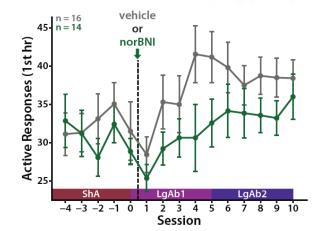


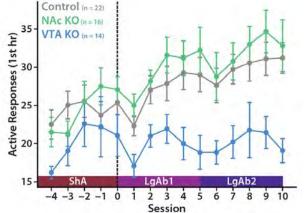


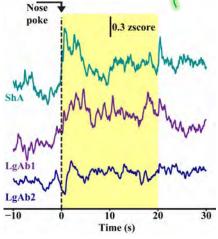
In vivo
Fluorescence
Imaging

Nose
poke | 0.3 zscore

Observe behavior and/or neural signals during behavior









Breakout Rooms

- ADAI: Addictions, Drug & Alcohol Institute
- HaRRT: Harm Reduction Research and Treatment Center
- NAPE: Center of Excellence in Neurobiology of Addiction, Pain, and Emotion
- CSHRB: Center for Study of Health and Risk Behaviors





Closing

• Evaluation: Voluntary, but helpful!

- Other questions? Feel free to email!
 - Mandy @ mandyo@uw.edu

